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Geological Survey of Canada

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1897

Sheet No. 3

MAP

Shewing the COUNTRY between the LOWER PORTIONS of the PEACE AND ATHABASCA RIVERS NORTH OF LESSER SLAVE LAKE

Scale 10 statute miles to 1 inch.

Sources of Information.

Topography west of Smoky River Forks, chiefly from map by G. M. Dawson, 1879-80.
Routes and details between Peace and Athabasca rivers from surveys by R. G. McConnell, 1889-90.
Peace and Athabasca rivers from surveys by G. M. Dawson, 1879, A. R. C. Selwyn, 1875, W. Ogilvie, 1884 and T. Fawcett, 1888.
Lake Athabasca from surveys by D. B. Dowling, 1892 and J. W. Tyrrell, 1893.
Lesser Slave Lake and River, 6th Initial Meridian and 22nd Base Line by W. T. Thompson, 1882. 5th Initial Meridian, 21st Base Line and townships in vicinity of Dunvegan by W. Ogilvie, 1883.
Clearwater River from survey by T. Fawcett, 1884.
La Biche River and Lake from surveys by R. Bell, 1884 and W. S. Gore, 1873.
Astronomical position of Forts Chipewyan and Vermilion according to Sir J. H. Lefroy, 1844.

Shales well exposed, fossil wood abundant, reddish boulder-clay in places

Valley 200' deep

Current 3 miles an hour

Koeg R.

Shales exposed all along

Between Battle River and Loon River, the Peace River section consists entirely of soft dark shales, holding calcareous nodules and occasional thin beds of sandstone and impure limestone and some ironstone. In the lower part of this section the shales belong to the Loon River series, but further up those of the Fort St. John series are also present

Wolverine R.

Valley 500' deep, 2·3 miles wide

Shales exposed at intervals

Sandstone band, 20 feet thick, intercalated in shales. (Peace River sandstones)

Gold occurs in the bars along this part of the river

H.B.Co.

Sandhills

Battle River

Valley 600' deep. Current 3·4 miles an hour

Line of Section N. 10° E.

Fossils (Benton)

Loon River shales pass below the surface of the valley

Fossils.

Heavy exposures of stratified sands and gravels under boulder-clay

Fossils.

With the exception of about a mile and a half at the Vermilion Falls and Rapids, Peace River is navigable by steamers from Lake Athabasca to Smoky River Forks and beyond.

The valley at the Forks is a huge trough 700 feet deep and a couple of miles wide but going northwards, its size gradually decreases and, below Red River, it almost disappears.

The Peace River sandstones, consisting of massive bands of yellowish and greyish sandstones holding numerous spherical nodules, alternating with thin-bedded sandstones and shales, rise from beneath the Fort St. John shales at the Smoky River Forks, and extend down Peace River to a point a couple of miles below Battle River where they thin out and disappear. They increase in thickness and become more arenaceous in ascending the river.

Region generally covered with aspen and willow coppice. Soil good.

Peace River sandstones exposed in cliffs all along, overlain by Fort St. John shales

Valley 600' to 700' deep. Current 3 miles an hour

Tar spring reported

Cadotte River

Extensive undulating prairie
Fertile soil, average elevation 2200'

White Mud River

Tar and natural gas spring on island

Tar I.

Rapid on left side

Cliffs of sandstone (so-called Ramparts.)

WHITE MUD PRAIRIE

Swamp

Valley 700' deep

Peace R. Landing
H.B.Co.

Peace River sandstones disappear in ascending the river

Smoky R. Forks
1223'

Blackish shales

Bluish shales (Ft St. John shales)

Soil along trail generally good mostly wooded, some open patches.

North Heart River

Extinct boucanes

Plateau sloping gradually towards Peace R. Soil generally good some prairie-Occasional swamps.

2450'

Pyramid 80. Monument Rock

Soft yellow sandstone

Ripple-marked sandstone

Thin lignite coal 1378'

Thick soft sandstone

Black shales (Pierre)

Boucanes, 1879

Blackish shales

Stinking L.

South Heart

Horse L.

Plateau country Average elevation 2000'
Generally wooded. Numerous small swamps
Soil generally good.

Iroquois L. 1845'

Stream 400' wide
Valley 250 deep ½ m. wide

Drift lignite

Approximate north-eastern boundary of Laramie

Streak-horse River

Goose River

Trail to Jasper House

To-se-gun-ne-pe

Wide undulating country; average elevation about 2000 feet. Generally woodland or brûlé but with some prairie patches. Fine meadows along river. Soil generally good. Occasional mossy swamps.

CLEAR HILLS
2600' to 3500' high

East Boundary of British Columbia.

6th Initial Meridian

Hills 2500' to 2600'
S. Slope poor. N. Slope fair soil

Boundary L.

22nd Base Line

River, generally 700' to 1000' wide, in places 5000'
Valley, trough-like 1 to 3 miles from rim to rim

Steep hills showing ledges of white-brown sandstone

Monument Rock

Clear R.

Plateau 1100'

Sandstones with plant remains

Open hills thick aspen coppice in gullies

Montagneuse R. (Head Fork)

Montagneuse R.

Banks rugged, broken by landslides

Hills 800' to 900' above river

Island L.

Woodland

Hay L.

Sandstone cliff

Lignite reported

Mud R.

Plateau generally wooded, but with some prairie broken by deep valleys, near the Peace River

Rivière de l'Hôpital

Island Cr.

Meadow Cr.

Grassy Islands

Tp 81 Rge IV

Rge III

II

I

Little Burnt Cr.

Tp 82 Rge XXV

Old Wives L.

XXVI

XXV

Plateau 1900'
Open prairie, very rich soil

Blackish shales (Ft St. John shales)

21st Base Line

At Dunvegan, sandstones and shaly sandstones horizontal with Inoceramus and other shells and fossil leaves. Section 405 feet thick.

Shaly sandstones and shales, flat

Wooded Plateau

Soil generally good

Laurentian boulders abundant from this point eastward

Dunvegan Cr.

Dunvegan
1305

Ile Verte

Ile Seche

Poplar and Spruce woods

Rat R.

Valley 40' deep

Horizontal shales

Undulating

Ghost R.

fertile Prairie

Rivière aux Brûlés

Thickly wooded with Spruce & Aspen

Long I.

Store Cr.

Wooded Plateau
Elevation about 2500'

Approximate outline of Dunvegan sandstones

Base of Dunvegan sandstones in the river

Pyramid 80. Monument Rock

Soft yellow sandstone

Ripple-marked sandstone

Thin lignite coal 1378'

Thick soft sandstone

Black shales (Pierre)

Boucanes, 1879

Blackish shales

Egg L.

Strong Bay

Ka-koot L.

Bad Heart R. at Crossing ½ m. wide 200 deep

Bad Heart R.

Blue shales Ironstone

Blue shales Ironstone

Densely wooded

Bluish shales with fossils (Pierre) overlain by sandstones

River 700' wide
Valley 400' deep

Pas-kwao-ka-mon

Approximate limit of Grande Prairie

Bear R.

Bear Lk.

Ile de Montagne

Klerkan L.

Sandstones and shales. Lignite coal

Service-berry Ile

Rapid 50' wide

Sandstones

GRAND PRAIRIE

Woodland or brûlé
Small prairie openings
Soil generally good

Massive and shaly sandstone

Sandy

Ridges & Swamps

Drift & lignite coal

Wapiti River

Sandy clays and shales with lignite coal

Sandy soil

Densely wooded plateau
Soil generally good

Big Mountain Cr.

Smoky River

Simonette River

Extensive brûlé

Sturgeon L.

Cree houses

Open woods

Prairie patches

Densely wooded plateau

stretching to the foot hills

Valley 300' deep
1 mile wide

Crees winter horses at this lake

Moose Cr.

20' wide

River 300' wide
Irangul

Trail to Jasper House

To-se-gun-ne-pe

ATHABASCA

BIRCH HILLS
Partly open plateau
Elevation about 2300'

Swan L.
2200

2670

High hilly country 'Brûlé'

Windfall & 'brûlé'

Beaver Lodge R.

Densely wooded

Approximate limit of Grande Prairie

Wide low valley

ALBERTA

GRAND PRAIRIE.

The valleys of the streams are wide and separated by gently swelling ridges. Surface diversified by aspen groves and willow and service-berry coppice. The soil generally of the richest description. It is the autumn berry-gathering place of the Beaver and Cree Indians.

The Wapiti, Elk, or La Biche River, is a large rapid stream with muddy water probably derived from glaciers in the mountains. It pursues a tortuous course in a wide trough-like valley 400 feet deep, in its lower part, and is said by Indians to rise near the sources of Smoky River.

The Smoky River is reported to receive three important tributaries from the west above this point:—the "Grand Coup Plat," "Porcupine" and "Sheep"

Black Jacks trail to Jasper House

562 563 512 513 412 413 462 463

120° 30′ 119° 30′ 118° 30′ 117° 30′

58° 57° 56° 55° 30′

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Compiled by C. O. Senécal, C.E.
Drawn for photo-lithography by H.E. Baine.

Geology of Peace River and tributaries above Smoky River Forks, chiefly from map by G. M. Dawson, 1879-80.
Peace River below Smoky River Forks, by R. G. McConnell, 1890.
Reference:- Part B, 1879-80 and Part P, Vol. V, (New Series) 1890-91.

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