

*Copy of this list to the  
General Office*

Copy of a letter from the Chief Inspector of Mines to the Minister of Mines, dated December 4, 1944, re letter of Dr. J.J. Gillis, M.L.A., re diamond drilling Diamond Vale coal property.

Memo from P.J. Mulcahy to Dr. Sargent advising that a grant of \$10,000 has been granted for experimental drilling in the Merritt coal basin, dated November 9, 1945.

**OPEN FILE**

Memo from Dr. Sargent to Mr. Walker, dated November 14, 1945, re proposed diamond drilling in the Merritt Coal Field.

Letter from G. Murray, Esq. Pitt Coal Mines Ltd., dated November 15, 1945 requesting a copy of the geological report by Dr. Hedley on the Nicola Coal Area, if available.

Letter to G. Murray, Merritt from Dr. Hedley re the proposed drilling programme, dated November 20, 1945.

Wire from G. Murray to Dr. Hedley, dated November 21, 1945 advising that Mr. Lauder, owner surface section 14, assures no objection to drilling.

Letter from G. Murray, dated November 24, 1945 confirming wire.

Letter to G. Murray, dated December 4, 1945, requesting that he obtain something in writing from Mr. Lauder confirming the fact that he is agreeable to the drilling being done on land of which he owns the surface rights.

Copy of wire from J.J. Gillis to E.C. Carson, dated January 24, 1946, recommending abandonment of present hole.

Copy of wire from J.J. Gillis to E.C. Carson, dated January 26, 1946, further to above.

Copy of wire from E.C. Carson to J.J. Gillis, dated January 28, 1946, in reply to wires of January 24 and 26.

Copy of wire from J.J. Gillis to E.C. Carson, dated January 28, 1946, strongly recommending abandonment of present site.

**GEOLOGICAL BRANCH**

Copy of wire from E.C. Carson to J.J. Gillis, dated January 29, 1946, advising that hole is to be continued and that Dr. Sargent is going to Merritt.

Copy of wire from Merritt Board of Trade to E.C. Carson, dated January 28, 1946, urging abandonment of present hole.

Copy of wire from E.C. Carson to President, Merritt Board of Trade, dated January 29, 1946, advising continuation of present site.

**00161 (04)**

*17 folders containing Merritt  
Drilling correspondence have been  
listed in the attached sheets &  
have been taken to the G. O. Computer  
copies of the list are filed here.  
RP*

*Taken to General  
Office Jan 20/46  
RP*

Memo to Miss Taylor from Dr. Sargent, dated February 11, 1946, attaching copy of letter to J.R. Jobling, President, Merritt Board of Trade, dated February 11, 1946, re Diamond Drilling, Merritt Coal Basin.

Memo to Dr. Walker from Dr. Sargent, dated February 12, 1946, attaching copy of letter to J.R. Jobling, President, Merritt Board of Trade, dated February 11, 1946, re Diamond Drilling, Merritt Coal Basin.

Letter from Dr. Hedley to The Hon. E.W. Hamber, dated February 15, 1946, requesting information about the Middlesboro Collieries, Ltd.

Letter from Secretary to Mr. Hamber to Dr. Hedley, dated February 19, 1946, advising that Middlesboro Collieries records were burned in a fire.

Letter from J.R. Jobling, President, Merritt Board of Trade, dated February 19, 1946, acknowledging letter of February 11.

Letter from Dr. Sargent to J.R. Jobling acknowledging letter of February 19, dated February 22, 1946.

Memo from Dr. Sargent to the Minister, dated March 1, 1946, attaching a letter from Percy Scott of the Mining Committee, Merritt Board of Trade, dated February 26, re Merritt Drilling.

Memo from Miss Taylor to Dr. Sargent asking Dr. Sargent to reply to Mr. Scott's letter, dated March 6, 1946.

Letter from Dr. Sargent to Percy Scott, dated March 8, 1946, in reply to Mr. Scott's letter of February 26.

Information obtained by telephone on May 7 from F.O. Morris re Lot 120.

Letter from J.J. Gillis to Hon. R.C. MacDonald, dated May 21, 1946, re abandonment of hole.

Letter from the Minister to J.J. Gillis, dated May 28, 1946, advising the hole is to be continued.

Letter from J.J. Gillis to Hon. R.C. MacDonald, dated June 6, 1946, re abandonment of hole.

Letter from Miss Taylor to J.J. Gillis, dated June 11, 1946, advising that the Minister is out of town.

Wire from J.J. Gillis to Hon. R.C. MacDonald, dated June 10, 1946, re abandonment of hole.

Letter from Miss Taylor to J.J. Gillis, dated June 11, 1946, advising that the Minister is out of town.

Letter from J.J. Gillis to Hon. R.C. MacDonald, dated June 13, 1946, re drilling at Merritt.

Wire from J.J. Gillis to Hon. R.C. MacDonald, dated June 17, 1946, re drilling at Merritt.

Wire from Hon. R.C. MacDonald to J.J. Gillis, dated June 17, 1946, advising abandonment of hole.

Memo from Mr. Dickson to R.C. MacDonald re letter of May 11, 1946, from Mr. Geo. Murray, Merritt Coal Mines, Ltd., re the programme of drilling. Memo dated May 29, 1946.

Letter from Miss Taylor to Mr. Murray, dated June 12, 1946, acknowledging his letter of May 11 and advising him that the Minister is away.

Wire to George Hanson, Geological Survey, Ottawa, from Dr. Sargent, dated October 22, 1945, requesting the location of certain boreholes in Merritt Coal Basin.

Wire from Dr. Walker to Dr. Sargent, dated October 26, 1945, advising that Hanson has no unpublished information re boreholes.

Letter from Dr. Sargent to Dr. Hanson, dated October 23, 1945, confirming wire of October 22, 1945.

Wire from Dr. Hanson to Dr. Sargent, dated October 24, 1945, advising that they have no data relating to the locations of boreholes.

Letter from Dr. Sargent to R.A. Smith, Merritt, dated February 6, 1946, enclosing copy of report re Merritt Collieries Ltd. made in 1913 by Frank C. Green and a report by Alfred J. Gaul.

Letter from Mr. Dodd, Gold Commissioner, Greenwood, dated July 9, 1946, to Dr. Walker enclosing letter to Dr. Walker from Dr. Sargent dated July 6, 1946, enclosing the description of intersections which resemble commercial seams in Holes 1, 2 and 4 and in old Hole No. 11.

Memo to the Minister from Dr. Sargent re Sunshine Coal property, dated July 15, 1946.

Memo to the Minister from Dr. Sargent enclosing transcript of the record of coal seams cut in holes 1, 2 and 4 and hole no. 11, dated July 12, 1946.

Memo to the Minister from Dr. Sargent, dated July 31, 1946, re drilling of Hole No. 5.

Merritt Files  
No. 2

Letter from Dr. Sargent to Dr. Walker, dated July 6, 1946, enclosing description of intersections in Holes 1, 2 and 4 and in Hole No. 11.

Memo from Dr. Sargent to Mr. MacDonald, dated July 9, 1946, re Hole No. 4.

Memo from Dr. Sargent to Mr. MacDonald, dated July 10, 1946, re the proposal to drill two additional holes.

Memo to Dr. Hedley, Dr. White and Mr. Newmarch from Dr. Sargent, dated May 27, 1946, advising that a summary of information obtained in drilling at Merritt is to be made by the officers connected with the project.

Merritt Files  
No. 3

Letter from Dr. Hedley to Dr. Sargent, dated October 31, 1945, re maps of the Merritt area.

Notes from report by Frank C. Green, 1913.

Letter from E.R. Hughes to Dr. Hedley, dated December 19, 1945, giving a report on the drilling at Merritt.

Letter from Dr. Hedley to E.R. Hughes, dated December 22, 1945 acknowledging receipt of above letter.

Memo from Dr. Sargent to Dr. Hedley that a summary of information obtained in drilling at Merritt is to be made by the officers connected with the project. Dated May 27, 1946.

Letter from Dr. Hedley to Dr. Sargent, dated May 31, 1946, re consultation with J.J. Gillis and G. Murray.

Letter from Dr. Sargent to Dr. Hedley, dated June 6, 1946, acknowledging above letter.

Memo to Dr. Sargent from Dr. Hedley, dated May 28, 1946, re information on Merritt Coal Investigations.

Merritt Files  
No. 4

Letter from Dr. Sargent to Boyles Bros., dated October 30, 1945,  
re drilling program.

Letter from Dr. Hedley to Boyles Bros., dated November 22, 1945,  
re drilling.

Letter from Boyles Bros. to Dr. Sargent, dated November 30, 1945,  
enclosing three copies of contract and advising that equipment  
will arrive on Dec. 4.

Letter from Dr. Sargent to Boyles Bros., dated December 3, 1945,  
re contracts.

Letter from Dr. Sargent to Boyles Bros., dated December 5, 1945,  
enclosing contract re drilling at Merritt, changes to be  
initialled and two copies returned.

Letter from Dr. Sargent to Boyles Bros., dated December 5, 1945,  
re the supplying of core boxes.

Letter from Dr. Sargent to Boyles Bros., dated December 12, 1945,  
requesting acknowledgement of letters dated December 5.

Letter from Dr. Sargent to Boyles Bros., dated January 12, 1946,  
requesting a daily report of footage on periodic reports of  
drilling.

Reports of work dated January 31, 1946 and February 12, 1946.

Reports of work dated January 15, 21, 28, 31, and February 7, 1946.

Reports of work dated February 14 and 15, 1946

Letter from Dr. Sargent to Boyles Bros., dated February 15, 1946,  
requesting dates to which items listed under standpiping apply.

Letter to Boyles Bros. from Dr. Sargent, dated February 15, 1946,  
re drilling.

Report of work dated February 21, 1946.

Letter from Boyles Bros. to Dr. Sargent, dated February 16, 1946,  
regarding dates of standpiping.

Letter from Dr. Sargent to Boyles Bros., dated February 23, 1946,  
acknowledging above letter.

Report of work dated February 28, 1946.

Report of work dated March 7, 1946.

Letter from Dr. Sargent to Boyles Bros., dated March 22, 1946,  
re experiment by Boyles Bros. in drilling Hole No. 2.

Report of work dated March 14, 1946.

Total of Boyles invoices.

Letter from Dr. Sargent to Boyles Bros., dated March 26, 1946,  
pointing out errors in accounts.

Report of work dated March 31, 1946.

Corrected invoices for weeks ending February 15 and January 31, 1946

Report of work dated March 21, 1946.

Letter from Boyles Bros. to Dr. Sargent, dated March 28, 1946,  
advising that no charge is being made for the experiment.

Letter from Dr. Sargent to Boyles Bros., dated April 1, 1946,  
acknowledging above letter and requesting a credit note for  
January.

Reports of work dated April 7, 1946, April 14, April 21, April 22,  
May 7, May 15, May, 1946, May 31, June 8, June 15, June 22,  
June 30, 1946.

Letter from Dr. Sargent to Boyles Bros., dated May 10, 1946,  
advising that Mr. Newmarch is going to replace Dr. White.

Letter from Dr. Sargent to Boyles Bros., dated July 17, 1946,  
re the drilling of another hole.

Letter from Dr. Sargent to Boyles Bros., dated July 30, 1946,  
re account dated June 30.

Letter from Dr. Sargent to Boyles Bros., dated August 6, 1946,  
re drilling of Hole No. 6.

Reports of work dated July 31, 1946, August 7, August 14, August 17,  
July 7, 1946.

Letter from Boyles Bros to Dr. Sargent, dated November 7, 1945,  
re cost of drilling program.

Letter from Dr. Sargent to Boyles Bros., dated November 15, 1945,  
acknowledging the above letter.

Merritt Files  
No. 5

Letter from T. Connors Diamond Drilling Co. to Dr. Sargent,  
dated October 31, 1945, advising that Mr. Murphy is out of town.

Letter from Dr. Sargent to T. Connors Diamond Drilling Co.,  
dated November 1, 1945, acknowledging letter of October 31.

Letter from T. Connors Diamond Drilling Co. to Dr. Sargent,  
requesting a copy of Ells' report "Nicola Coal Basin" and  
Memoir 69, dated November 2, 1945.

Letter from Dr. Sargent to T. Connors Diamond Drilling Co.,  
dated November 3, 1945, advising that they can obtain copies  
of the two reports at 305 Federal Building.

Letter from Dr. Sargent to T. Connors Diamond Drilling Co.,  
dated November 7, 1945, further to drilling program.

Letter from T. Connors Diamond Drilling Co. to Dr. Sargent,  
dated November 13, 1945, re cost of drilling.

Letter from Dr. Sargent to T. Connors Co., dated November 14, 1945,  
giving more information about number of holes, etc.

Letter from Boyles Bros. to Dr. Sargent, dated December 14, 1945,  
enclosing two copies of Contract.

Description of land from contract with Boyles Bros.

Memo from Dr. Sargent to Mr. Mulcahy, dated April 4, 1946, re  
Hole No. 2.

Memo from Mr. Mulcahy to Dr. Sargent re payment of invoices,  
dated April 11, 1946.

Copy of voucher dated April 18.

Memo from Dr. Sargent to the Minister, dated March 27, 1946,  
giving costs of Holes No. 1 and 2.

Costs of Holes No. 1 and 2.

Merritt Drilling Costs

Copy of memo from Asst. Deputy Minister of Finance to Dr.  
Walker, dated June 28, 1946, re grant for Merritt Drilling.

Special Warrant No. 1

Special Warrant No. 7



Merritt Files  
No. 6

Note book belonging to W.H. White?

Sketch of Outcrops Hamilton Ck. Area.

Comparison of Geological Section at Drill Hole #1 and B.P. Litte's  
(White).

Trial section by J.M. Black

Map of Merritt Area.

Map of part of Merritt Coal Basin

Plan of Coldwater Hill, W.H. White, 8/3/46

Descriptive Notes "Nicola Map-Area, B.C.," Geological Survey Paper  
44-20 by W.E. Cockfield. Preliminary map 44-20A

Brief Report on Merritt Coal Basin by M.S. Hedley, November 1945.

Geological Map of the Coal Basins of Quilchena Creek, Coldwater River,  
Coal Gully and Tenmile Creek, Nicola Valley, Yale Dist. B.C.  
to illustrate report of R.W. Ellis, L.L.D., 1904

Map by Dawson, Nicola, B.C. 30 May, 1904.

Photostat copy of map of Merritt area.

Sections from Middlesboro maps.

Tracing of Portals of Diamond Vale Mine

Merritt Files  
No. 7

Legend of Merritt Coal Log

Copy of Log of No. 11 Hole, Diamond Vale Collieries (3)

Middlesboro Collieries Ltd. Section.

Geological Section near Diamond Vale Mines.

Copy of Log of No. 11 Hole, Diamond Vale Collieries

Manager's report to the Shareholders, Diamond Vale Coal and Iron  
Mines, Ltd., March 1907.

Copy of letter from B.P. Little to The Diamond Vale Collieries,  
Ltd. dated October 20, 1909.

Coal Production Merritt Coal Field to end 1944

Sketch Diamond Vale Bore Hole 2

List of maps of Merritt Coal Basin

Letter from Frank C. Green to T.J. Smith, Vancouver enclosing  
a report on the Coal Property of the Diamond Vale Collieries, Ltd.

Merritt Files  
No. 8

4 copies of report on Merritt Coal Basin by M.S. Hedley,  
November 1945.

**Merritt Files**  
**No. 9**

Memo from Dr. Hedley to Superintendent, November 19, 1945, requesting information re lands in vicinity of Merritt.

Memo from Superintendent of Lands to Dr. Hedley, dated November 26, 1945, enclosing a list of lands in the vicinity of Merritt, giving description and assessed owner.

Notes re lands around Merritt

Letter from Dr. Sargent to Land Registry Office, Kamloops, dated December 4, 1945 re uesting information re land in the vicinity of Merritt

Letter from Land Registry Office, Kamloops, dated December 11, 1945, giving information requested in above letter.

Letter from Dr. Sargent to Land Registry Office, Kamloops acknowledging above letter, dated January 11, 1946.

Merritt Files  
No. 10

2 copies of letter from Frank C. Green to T.J. Smith, Vancouver, dated June 30, 1913, enclosing report on the Diamond Vale Collieries Ltd.

3 copies of report by Alfred J. Gaul on Diamond Vale Colliery Merritt, B.C., Preliminary remarks.

Map Coal Lands of the Diamond Vale.

Map "A-B" Section across Nicola Valley Coal Basin

Merritt Files  
No. 11

Letter from Dr. Sargent to Dr. White, dated February 15, 1946,  
authorizing him to go to Merritt.

Progress Report and Log of Hole No. 1, 924' to 964'

Wire from Dr. Sargent to Dr. White, dated February 20, 1946,  
asking him to phone.

Wire from Dr. White to Dr. Sargent, dated February 20, 1946,  
advising that hole is to be stopped.

Letter from Dr. Sargent to Dr. White, dated February 22, 1946,  
confirming telephone conversation re next hole.

Progress Report and Log of Hole 900' to 924'

Letter dated February 17, 1946 from Dr. White to Dr. Sargent,  
discussing differences in Dr. Mandy's logs and his own.

Letter from Dr. Sargent to Dr. White, dated February 22, 1946,  
acknowledging above and asking Dr. White to collect specimens  
of the types of rock logged.

Letter from Dr. White to Dr. Sargent, dated February 24, 1946,  
enclosing Progress Report, February 22 - 24, discussing possibility  
of drilling two more holes.

Letter from Dr. White to Dr. Sargent, dated February 19, 1946,  
re stratigraphy of the Diamond Vale section of the Merritt  
Coal Basin. Enclosing comparison of geological section at  
Drill Hole #1 and B.P. Little's.

Letter from Dr. White to Dr. Sargent, dated February 21, 1946,  
enclosing Progress Report and log for Hole No. 1, 964' - 995'.  
Re location of Hole No. 2.

Letter from Dr. Sargent to Dr. White, dated February 25, 1946,  
Acknowledging receipt of February 19 and 21 letters.

Letter from Dr. Sargent to Dr. White, dated February 26, 1946,  
re logging.

Letter from Dr. White to Dr. Sargent, dated March 3, 1946,  
enclosing Progress Report of Hole No. 2, February 27 - March 3.

Progress Report Drill Hole No. 2 - March 4 - 6.

Letter from Dr. White to Dr. Sargent, dated March 9, 1946,  
enclosing progress report March 7 to 9, re drilling of Hole #2.

Letter from Dr. White to Dr. Sargent, dated March 11, 1946,  
enclosing progress report of Hole No. 2, March 10 - 11,  
and log of Hole No. 1.

Letter from Dr. White to Dr. Sargent, dated March 14, 1946,  
enclosing progress report of Hole No. 2, March 12 - 14,  
re experiment in drilling and location of third hole.

Wire from Dr. White to Dr. Sargent, March 14, 1946,  
re Blanc's new method.

Note on telephone conversation.

Wire from Dr. Sargent to Dr. White, dated March 13, 1946,  
re drilling.

Wire from Dr. White to Dr. Sargent, dated March 13, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. White, dated March 16, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated March 16, 1946,  
geological section containing the Coldwater Hill seams.

Wire from Dr. White to Dr. Sargent, dated March 19, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated March 19, 1946,  
enclosing progress report, Hole No. 2, March 15 - 19.  
Re experiment in drilling.

Letter from Dr. Sargent to Dr. White, dated March 22, 1946,  
re above.

Progress Report, Hole No. 2, March 20 - 24, log 150' - 243',  
progress report March 25 - 27.

Wire from Dr. White to Dr. Sargent, dated March 26, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. White, dated March 29, 1946,  
re specimens of core.

Progress report, Hole No. 2, March 27 - 29, log 244' - 306'

Progress report, Hole No. 2, April 1 - 3, log 387' - 476'

Progress report, Hole No. 2, April 3 - 6, log 478' - 632'

Progress Report, Hole No. 2, April 7 - 8, log 643' - 677'

Letter from Dr. Sargent to Dr. White, dated April 4, 1946,  
re location of Hole No. 3.

Wire from Dr. White to Dr. Sargent, dated April 5, 1946  
re drilling.

Wire from Dr. White to Dr. Hedley, dated April 8, 1946,  
re drilling.

Letter from Dr. Hedley to Dr. White, dated April 8, 1946,  
re location of next hole.

Progress report, drill hole No. 2, April 8 - 10, log 679' - 761'

Letter from Dr. Hedley to Dr. White, dated April 12, 1946,  
re location of 3rd hole.

Letter from Dr. White to Dr. Hedley, dated April 12, 1946,  
re location of next holes.

Progress report, Drill Hole No. 2, April 10 - 12, log, 772' - 831'

Wire from Dr. Hedley to Dr. White, dated April 15, 1946,  
re drilling.

Letter from Dr. Hedley to Dr. White, dated April 16, 1946,  
re drilling.

Progress report, Drill Hole No. 2, April 15 - 17, log, 894' - 944'

Letter from Dr. White to Dr. Sargent, dated April 18, 1946,  
re next hole.

Letter from Dr. Sargent to Dr. White, dated April 23, 1946,  
acknowledging above letter.

Letter from Dr. White to Dr. Sargent, dated April 24, 1946,  
re drilling of new hole.

Letter from Dr. White to Dr. Sargent, dated April 15, 1946,  
re Hole No. 2. Enclosing sketch of outcrops on Hamilton  
Creek, Progress report, Drill Hole No. 2, April 12 - 15,  
log 834' - 893'.

Letter from Dr. Hedley to Dr. White, dated April 17, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. White, dated April 20, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated April 25, 1946,  
re drilling.

Wire from Dr. Sargent to Dr. White, dated April 27, 1946, requesting  
Northwest mss.



Wire from Mr. MacDonald to Dr. J.J. Gillis, dated April 29, 1946, re information about another drill hole.

Wire from Dr. Gillis to Mr. MacDonald, dated April 29, 1946, giving information about other drill hole.

Wire from Dr. White to Dr. Walker, dated April 29, 1946, advising him that he has given information to Dr. Sargent.

Wire from Dr. Gillis to Mr. MacDonald, dated April 30, 1946, re information about other drill hole.

Letter from Dr. Sargent to Dr. White, dated April 30, 1946, acknowledging letters of the 24th and 25th.

Letter from Dr. White to Dr. Sargent, dated April 30, 1946, re Hole No. 3. Enclosing copy of a letter from Jas. A. Irvine, to Geo. A. Bogy, dated May 14, 1906, letter from G. Hoffman to Charles H. Keefer, dated June 12, 1906, letter from C.H. Keefer to R.W. Ells, dated June 30, 1906, copy of log of bore hole No. 1 Indian Reserve, dated April 25, 1906.

Letter from Dr. Sargent to Dr. White, dated May 4, 1946, requesting that he get in touch with Dr. Gillis and G. Murray and ask them to propose the location for next hole.

Letter from Dr. White to Dr. Sargent, dated May 4, 1946, re Emory Creek camp.

Letter from Dr. White to Dr. Sargent, dated May 4, 1946, re Hole No. 3. Enclosing progress report, Drill Hole No. 3, May 2 - 4, log 95' - 202'.

Letter from Dr. White to Dr. Sargent, dated May 2, 1946, re drilling. Enclosing progress report, Hole No. 3, April 29 - May 2, log 7' - 90'

Letter from Dr. Sargent to Dr. White, dated May 6, 1946, re drilling.

Wire from Dr. Sargent to Dr. White, dated May 6, 1946, requesting specimens of core.

Letter from Mr. Newmarch to Dr. White, dated May 7, 1946, requesting Dr. White to reserve a room at the hotel.

Log of Hole No. 3 357' - 459'.

Progress report, Drill Hole No. 3, May 8 - 10.

Progress report, Drill Hole No. 3, May 6 - 8

Log, Hole No. 3, 320' - 355'.

Letter from Dr. White to Dr. Sargent, dated May 8, 1946,  
re casing.

Wire from Dr. White to Dr. Sargent, dated May 10, 1946, re casing.

Letter from Dr. Sargent to Dr. White, dated May 10, 1946,  
enclosing accounts from Boyles Bros. to be approved.

Drawing.

Merritt Files  
No. 12

Letter from Dr. Sargent to Dr. Black, dated June 14, 1946,  
re drilling.

Progress report, Drill Hole No. 3, June 17 - 18.

Log of Hole No. 3, 1175' - 1270'.

Progress report, Hole No. 4, June 19 - 24

Progress report, Hole No. 4, June 26 - 28

Log of Hole No. 4, 286' - 385'

Letter from Dr. Black to Dr. Sargent, dated June 23, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. Black, dated June 28, 1946,  
re drilling.

Log, Hole No. 4, 186' - 286'

Progress report, June 24 - 26, Hole No. 4.

Wire from Dr. Black to Dr. Sargent, dated June 23, 1946, re drilling.

Letter from Dr. Black to Dr. Sargent, dated June 29, 1946, re  
drilling.

Wire from Dr. Black to Dr. Sargent, dated June 29, 1946, re-  
commending that hole be continued to 600'.

Letter from Dr. Sargent to Dr. Black re storing of core, dated  
July 2, 1946.

Letter from Dr. Sargent to Dr. Black, dated July 2, 1946, re  
abandonment of Hole No. 3.

Progress report, Hole No. 4, June 28 - July 2.

Log, Hole No. 4, 385' - 491'.

Letter from Dr. Black to Dr. Sargent, dated July 2, 1946, re  
logging of holes.

Wire from Dr. Black to Dr. Sargent, dated July 4, 1946, advising  
the hole has reached 570.

Letter from Dr. Sargent to Dr. Black, dated July 4, 1946, re  
storing core.

Wire From Dr. Sargent to Dr. Black, dated July 4, 1946, advising  
him to terminate drilling at about 580.

Wire from Dr. Sargent to Dr. Black, dated July 4, 1946, re core.

Progress report, Hole No. 4, July 2 - 4.

Log, Hole No. 4, 491' - 572'

Letter from Dr. Black to Dr. Sargent, dated July 4, 1946, enclosing TDI form.

Letter from Dr. Black to Dr. Sargent, dated July 6, 1946, re incident with Mr. Murray.

Wire from Dr. Black to Dr. Sargent, dated July 8, 1946, re removal of casing.

Wire from Dr. Sargent to Dr. Black, dated July 8, 1946, asking him to phone.

Letter from Dr. Sargent to Dr. Black, dated July 9, 1946, re letter of July 6.

Wire from Dr. Sargent to Dr. Black, dated July 10, 1946, re casing situation.

Wire from Dr. Sargent to Dr. Black, dated July 12, 1946, re abandonment of Hole No. 3.

Memo from Dr. Walker to Dr. Sargent, dated July 16, 1946, re storing of core.

Letter from Dr. Sargent to Dr. Black, dated July 16, 1946, re storing of core.

Letter from Dr. Sargent to Dr. Black, dated July 17, 1946, re drilling of new hole.

Letter from Dr. Sargent to Dr. Black, dated July 17, 1946, re new hole.

Letter from Dr. Black to Dr. Sargent, dated July 20, 1946, re Hole No. 5.

Letter from Dr. Sargent to Dr. Black, dated July 22, 1946, enclosing an account to be certified.

Progress report, Hole No. 5, July 23 - 25

Letter from Dr. Black to Dr. Sargent, dated July 25, 1946, re removal of casing.

Progress report, Hole No. 5, July 17 - 23.

Letter from Dr. Black to Dr. Sargent, dated July 23, 1946, re drilling of Hole No. 5.

Letter from Dr. Sargent to Dr. Black, dated July 26, 1946,  
re termination of drilling.

Log, Hole No. 5, 178' - 310'

Wire from Dr. Black to Dr. Sargent, dated July 27, 1946, progress  
of drilling.

Progress report, Hole No. 5, July 25 - 27.

Log, Hole No. 5, 310' - 443'.

Letter from Dr. Black to Dr. Sargent, dated July 27, 1946, re  
drilling.

Progress report, Hole No. 5, July 27-29.

Log, Hole No. 5, 451' - 520'

Letter from Dr. Black to Dr. Sargent, dated July 29, 1946, re  
drilling.

Wire from Dr. Black to Dr. Sargent, dated July 29, 1946, re drilling.

Wire from Dr. Black to Dr. Sargent, dated July 29, 1946, re drilling.

Progress report, Hole No. 5, July 29 - 30

Log, Hole No. 5, 530' - 555'.

Sketch of outcrops Hamilton Ck. Area.

Wire from Dr. Black to Dr. Sargent, dated August 6, 1946, re drilling.

Memo from Dr. Sargent to Dr. Walker, dated August 6, 1946,  
re hole No. 6.

Merritt Files  
No. 13

Letter from Dr. Sargent to Mr. Newmarch, dated May 10, 1946,  
instructions.

Progress report, Hole No. 3, May 11 - 13.

Letter from Mr. Newmarch to Dr. Sargent, dated May 14, 1946  
re drilling.

Progress report, Hole No. 3, May 14 - 15.

Log, Hole No. 3 459' - 549'.

Progress report, Hole No. 3, May 16 - 17.

Log, Hole No. 3, 550' - 671'

Progress report, Hole No. 3, May 18 - 20

Log, Hole No. 3, 676' - 800'

Progress report, Hole No. 3, May 21 - 25

Progress report, Hole No. 3, May 26 - 27

Wire from Mr. Newmarch to Dr. Sargent, dated May 27, 1946,  
re drilling.

Wire from Dr. Sargent to Mr. Newmarch, dated May 27, 1946,  
advising that Dr. Hedley will arrive Thursday.

Copy of memo from Dr. Sargent to Dr. Hedley, Dr. White and Mr.  
Newmarch, dated May 27, 1946, advising them a summary of  
information is to be prepared by the officers of the De-  
partment who had anything to do with the Merritt drilling.

Wire from Dr. Sargent to Mr. Newmarch, dated May 28, 1946,  
advising that hole is to be continued.

Log, Hole No. 3, 810' - 861'.

Progress report, Hole No. 3, May 28 - 29.

Log, Hole No. 3, 863' - 946'

Progress report, Hole No. 3, May 30 - 31

Letter from Mr. Newmarch to Dr. Sargent, dated May 31, 1946,  
re location of next hole.

Progress report, Hole No. 3, June 1 - 2.

Progress report, Hole No. 3, June 3 - 4

Progress report, Hole No. 3, June 5 - 9

Log, Hole No. 3, 946' - 1024'

Wire from Mr. Newmarch to Dr. Sargent, dated June 8, 1946,  
advising that rods arrived.

Letter from Mr. Newmarch to Dr. Sargent, dated June 12, 1946,  
re drilling.

Letter from Dr. Sargent to Mr. Newmarch, dated June 15, 1946,  
re arrival of Dr. Black.

Sketch.

Letter from Dr. Sargent to Mr. Newmarch, dated June 8, 1946,  
re costs of drilling.

Letter from Dr. Sargent to Mr. Newmarch, dated June 12, 1946.  
re Hole No. 3.

Progress report, Hole No. 3, June 10 - 12

Progress report, Hole No. 3, June 13 - 16.

Log, Hole No. 3, 1030' - 1093'.

Log, Hole No. 3, 1099' - 1175'

Merritt Files  
No. 14

Letter from Dr. Hedley to Dr. Mandy, dated December 6, 1945,  
re Hole No. 1.

Letter from Dr. Sargent to Dr. Mandy, dated January 11, 1946,  
requesting reports twice a week on drilling progress.

Progress report, Jan. 7 - 12.

Letter from Dr. Hedley to Dr. Mandy, dated December 15, 1945,  
summary of essential points of the contract with Boyles Bros.

Progress report, Jan. 14 - 15.

Log, 105' - 151', Hole No. 1

Progress report, Jan. 15 - 16

Log, Hole No. 1, 154' - 241'

Wire from Dr. Sargent to Dr. Mandy, dated January 19, 1946,  
re drilling.

Progress report, January 17 - 19.

Log, Hole No. 1, 251' - 396'

Letter from Dr. Sargent to Dr. Mandy, dated January 21, 1946,  
re drilling.

Letter from Dr. Sargent, to Dr. Mandy, dated January 22, 1946,  
re drilling.

Wire from Dr. Mandy to Dr. Sargent, dated January 22, 1946,  
re progress of drilling.

Progress report, January 19 - 22

Log, Hole No. 1, 396' - 508'

Letter from Dr. Mandy to Dr. Sargent, dated January 17, 1946,  
re renting a car.

Progress report, January 22 - 23.

Log, Hole No. 1, 508' - 585'

Wire from Dr. Mandy to Dr. Walker, dated January 24, 1946,  
re progress of drilling.

Wire from Dr. Mandy to Dr. Walker, dated January 31, 1946,  
advising that he is returning to Merritt.



Wire from Dr. Sargent to Dr. Mandy, dated January 31, 1946,  
advising that he is going to Merritt.

Letter from ~~from~~ Dr. Mandy to Dr. Sargent, dated February 2, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. Mandy, dated February 5, 1946,  
re trip to Vancouver.

Progress report, January 24 - February 6.

Log, Hole No. 1, 594' - 643'

Progress report, February 6 - 8

Log, Hole No. 1, 646' - 698'

Letter from Dr. Sargent to Dr. Mandy, dated February 12, 1946,  
re trip to Vancouver.

Progress report, February 9, - 12

Log, Hole No. 1, 708' - 801'

Letter from Dr. Sargent to Boyles Bros., Merritt, dated  
February 14, 1946, advising that Dr. White is replacing Dr. Mandy.

Letter from Dr. Sargent to Boyles Bros., Vancouver, dated  
February 14, 1946, advising that Dr. White is replacing Dr. Mandy.

Letter from Dr. Sargent to Dr. Mandy, dated February 14, advising  
that Dr. White is replacing him.

Wire from Dr. Sargent to Dr. Mandy, dated February 14, advising  
that Dr. White is replacing him.

Progress report, February 12 - 16.

Log, Hole No. 1, 811' - 900'.

Merritt Files  
No. 15

- Copy of letter from J.A. Irvine to G.A. Bogy, dated May 14, 1906.
- Copy of letter from C. Hoffman to C.H. Keefer, dated June 12, 1906.
- Copy of letter from C.H. Keefer to E.W. Ells, dated June 30, 1906.
- Letter from Dr. Hedley to Dr. Mandy, dated December 15, 1945,  
summary of the essential points of the contract between the  
Government and Boyles Bros.
- Letter from Dr. Sargent to Dr. Mandy, dated January 11, 1946,  
requesting reports of progress twice a week.
- Coal Basin notes after Frank C. Green.
- Invoice from Boyles Bros., February 15, 1946.
- Letters to Dr. Mandy, Boyles Bros, Vancouver, Boyles Bros, Merritt,  
advising that Dr. White is replacing Dr. Mandy, dated Feb. 14, 1946
- Letter from Dr. Sargent to Dr. White, dated February 15, 1946,  
authorizing him to go to Merritt.
- Letter from Dr. White to Dr. Sargent, dated February 19, 1946,  
re stratigraphy of the Diamond Vale section.
- Letter from Dr. White to Dr. Sargent, dated February 21, 1946,  
re location of Hole No. 2.
- Letter from Dr. Sargent to Dr. White, dated February 22, 1946,  
re drilling.
- Letter from Dr. Sargent to Dr. White, dated February 22, 1946,  
re selection of specimens.
- Letter from Dr. Sargent to Dr. White, dated February 25, 1946,  
re drilling.
- Letter from Dr. Sargent to Dr. White, dated February 26, 1946,  
re logging.
- Letter from Dr. White to Dr. Sargent, dated February 27, 1946,  
re drilling.
- Receipt for express sent C.P.R. from Merritt to Dr. Sargent.
- Letter from Dr. White to Dr. Sargent, dated February 28, 1946,  
re drilling.
- Letter from Dr. Sargent to Dr. White, dated February 28, 1946,  
enclosing cheques for expenses and salary.
- Boyles Bros. invoice, February 28, 1946.

Letter from Dr. White to Dr. Sargent, dated March 3, 1946,  
acknowledging letter of February 28.

Letter from Dr. Sargent to Dr. White, dated March 6, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated March 9, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated March 11, 1946,  
re Hole No. 2.

Wire from Dr. Sargent to Dr. White, dated March 13, 1946,  
re drilling.

Wire from Dr. White to Dr. Sargent, dated March 13, 1946,  
information re drilling.

Wire from Dr. White to Dr. Sargent, dated March 14, 1946,  
re new method.

Letter from Dr. White to Dr. Sargent, dated March 14, 1946,  
re new method.

Letter from Dr. White to Dr. Sargent, dated March 16, 1946,  
geological section containing the Coldwater Hill seams.

Letter from Dr. Sargent to Dr. White, dated March 16, 1946,  
location of next hole.

Letter from Dr. White to Dr. Sargent, dated March 19, 1946,  
re new method.

Wire from Dr. White to Dr. Sargent, dated March 19, 1946, re drilling.

Letter from Dr. Sargent to Dr. White, dated March 22, 1946,  
re new method.

Wire from Dr. White to Dr. Sargent, dated March 26, 1946,  
re drilling.

#### Merritt Drilling Costs

Letter from Dr. Sargent to Dr. White, dated March 29, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated March 31, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated April 1, 1946,  
re drilling costs.

Letter from Dr. Sargent to Dr. White, dated April 3, 1946,  
re drilling.

- Letter from Dr. Sargent to Dr. White, dated April 4, 1946,  
re Hole No. 3.
- Wire from Dr. White to Dr. Sargent, dated April 5, 1946, re  
progress.
- Wire From W.H. White to Dr. Hedley, dated April 8, 1946, re  
progress.
- Letter from Dr. Hedley to Dr. White, dated April 8, 1946,  
re location of next hole.
- Letter from Dr. White to Dr. Hedley, dated April 9, 1946,  
re drilling.
- Letter from Dr. White to Dr. Hedley, dated April 12, 1946,  
re location of next hole.
- Letter from Dr. Hedley to Dr. White, dated April 12, 1946,  
re location of next hole and enclosing invoice from Boyles  
Bros. March 30, 1946.
- Letter from Dr. White to Dr. Hedley, dated April 15, 1946,  
re drilling.
- Wire from Dr. Hedley to Dr. White, dated April 15, 1946,  
re drilling.
- Letter from Dr. Hedley to Dr. White, dated April 16, 1946,  
re drilling.
- Letter from Dr. Hedley to Dr. White, dated April 17, 1946,  
re next hole.
- Letter from Dr. Sargent to Dr. White, dated April 18, 1946,  
re drilling.
- Letter from Dr. White to Dr. Sargent, dated April 24, 1946,  
re drilling.
- Letter from Dr. Sargent to Dr. White, dated April 20, 1946,  
re next hole.
- Letter from Dr. Sargent to Dr. White, dated April 23, 1946,  
re next hole.
- Letter from Dr. White to Dr. Sargent, dated April 25, 1946,  
re drilling.
- Letter from Dr. White to Dr. Sargent, dated April 28, 1946,  
re Northwest manuscript.

C.P.R. Express receipt for manuscript sent to Dr. Sargent.

Wire from Dr. Walker to Dr. White, dated April 29, 1946,  
re telegram to Dr. Gillis.

Wire from Mr. MacDonald to Dr. White, dated April 29, 1946,  
telegram to Dr. Gillis.

Wire from Dr. White to Dr. Walker, dated April 29, 1946,  
advising that he sent the material to Dr. Sargent.

Letter from Dr. White to Dr. Sargent, dated April 30, 1946,  
re location of Hole No. 3.

Letter from Dr. Sargent to Dr. White, dated April 30, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated May 2, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated May 4, 1946,  
re drilling.

Wire from Dr. Sargent, to Dr. White, dated May 6, 1946, re  
sending in specimens.

Letter from Dr. Sargent to Dr. White, dated May 4, 1946,  
re drilling.

Letter from Dr. White to Dr. Sargent, dated May 6, 1946,  
re drilling.

C.P.R. Express receipt for rocks sent to Dr. Sargent.

Letter from Dr. Sargent to Dr. White, dated May 6, 1946,  
re collecting specimens.

Letter from Dr. White to Dr. Sargent, dated May 8, 1946,  
re progress of drilling.

Wire from Dr. White to Dr. Sargent, dated May 10, 1946, re  
progress of drilling.

Boyles Bros. invoice, April 30, 1946, No. 804

Boyles Bros. invoice, April 30, 1946, No. 782

Boyles Bros. invoice, April 30, 1946, No. GI-83

Letter from Dr. Sargent to Mr. Newmarch, dated May 28, 1946,  
re employment forms etc.

Letter from Dr. Sargent to Mr. Newmarch, dated June 8, 1946,  
re cost of drill rods, etc.

Letter from Dr. Black to Dr. Sargent, dated June 26, 1946,  
enclosing Civil Service application.

Wire from Dr. Black to Dr. Sargent, dated June 28, 1946,  
re drilling.

Letter from Dr. Black to Dr. Sargent, dated June 28, 1946,  
re drilling.

Wire from Dr. Black to Dr. Sargent, dated June 29, 1946,  
recommending hole to be continued.

Letter from Dr. Black to Dr. Sargent, dated June 29, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. Black, dated June 27, 1946,  
re drilling.

Letter from Dr. Black to Dr. Sargent, dated July 2, 1946,  
re logging.

Letter from Dr. Sargent to Dr. Black, dated June 28, 1946,  
re drilling.

Wire from Dr. Black to Dr. Sargent, dated July 4, 1946,  
re drilling.

Letter from Dr. Black to Dr. Sargent, dated July 4, 1946,  
enclosing TDI form.

Wire from Dr. Sargent to Dr. Black, dated July 4, 1946,  
advising when to terminate present hole.

Letter from Dr. Sargent to Dr. Black, dated July 2, 1946,  
re storing core.

Letter from Dr. Sargent to Dr. Black, dated July 2, 1946,  
re drilling.

Wire from Dr. Sargent to Dr. Black, dated July 4, 1946,  
re coal specimens.

Letter from Dr. Black to Dr. Sargent, dated July 6, 1946,  
re incident with Mr. Murray.

Letter from Dr. Sargent to Dr. Black, dated July 4, 1946,  
re storing of core.

Wire from Dr. Sargent to Dr. Black, dated July 4, 1946,  
re specimens of typical core.

Wire from Dr. Black to Dr. Sargent, dated ----, re casing.

C.P.R. Express receipt for rock samples sent to Dr. Sargent.

Wire from Dr. Sargent to Dr. Black, dated July 10, 1946,  
re casing situation.

Wire from Dr. Sargent to Dr. Black, dated July 8, 1946,  
requesting him to phone.

Wire from Dr. Black to Dr. Sargent, re drilling.

Wire from Dr. Sargent to Dr. Black, dated July 12, 1946,  
advising abandonment of hole No. 3.

Letter from Dr. Sargent to Dr. Black, dated July 16, 1946,  
re storing of core.

Letter from Dr. Sargent to Dr. Black, dated July 17, 1946,  
re further expenditure for another hole.

Letter from Dr. Sargent to Boyles Bros., dated July 17, 1946,  
re new hole.

Letter from Dr. Black to Dr. Sargent, dated July 20, 1946,  
re drilling.

Letter from Dr. Black to Dr. Sargent, dated July 23, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. Black, dated July 22, 1946,  
re certification of voucher.

Letter from Dr. Black to Dr. Sargent, dated July 25, 1946,  
re drilling.

Letter from Dr. Black to Dr. Sargent, dated July 27, 1946,  
re drilling.

Wire from Dr. Black to Dr. Sargent, re drilling.

Wire from Dr. Black to Dr. Sargent, dated July 29, 1946, re drilling

Letter from Dr. Black to Dr. Sargent, dated July 29, 1946,  
re drilling.

Letter from Dr. Sargent to Dr. Black, dated July 26, 1946,  
re winding up program.

Wire from Dr. Black to Dr. Sargent, dated July 29, 1946,  
re drilling.

Merritt Files  
No. 16

Carbon copies made at Merritt of original logs Holes 1 - 5, 1946,  
also Hole No. 6, 1946  
Hole No. 11 Diamond Vale  
Indian Reserve Hole  
Blair Shaft  
Middlesboro No. 1 Hole.



Merritt Files  
No. 17

Progress Notes, 1946 drilling.

Carbon copies of Progress Notes typed in Merritt

Copies of Dr. Mandy's Progress Notes copies from originals in  
Victoria.

SHALE, grey, sandy, cross-bedded sandstone streaks	2' 6"	726' 8"
SHALE, black, compact	1' 4"	728' 0"
SHALE, grey, sandy, with sand lenses	18' 6"	746' 6"
SANDSTONE, shaly, shale streaks dipping at high angles, vertical channelling	19' 6"	766' 0"
SHALE, sandy, with sand streaks	7' 0"	773' 0"
SANDSTONE, grey, poorly sized, with shaly streaks dipping at high angles	29' 0"	802' 0"
SHALE, grey, sandy	2' 8"	804' 8"
SANDSTONE, shaly streaks at high angles	6' 4"	811' 0"
SANDSTONE, light grey, coarse, poorly sorted	2' 9"	813' 9"
SHALE, grey, sandy	6' 3"	820' 0"
SANDSTONE, light grey, coarse	3' 0"	823' 0"
CONGLOMERATE, Med., to coarse with few sand lenses	26' 0"	849' 0"
SANDSTONE, grey, coarse, cross-bedded	8' 0"	857' 0"
SHALE, black, coal marks	2' 0"	859' 0"
SHALE, black, coal marks and soft black mud	4' 0")	
COAL	0' 6")	862' 6"
SHALE, dark grey, compact	16' 6"	879' 0"
SHALE, grey, sandy	4' 0"	883' 0"
SHALE, dark grey, compact	5' 0"	888' 0"
SHALE, grey, sandy, with sand streaks	2' 0"	890' 0"
SANDSTONE, coarse, cross-bedded, shale streaks	3' 0"	893' 0"
SHALE, dark grey, fractured	7' 0"	900' 0"

.....  
 Remainder of log is on file at Victoria  
 .....

"W. H. White"

Assoc. Mining Engineer

10/ Mar./46

SANDSTONE, fine grained	1'	6"	375'	0"
CONGLOMERATE, fine	0'	8"	375'	8"
SANDSTONE, fine grained	1'	0"	376'	8"
SHALE, light grey, sandy	2'	0"	378'	8"
SANDSTONE, light grey, coarse, few shaly streaks	71'	4"	450'	0"
SHALE, dark grey, sandy, sand streaks, coal marks	11'	5 1/2"	461'	5 1/2"
COAL, with 1 1/2" Shale parting	3'	3 3/8"	464'	9"
SHALE, dark grey, coal streaks	1'	7 3/8"	466'	4 1/2"
COAL,	1'	10 1/2"	468'	3"
SHALE,	0'	3"	468'	6"
COAL, with 2" Shale parting	5'	10"	474'	4"
SHALE, black	0'	9"	475'	1"
COAL, black	0'	3"	475'	4"
SHALE, Black	0'	4"	475'	8"
COAL,	0'	9"	476'	5"
SHALE, black	0'	1 1/2"	476'	6 1/2"
COAL,	0'	2 1/2"	476'	9"
SHALE, black coal marks and several 1/4" Coal seams	9'	1"	485'	10"
COAL,	0'	10"	486'	8"
SHALE, black, coal marks	1'	6"	488'	2"
COAL, boney	1'	6"	489'	8"
SHALE, black, coal streaks	1'	0"	490'	8"
COAL,	0'	8"	491'	4"
SHALE, black, fissile, leaf molds, coal marks	10'	8"	502'	0"
COAL,	0'	6"	502'	6"
SHALE, grey, somewhat sandy	4'	6"	507'	0"
SANDSTONE, coarse, poorly sorted	1'	0"	508'	0"
SHALE, dark grey to black, fractured and sheared	7'	0"	515'	0"
SANDSTONE, grey, med. grained with shaly and fine sand streaks. <u>Dip 18°</u>	32'	6"	547'	6"
SHALE, black coal marks	3'	0"	550'	6"
COAL,	4'	10"	555'	4"
SHALE, black	1'	2"	556'	6"
COAL, some boney streaks	4'	6"	561'	0"
SHALE, Black, fissile, coal marks, leaf molds	6'	0"	567'	0"
SANDSTONE, shaly	6'	0"	573'	0"
SANDSTONE, light grey, medium grained with a few coarse streaks, carbonized twigs	70'	0"	643'	0"
SHALE, black, compact, coal marks	3'	6"	646'	6"
COAL, in part boney	4'	0"	650'	6"
SHALE, black, coal streaks	1'	6"	652'	0"
COAL, boney	0'	10"	652'	10"
SHALE, dark grey, sandy, fractured	3'	2"	656'	0"
SANDSTONE, dark grey, shaly	1'	6"	657'	6"
SHALE, grey, sandy, with many sand lenses, much fractured and high core loss	9'	6"	667'	0"
SANDSTONE, coarse, poorly sorted	2'	0"	669'	0"
SHALE, dark grey, sandy fractured	9'	0"	688'	0"
SANDSTONE, grey shaly <u>Dip 10°</u>	10'	0"	698'	0"
SANDSTONE, grey, coarse	10'	0"	708'	0"
SANDSTONE, med. fine grained with shaly streaks	3'	10"	711'	10"
SHALE, dark grey, with sandy streak	6'	2"	718'	0"
SANDSTONE, shaly Streaks <u>Dip 8°</u>	3'	8"	721'	8"
SHALE, black, fractured	2'	6"	724'	2"

76

MERRITT DIAMOND DRILLING

LOG OF HOLE #1

N 35°

(Located on NW quarter Sec. 14, Tp. 91, 378' E From Diamond Vale Hole #11) (Elevation 1986')

Boulder Clay		102'	102' 0"
SANDSTONE, grey, med., to coarse grain, with shaly streaks		14' 0"	116' 0"
SHALE, dark, sandy		6' 6"	122' 6"
SANDSTONE, very coarse, poorly sorted, shaly streaks		5' 0"	127' 6"
SHALE, grey, sandy		3' 6"	131' 0"
SANDSTONE, grey, coarse, coal marks		2' 10"	133' 10"
COAL, bony		0' 10"	134' 8"
SHALE, dark, fissile, coal marks		1' 6"	136' 2"
SANDSTONE, grey coarse, some fine sand and shaly streaks		11' 0"	147' 2"
SHALE, black, leaf molds, few sandy streaks		9' 0"	156' 2"
SANDSTONE, shaly, finely bedded		2' 6"	158' 8"
SHALE, dark to black, coal marks		3' 0"	161' 8"
SHALE, dark, sandy		1' 0"	162' 8"
SANDSTONE, Med. grain, with few shaly streaks		4' 8"	167' 4"
SHALE, sandy, grey		2' 6"	169' 10"
SANDSTONE, Med., grain, shaly streaks, coal marks		3' 2"	173' 0"
SHALE, black, coal marks, much fractured		7' 0"	180' 0"
SANDSTONE, Light grey, coarse		3' 8"	183' 8"
SHALE, Grey, sandy		5' 6"	189' 2"
SANDSTONE, grey, coarse, poorly sorted		10' 10"	200' 0"
SHALE, dark grey, slightly sandy	Dip 25°	9' 0"	209' 0"
SANDSTONE, Shaly	Dip 15°	4' 6"	213' 6"
SHALE, dark grey, sandy, fractured		6' 6"	220' 0"
SANDSTONE, Med. to coarse, poorly sorted, few fine sand and shaly streaks		19' 0"	239' 0"
SHALE, black, compact, leaf molds		13' 6"	252' 6"
COAL		0' 8"	253' 2"
SHALE, black, much fractured		8' 10"	262' 0"
SANDSTONE, fine grain, shaly	Dip 14°	4' 0"	266' 0"
SANDSTONE, very coarse poorly sorted with some irregular fine conglomerate bands, Abrupt contact below		14' 0"	280' 0"
SHALE, black, fractured		3' 1 1/2"	283' 1 1/2"
(al,		0' 4 1/2"	283' 6"
SHALE, black, fissile, leaf molds		9' 0"	292' 6"
SANDSTONE, Med., to fine grained, somewhat shaly		8' 0"	300' 6"
SHALE, dark, fractured		4' 0"	304' 6"
SANDSTONE, grey, shaly, coal marks		3' 0"	307' 6"
SHALE, grey to black, fractured, 1/4" Coal seam		6' 6"	314' 0"
SANDSTONE, shaly, dark grey		4' 6"	318' 6"
SANDSTONE, light grey, coarse, poorly sorted, irregular conglomerate streaks		12' 0"	330' 6"
CONGLOMERATE, fine		0' 9"	331' 3"
SANDSTONE, light grey, coarse, friable, poorly sorted		27' 0"	358' 3"
SHALE, dark, sandy, with fine sand streaks	Dip 14°	5' 9"	364' 0"
SANDSTONE, grey, medium grained, shaly streaks		4' 6"	368' 6"
CONGLOMERATE, fine, with coarse sand streaks and 2" streak of sandy shale		5' 0"	373' 6"

LOG OF MERRITT DRILL HOLE #1 - 964' - 995'

Breccia, fragments of shale and volcanicics	4' 0"	-	968' 0"
CONGLOMERATE, soft, muddy, coaly shale streaks	1' 8"	-	969' 8"
Breccia, large volcanic fragments with muddy cement. Rock soft and friable	6' 4"	-	976' 0"
FELSITE, light grey, fine grained.	2' 0"	-	<u>978' 0"</u>
Greenstone, fine-grained, dark green, Chloritic	7' 0"	-	<u>985' 0"</u>
GREENSTONE, fine,-grained, somewhat brecciated	3' 6"	-	988' 6"
SHALE, compact, indurated	1' 0"	-	989' 6"
Greenstone, pillowed, somewhat porphyritic	5' 6"	-	995' 0"

END OF HOLE #1

"Wm. H. White"

William H. White  
Assoc. Mining Engineer.

MERRITT DRILL HOLE #1 - LOG 924' to 964'

SHALE, grey, badly fractured Abrupt, Irregular Contact, Dip 35°	3' 4" 1' 2"	927' 4"
SANDSTONE, grey, fine even-grained	0' 8"	<u>928' 0"</u>
SANDSTONE, grey, fine even-grained, Scattered grains of Sulphide	4' 0" 1' 9"	<u>932' 0"</u>
SHALE, grey, compact, somewhat sandy	0' 11"	932' 11"
SANDSTONE, grey, fine even-grained. Dip 29°	0' 1"	933' 0"
SHALE, grey, compact, sandy	3' 10"	936' 10"
SHALE, grey, compact, sandy. Fine sand streaks Dip 23° Seam of carbonate.	1' 2"	938' 0"
SHALE, grey, compact, sandy	0' 11"	938' 11"
SANDSTONE, coarse, poorly sorted	0' 1"	939' 0"
SHALE, grey, compact, sandy. Fine sand seams Dip 31°	3' 0"	<u>942' 0"</u>
SHALE, grey, compact, numerous sand seams Dip 29°	7' 6" 1' 0"	949' 6"
SHALE, dark, badly fractured	2' 6" 0' 6"	952' 0"
SHALE, black, coal marks, badly sheared	1' 10" 0' 10"	953' 10"
MUD or GOUGE SEAM, containing fragments of shale and a 1/4" seam of crushed COAL	0' 5"	954' 3"
BRECCIA, coarse fragments, sand cement.	2' 9" 0' 6"	<u>957' 0"</u>
MUD or GOUGE SEAM, containing fragments of breccia and fine flakes of shale	1' 0"	
COAL, about 1" of bony fragments and some coal mud recovered	0' 6"(?) 1' 10"	958' 6"
MUD or GOUGE SEAM, as above	1' 6"	<u>960' 0"</u>
SHALE, ground up, containing some coal fines	0' 10" 0' 4"	<u>960' 10"</u>
DIORITE, medium coarse grained, containing biotite and hornblende. Sheared contact with shale dips 45°	0' 8"	961' 6"
SHALE, dark, badly sheared	0' 6" 0' 1"	962' 0"
CONGLOMERATE, poorly sorted with coarse sand lenses	2' 0" 0' 2"	964' 0"

Note: Diorite logged at 961' is thought to be a boulder.

"Wm. H. White"

William H. White  
Assoc. Mining Engineer.

I have checked back over the last hundred feet of Mandy's Logging and find it similar to my own, possibly a bit more meticulous. However, there are minor differences. That which he logs as shale is in places arenaceous to the extent that under the glass individual grains can be seen. This material, which is dark, but not black in appearance may be what is referred to as "Sandy Shale" in the log of Hole #11. Mandy's "Sandy Shale" is that in which sand streaks are quite evident to the naked eye. At present I am logging the slightly arenaceous shale as "Grey" or "Dark", reserving the term "Black" for the argillaceous shale. Another point: Material which Mandy describes as "Limey" is that containing patches and stringers of carbonite. In Logging I am following the usual practise of tabulating the core missing in a separate column, where possible assigning the loss to its proper place in the section.

The textural features of these sediments indicates variable environment of deposition such as would obtain in a periodically flooding river at grade or delta. Cross-bedding, abrupt changes in grain size, poorly sorted sands, abrupt contacts between sandstone and shale, and much evidence of channelling characterize the material. Probably the beds are quite lenticular, and correlation of individual horizons in these lower measures correspondingly difficult.

	THICKNESS	MISSING	DEPTH
SHALE, dark, soft, slickensided partings, carbonate stringers. Abrupt Irregular contact	10' 0"	5' 0"	910' 0"
SANDSTONE, light, coarse-grained	4"		910' 4"
SHALE, dark, finely cross-bedded	1"		910' 5"
SANDSTONE, light grey, coarse, cross-bedded Cross-bedding dips 700	5"		910' 10"
SHALE, dark with intercalated seams of fine Sand	1' 0"		911' 10"
SANDSTONE, light grey, coarse (About 1mm.) with some grains of shale. Abrupt contact.	2' 0"	7"	913' 10"
SHALE, black with a few fine-grained sand streaks interbedded.	1' 2"	7"	915' 0"
SHALE, black, compact, wavy bedding with average dip 45 degrees	3' 5"		918' 5"
COAL, bony, bright partings, friable	1 1/8"		918' 6 1/8"
SHALE, black, much fractured, slickensided fragments.	1' 3 1/2"	2"	919' 10"
SHALE, black with a few sandy streaks and wavy bedding dipping about 45 degrees	4' 2"	2'-3"	924' 0"





MERRITT DIAMOND/DRILLING

LOG OF HOLE No. 1, (Continued)

<u>Description</u>	<u>Thickness</u>	<u>Depth</u>
Sandstone (Grey; coaly marks, shale streaks) Bed dip - 12°	10' 0"	<u>708' 0"</u>
Sandy shale (Coaly marks, compact actual 1' 8"	2' 6" (?)	
SHALE, (Dark sandy, coaly streaks) actual 3' 2"	5' 6" (?)	
(Note - Grinding in core tube)		
SHALE, Black; coaly streaks, soft, broken) actual 0' 9"	2' 0" (?)	<u>718' 0"</u>
SHALY, sandstone (Grey) " 3' 8"	3' 9"	
SANDY SHALE " 0' 5"	0' 6"	
SHALE (Dark grey, fractured crushed, broken, slickensided/ Actual 5' 4"	5' 9"	<u>728' 0"</u>
SHALE, ( " " " )	8' 0"	<u>736' 0"</u>
SHALE, ( " " Compact)	9' 0"	<u>745' 0"</u>
SHALE, ( " " broken)	1' 0"	<u>746' 0"</u>
SANDY, shale, (Sandy Pockets; coaly marks; shale streaks vertical and steep angles, cross-bedding; limey, fractured slickensided)	10' 0"	<u>756' 0"</u>
SHALY SANDSTONE ( " " " )	10' 0"	<u>766' 0"</u>
SHALY SANDSTONE ( " " " Broken)	2' 4"	<u>768' 4"</u>
SHALY SANDSTONE ( " " " " )		
SHALY SANDSTONE ( " " " actual 1' 8"	4' 8"	<u>773' 0"</u>
SHAKY SANDSTONE ( " " )	10' 0"	<u>783' 0"</u>
SHALY SANDSTONE ( " " )	8' 0"	<u>791' 0"</u>
SHALY SANDSTONE ( " " )	4' 6"	<u>795' 6"</u>
SHALY SANDSTONE ( " " )	5' 6"	<u>801' 0"</u>

"Joseph T. Mandy"  
Mining Engineer.

PROGRESS REPORT - MERRITT DIAMOND DRILLING

Feb. 22nd to 24th.

Feb. 22nd: Pulling Casing (Day Shift Only - 8 Men)  
Feb. 23rd: Pulling stand pipe and preparing for move (one Shift - 7 Men)  
Feb. 24th: Not working.

William H. White  
Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DIAMOND DRILL HOLE #1Feb. 19th to Feb. 21st.

Feb. 19th: Night Shift: Cored 964' - 968'; 968' - 978'  
Graveyard Shift: Cored 978' - 988'

Feb. 20th: Day Shift: Cored 988' - 995' END OF HOLE  
Night Shift: Pulling rods and casing

Feb. 21st: Day Shift: Pulling casing ( 8 Men)  
No Night Shift:

PROGRESS REPORT, MERRITT D.D. HOLE #1 - FEB. 17th to 19th

Feb. 17th: Night Shift: Cored 924 - 928: 928 - 932  
Graveyard : " 932 - 942

Feb. 18th: Day Shift: Cored 942 - 952  
Night Shift: " 952 - 957  
Graveyard : " 957 - 960

Feb. 19th: Day Shift : Cored 960 - 964; Drilling.

Progress is slow due to blocky ground and short pulls,  
but core recovery is satisfactory.

"WM. H. WHITE"

William H. WHITE,  
ASSOC. Mining Engineer.

80

MERRITT DRILLING

PROGRESS REPORT - Feb. 16 - 17th .

Feb. 16th - Day Shift: Cored 890 - 900  
          Night Shift:   "   900 - 910  
          Graveyard :   "   910 - 915

Feb. 17th - Day Shift: Cored 915 - 920; 920 - 924  
                          Pump trouble remedied.

A new type of bit was tried on Feb. 17th. This has the water holes entering the inner surface of the bit about  $\frac{3}{4}$ " up from the cutting edge, the object being to allow a build-up of pressure if the bit becomes blocked. The block at 924' was quite definite; the pressure increase caused the overflow valve on the pump to release. However, this cannot detect blockage and grinding in the core-tube, because the mud circuit does not pass through the tube.

The "Altamud" system appears to accomplish it's chief purpose of preventing caving, though it is doubtful if it affects core recovery one way or the other. The use of "Altamud" slows up drilling to some extent because of more frequent break-downs of pumping equipment, difficulty of handling muddy rods, and the necessity of periodically diluting or replacing the mud circuit. The mud has not been found a serious hindrance in examining the core.

Mr. Johnson expects trouble with the drill rig if this hole is continued to 1500'. According to him, he was told to make the set-up for a 600' hole, which he did. The foundations were laid on frozen ground and no mud-sills laid to anchor it. Now, with the ground thawing, and with over twice the string of rods that he figured on, Mr. Johnson is doubtful about the foundations holding.

Attached hereto is the log from 900' to 924'.

W.H. White,  
Assoc. Mining Engineer.

86

MERRITT DIAMOND-DRILLING

Progress Report - Feb. 12th - Feb. 16th (Noon)

Feb. 13th - Day Shift - cored 801 - 811.  
Night " - " 811 - 821.  
Graveyard - " 821 - 831; 831 - 834.  
Feb. 14th - Day Shift - " 834 - 836; 836 - 840; 840 - 850  
Night " - " 850 - 856; 856 - 864.  
Graveyard - " 864 - 869  
Feb. 15th - Day shift - Thickening mud to stop caving above 864.  
Rods down to 6" of bottom. Cored 869 - 878.  
Night " - cored 878 - 886.  
Graveyard - " 886 - 890  
Feb 16th - Day shift - " 890 - 900.  
Feb. 16th - Handed over to W.H. White.

"Joseph T.Mandy"

Mining Engineer.

MERRITT DIAMOND-DRILLING  
LOG OF HOLE NO. 1, CONTINUED

CORRECTION

<u>DESCRIPTION</u>		<u>THICKNESS</u>	<u>DEPTH</u>
Shale (Dark, sandy in part)	<u>Actual</u> -	3' 10"	
Shale (Dark, sandy in part, crushed)	"	2"	
Sandstone, (light grey, limey)	"	3' 3"	
Shale, (Black, broken, slickensided)	"	1' 7"	
Shale (fractured, limey) " " "	"	4' 9"	900' 0"

"Joseph T. Mandy"  
Mining Engineer

MERRITT DIAMOND-DRILLING

PROGRESS REPORT FEB 9th - Feb 12th

Feb. 9th - Day shift - Engine arrived by express. Installing engine; Running-in engine.

" " Night " - Drilling; cored 698 - 708

" " Graveyard - Cored 708 - 718

Feb. 10th - day shift- Cored 718 - 728.

Note - Core loss between 708 - 728 thought possibly due to wash at grind-ing edge of mud bit. Dropped Altamud circulation and resumed water circulation test for improved core recovery.

" " Night Shift- Cored 728 - 736; 736 - 746.

Note - Noted caving at 682' after last core pull.

" " Graveyard - Broke brakehandle bolt when letting rods down.

Feb. 11th - Day Shift- Repairing brake handle. Preparing mud circulation for resuming Altamud circulation. Drilling.

Feb. 11th - Night " - Core 746 - 756; 756 - 766.

" 11th - Graveyard - Rods plugged in hole 8' from bottom.

Feb. 12th - Day Shift - Cored 766 - 773

Feb. 12th - Night shift - Cored 773 - 791

" 12th - Graveyard - Cored 791 - 801.

"Joseph T. Mandy"

Mining Engineer.



LOG OF DRILL HOLE #2 - MERRITT, B.C.

Located on N.E. Quarter Section 14, Tp 91, 1233' from hole #1 in Direction 088° True. Elevation 2022'. Hole started 27/Feb./46.

Boulder clay, with some sand and gravel beds	150'	150'
SAND, loose, coarse, undecomposed	14'	164'
Gravel, with very little interstitial sand	14'	178'
Sand, loose, coarse, with layers of coarse gravel	15'	193'
Sand, fine, with few large boulders	10'	203'

BEDROCK	Thickness Core		Depth
	Missing	→	
SANDSTONE, weathered and broken	8' 0"	7' 10"	211' 0"
SANDSTONE, grey, compact, poorly sorted medium to coarse grained with a few thin shaly streaks. Dip 14°	4' 9"	-	215' 9"
CONGLOMERATE, fine grained. Abrupt Contact.	0' 6"	-	216' 3"
SHALE, black, fissile, coaly streaks, becoming sandy at the bottom	2' 0"	-	218' 3"
SANDSTONE, grey, variable texture from fine to very coarse, Irregular bedding.	2' 6"	-	220' 9"
CONGLOMERATE, fine grained. Abrupt Contact.	1' 8"	-	222' 0"
SHALE, light grey, sandy, coaly twigs	1' 7"	-	223' 7"
SANDSTONE, grey, fine even grain, massive	1' 3"	-	224' 10"
SANDSTONE, dark grey, fine grained, thin bedded with dark laminae dipping irregularly from 8 to 18°	4' 0"	-	228' 10"
SANDSTONE, light grey, med. to coarse. Massive	2' 5"	-	231' 3"
SHALE, grey, sandy	0' 5"	-	231' 8"
SHALE, black, coal marks	1' 4"	0' 6"	233' 0"
SANDSTONE, light grey, coarse, friable	4' 4"	-	237' 4"
CONGLOMERATE, fine grained, poorly sorted	2' 0"	-	239' 4"
SANDSTONE, light grey, coarse, friable	4' 8"	1' 6"	243' 0"

NOTE: This sequence of sandstone, shale, and conglomerate is similar to, although not identical in detail with that occurring in Hole #1 at 375' depth, which is 85' above the first coal seam. Projection using the assumed attitude indicates approximately the same horizon in the two holes. If the apparent equivalence is a fact, coal should be cut in Hole #2, at a depth of about 320'.

"Wm. H. White"

"Wm. H. White  
Assoc. Mining Engineer.

LOG OF MERRITT DRILL HOLE #2, Continued

SANDSTONE, grey, medium to fine grained	1' 2"	-	244' 2"
SHALE, grey, sandy	0' 10"	-	245' 0"
SANDSTONE, dark grey, medium to fine grained, thin-bedded showing cross-bedding and channelling	6' 2"	-	251' 2"
SANDSTONE, light grey, coarse, massive bedded, friable, containing two 1/8" coal seams, and grading downwards into conglomerate	8' 10"	-	260' 0"
CONGLOMERATE, fine grained, scattered coaly material	9' 0"	-	269' 0"
SANDSTONE, fine grained, few shaly streaks	1' 0"	0' 4"	270' 0"
SHALE, grey, compact	4' 8"	2' 8"	274' 8"
SHALE, black, compact, many coal streaks.			
	<u>Dip 22°</u>		
SANDSTONE, dark grey, fine grained, shaly	1' 5"	-	276' 1"
SHALE, grey, sandy	3' 11"	-	280' 0"
SHALE, black, fissile, coal marks and coal streaks <u>Dip 14°</u>	0' 9"	-	280' 9"
SHALE, black, fissile, coal marks and coal streaks <u>Dip 18°</u>	3' 3"	-	284' 0"
SANDSTONE, dark grey, micaceous, shaly <u>Dip 19°</u>	2' 6"	-	286' 6"
SHALE, grey, sandy	3' 0"	-	289' 6"
SANDSTONE, dark grey, shaly	2' 0"	-	291' 6"
SHALE, dark grey, coal marks, broken	1' 2"	-	292' 8"
SHALE, grey, compact, becoming sandy	1' 4"	← 0' 8"	294' 0"
SANDSTONE, dark grey, fine grained, thin bedded, somewhat shaly. <u>Dip</u>	4' 0"	0' 6"	298' 0"
	<u>Variable 5 to 20°</u>		
SANDSTONE, light grey, medium to coarse, massive	2' 10"	0' 3"	303' 2"
			306' 0"

"Wm. H. White"

Assoc. Mining Engineer.

LOG OF HOLE #2, Continued

SANDSTONE, light grey, medium to coarse, massive	6' 0"	-	312' 0"
SHALE, black, compact, few coal streaks	0' 9"	-	312' 9"
SHALE, jet black, compact, with numerous coal streaks making up to 25% of the core.			
<u>Dip 14°</u>	2' 1"	-	314' 10"
SHALE, black, compact, few coal streaks	1' 2"	0' 5"	316' 0"
SHALE, grey, sandy	0' 8"	-	316' 8"
SANDSTONE, dark grey to grey, fine grained, thin-bedded with thin shaly partings. Some cross-bedding. Dip and strike variable	22' 0"	-	338' 8"
SHALE, dark, compact, coal marks	1' 3"	-	339' 11"
SANDSTONE, light grey, coarse	0' 5"	-	340' 4"
SHALE, dark to black, compact, coal marks and few coal streaks. Dip 18°	6' 8"	0' 6"	347' 0"
SHALE, grey, sandy	1' 0"	-	348' 0"
SANDSTONE, dark grey, shaly bands	3' 6"	-	351' 6"
SANDSTONE, light grey, medium to coarse grained, Massive bedded	19' 2"	-	370' 8"
SHALE, dark grey, sandy Dip 8°	1' 4"	-	372' 0"
SANDSTONE, dark grey, shaly	1' 0"	-	373' 0"
SHALE, dark grey, sandy	2' 6"	-	375' 6"
SANDSTONE, dark grey, thin bedded with shaly streaks	2' 3"	-	377' 9"
SHALE, dark, compact	3' 3"	-	381' 0"
SHALE, grey, sandy	1' 0"	-	382' 0"
SANDSTONE, dark grey, shaly bands and streaks Dip 15°	4' 0"	-	386' 0"

"Wm H. WHITE"  
 Assoc. Mining Engineer.

LOG OF DRILL HOLE #2 CONTINUED

SANDSTONE, dark grey, shaly	1' 0" -	387' 0"
SANDSTONE, grey, medium grained, faulted contact with underlying shale dips 45°	7' 0" -	394' 0"
SHALE, grey, sandy, broken	1' 0" -	395' 0"
SHALE, grey, Numerous talcose shear planes and gouge filled fault planes dip- ping about 45°	5' 0" -	400' 0"
SHALE, grey, Broken in all directions by many curved talcose shear planes	7' 0" -	407' 0"
SHALE, Grey, Very broken, in part finely comminuted. Abrupt faulting contact with sandy shale below	3' 6" -	410' 6"
SHALE, grey, sandy, compact.	1' 0" -	411' 6"
SANDSTONE, grey, fine grained, thin-bedded, with few shaly partings <u>Dip 9°</u>	10' 0" -	421' 6"
SANDSTONE, light grey, medium grained, massive	6' 0" -	427' 6"
SHALE, grey, somewhat broken but not sheared. One fault plane dipping 45°	7' 6" -	435' 0"
SANDSTONE, dark grey, fine grained, some shaly streaks	2' 1" -	
SHALE, dark grey, sandy	2' 8" -	439' 9"
SANDSTONE, dark grey, shaly	2' 8" -	442' 5"
SHALE, dark grey, sandy	1' 0" -	443' 5"
SANDSTONE, dark grey, shaly	1' 0" -	444' 5"
SHALE, dark, somewhat sandy	1' 10" -	446' 3"
SANDSTONE, dark grey, shaly streaks <u>Dip 10°</u>	2' 6" -	448' 9"
SANDSTONE, grey, few shaly bands. Irregular Bedding	9' 6" -	458' 3"
SHALE, dark, slightly sandy, very compact.	10' 0" -	468' 3"
SHALE, finely crushed in fault zone	1' 3" -	469' 3"
SHALE, grey, sandy, compact	0' 7" -	469' 10"
SANDSTONE, light grey, medium grained	0' 5" -	470' 3"
SHALE, dark, slightly sandy. Few streaks of sand	4' 4" -	474' 7"
SANDSTONE, dark grey, fine grained, shaly	1' 5" -	476' 0"

"Wm. H. WHITE"

Assoc. Mining Engineer.

LOG OF DRILL HOLE #2, Continued

SANDSTONE, dark grey, fine grained, shaly	2' 6"	-	478' 6"
SHALE, dark grey, slightly sandy, many coal streaks <u>Dip 8°</u>	2' 4"	-	480' 10"
SANDSTONE, light grey, medium to coarse grained	5' 6"	-	486' 4"
SHALE, grey, sandy, few coal streaks	4' 6"	-	490' 10"
SANDSTONE, grey, variable texture from fine to coarse irregular cross-bedding. Abrupt contact with underlying shale	10' 0"	-	500' 10"
SHALE, dark grey, slightly sandy, compact	12' 2"	1' -0"	513' 0"
SANDSTONE, dark grey, shaly <u>Dip 5°</u>	1' 0"	-	514' 0"
SANDSTONE, grey, medium grained	2' 0"	-	516' 1"
SHALE, black, fissile, few coal streaks <u>Dip 9°</u>	0' 11"	-	517' 0"
SANDSTONE, dark grey, shaly	2' 0"	-	519' 0"
SANDSTONE, light grey, coarse, cross-bedded	2' 0"	-	521' 0"
SANDSTONE, dark grey, shaly	1' 0"	-	522' 0"
SHALE, Black fissile, leaf impressions, coal streaks	4' 1"	-	526' 1"
SHALE, grey, sandy, few coal streaks	2' 0"	0' -6"	528' 1"
SHALE, dark grey, finely shared in part, few coal streaks	3' 9"	1' -0"	531' 10"
SANDSTONE, dark grey, shaly	2' 2"	-	534' 0"
SHALE, Dark, sandy, few coal streaks	2' 0"	0' 3"	536' 0"
SANDSTONE, dark, very shaly, several coal streaks	2' 6"	-	538' 6"
SHALE, dark, sandy streaks, coal marks <u>Dip 10°</u>	7' 8"	1' 6"	546' 2"
SANDSTONE, grey, medium grain, few shaly partings	7' 4"	-	553' 6"
SANDSTONE, light grey, coarse to very Coarse, friable (Borderline of fine conglomerate)	<del>7' 4"</del>	-	<del>553' 6"</del>
SHALE, grey, sandy	9' 9"	-	563' 3"
SHALE, grey, sandy	1' 6"	-	564' 9"
SANDSTONE, dark grey, medium to fine grained with numerous shaly bedding planes	15' 2"	-	579' 11"
SANDSTONE, light grey, coarse	0' 10"	-	580' 9"
SANDSTONE, dark grey, fine grain, shaly partings	1' 0"	-	581' 9"
CONGLOMERATE, fine grained, friable, with indistinct bands of coarse sandstone, and two 1" Shale bands, and several coal streaks which vary in dip from 0° to 10°	11' 3"	-	593' 0"
SANDSTONE, light grey, coarse, few coal streaks <u>DIP 10°</u>	34' 0"	-	627' 0"
CONGLOMERATE, fine	3' 0"	-	630' 0"
SANDSTONE, light grey, very coarse, friable	2' 0"	-	632' 0"

"Wm. H. White"

Assoc. Mining Engineer

LOG OF HOLE # 2, - Continued

Sandstone, light grey, coarse to very coarse, with irregular conglomerate beds	11' 3"	-	643' 3"
SANDSTONE, dark grey, shaly	0' 9"	-	644' 0"
SHALE, dark grey, sandy, compact	4' 6"	-	648' 6"
SHALE, black, containing two $\frac{1}{2}$ " Coal seams and several thinner coal streaks	2' 0"	0' 4"	650' 6"
COAL, boney	0' 3"	0' 1"	650' 9"
SHALE, grey, sandy, with coal marks	0' 7"	0' 1"	651' 4"
COAL, bright, hard, with two-way cleat	2' 8"	1' 7"	654' 0"
COAL,	0' 4"	0' 2"	654' 4"
SHALE,	0' 3"	-	654' 7"
COAL,	0' 3"	0' 1"	654' 10"
SHALE,	0' 1"	-	654' 11"
COAL,	0' 3"	0' 1 $\frac{1}{2}$ "	655' 2"
SHALE,	0' 2"	-	655' 4"
COAL, bright, hard, narrow streaks of bone	1' 8"	0' 8"	657' 0"
SHALE, grey, sandy	0' 9"	-	657' 9"
COAL, boney, with numerous thin streaks of shale	2' 2"	0' 7"	659' 11"
SHALE, dark grey, sandy	1' 8"	-	661' 7"
SANDSTONE, light grey, very coarse	2' 8"	-	664' 3"
CONGLOMERATE, fine, with indistinct beds of coarse sandstone, and scattered larger pebbles	3' 9"	-	668' 0"
SANDSTONE, light grey, very coarse	2' 0"	-	670' 0"
CONGLOMERATE, fine to medium-grained	1' 0"	-	671' 0"
SANDSTONE, light grey, very coarse	2' 0"	-	673' 0"
CONGLOMERATE, fine to medium-grained with a few scattered pebbles up to 2", and with indistinct beds of coarse sandstone	4' 0"	-	677' 0"

"Wm. H. White"

Assoc. Mining Engineer.

LOG OF HOLE # 2, Continued

SANDSTONE, light grey, coarse	2' 0" -		679' 0"
CONGLOMERATE, medium grained	0' 6" -		679' 6"
SANDSTONE, light grey, coarse with few large pebbles	9' 0" -		688' 6"
CONGLOMERATE, medium to coarse grained several coal streaks	5' 6" -	2' 0"	694' 0"
SHALE, grey, sandy, compact, few coal marks	4' 0" -		698' 0"
SANDSTONE, dark grey, shaly	2' 0" -		700' 0"
SANDSTONE, grey, fine to medium grained	20' 0" m-		720' 0"
SHALE, grey, sandy, few coal streaks			
<u>DIP 3°</u>			
SHALE, grey, sandy, with irregular steep bedding	1' 8" -		721' 8"
COAL, hard, bright	4' 2" -		725' 10"
SHALE, grey, sandy, one 1/4" Coal Seam	0' 2" -	0' 1"	726' 0"
SANDSTONE, dark shaly, irregular bedding	0' 6" -		726' 6"
SANDSTONE, grey, fine even grain	1' 10" -		728' 4"
SANDSTONE, light grey, coarse to very coarse. Rude bedding dips from 10° to 35°.	4' 6" -		732' 10"
CONGLOMERATE, fine Grained	16' 2" -	2' 6"	749' 0"
CONGLOMERATE, medium grained	3' 6" -		752' 6"
SHALE, light grey, few coal streaks	1' 0" -		753' 6"
SANDSTONE, dark grey, shaly streaks. Shows irregular cross-bedding	2' 2" -	0' 9"	755' 8"
	5' 4" -		761' 0"

Assoc. Mining Engineer.

LOG OF HOLE #2, Continued

SANDSTONE, Dark grey, shaly. Numerous intercalated bands of sandy shale. Dip variable 0° to 20°	11' 6"	-	772' 6"
SANDSTONE, almost white in color, thin-bedded, mostly fine-grained with thin dark bedding planes having variable dips at low angles	20' 6"	-	793' 0"
SANDSTONE, dark grey, shaly	8' 0"	-	801' 0"
SHALE, Dark grey, broken, in part finely sheared. Many carbonate stringers	5' 0"	2' 0"	806' 0"
SHALE, dark grey, sandy	1' 8"	-	807' 8"
SANDSTONE, dark grey, shaly	3' 4"	-	811' 0"
SHALE, dark grey, sandy, few coal streaks	0' 6"	-	811' 6"
SANDSTONE, dark grey, shaley	1' 4"	-	812' 10"
SHALE, grey, sandy, with sand-filled mud cracks. Few Coal Streaks	9' 2"	-	822' 0"
SANDSTONE, dark grey, shaly	0' 8"	-	822' 8"
SHALE, dark to black, compact, indurated having a false cleavage at 45°. few carbonate seams	8' 4"	-	831' 0"

"Wm. H. White"

Assoc. Mining Engineer.



88

LOG OF MOLE # 2, Continued

SHALE, grey, sandy with sand lenses, few coal streaks	3' 0" -	834' 0"
SANDSTONE, light grey, Medium even grain	4' 6" -	838' 6"
SANDSTONE, grey to dark grey, fine-grained, thin-bedded, shaly with several shale bands.		
<u>Dip 23°</u> , Fairly regular	14' 6" 1' -0"	853' 0"
SANDSTONE, finely crushed, with much gouge in fault zone	4' 0" 1' 6"	857' 0"
SHALE, black, many coal streaks <u>Dip 38°</u>	1' 0" 0' 4"	858' 0"
SANDSTONE, grey, fine-grained, somewhat broken	9' 0" 1' 0"	867' 0"
SANDSTONE, grey, shaly, crushed and faulted zone	3' 0" 1' 8"	870' 0"
SANDSTONE, light grey, fine-grained, compact except in narrow crushed zone at 875'. Calcite Strs.	6' 3" -	876' 3"
SANDSTONE, grey, fine-grained, shaly bedding planes. Variable dip at low angles	1' 9" -	878' 0"
SHALE, grey, sandy, few coal streaks	1' 0" -	879' 0"
SHALE, dark grey, few coal streaks <u>Dip 15°</u>	0' 11" -	879' 11"
COAL, very boney (nearly half black shale) Sheared.	1' 0" 0' 3"	880' 11"
SHALE, grey, sandy, few coal streaks, In part finely crushed	4' 1" 2" 3"	885' 0"
SHALE, black, few coal streaks. Finely crushed	0' 8" 0' 3"	885' 8"
SHALE, grey, compact, few coal streaks <u>Dip 45°</u>	1' 0" -	886' 8"
SHALE, black, numerous coal streaks up to 1/2" thick comprise nearly half the core. Coal streaks dip about 50°, and shearing evident parallel to the bedding.	0' 10" 0' 1"	887' 6"
SHALE, black, several coal streaks up to 1/4" Thick. Severely sheared, in part finely cominuted.	2' 9" 1' 0"	890' 3"
COAL, very boney (nearly half black shale). severely sheared, in part finely cominuted	1' 7" 0' 7"	891' 10"
SHALE, grey, sandy, compact.	1' 2" 0' 2"	893' 0"

"Wm. H. White."

Assoc. Mining Engineer.

LOG OF HOLE #2, Continued

SANDSTONE, Dark grey, shaly	1' 5"	-	894' 5"
SANDSTONE, grey, medium grained, shaly streaks			
	<u>Dip 31°</u>		
SANDSTONE, light grey, medium to coarse grained. Few carbonate stringers	4' 0"	-	898' 5"
SHALE, Grey, sandy	8' 7"	-	907' 0"
SHALE, dark, sheared, few coal streaks	1' 1"	-	908' 1"
SHALE, black, sheared, many coal streaks.	2' 9"	-	910' 10"
	<u>Dip 32°</u>		
SHALE, dark, compact	1' 5"	-	912' 3"
TUFF, light colored, fine grained, coal marks	1' 0"	-	913' 3"
CONGLOMERATE, Volcanic fragments, medium to coarse grained.	1' 6"	-	914' 9"
	<u>Dip 25°</u>		
SHALE, dark, compact, coal marks	11' 7"	-	926' 4"
BRECCIA, medium to fine grained volcanic Frags.	0' 5"	-	926' 9"
VOLCANICS, probably basalt, finely porphyritic	2' 3"	-	929' 0"
VOLCANICS, greenstone, fine grained, dark green, in part brecciated or pillowed	3' 6"	-	932' 6"
SANDSTONE, metamorphosed, with biotite and feldspar developed	8' 6"	-	941' 0"
	3' 0"	-	944' 0"

END OF HOLE

Asso. Mining Engineer.

FINAL PROGRESS REPORT - MERRITT DRILL HOLE #2, - April 15 - 17th

April 15th - Night Shift: 893' to 903'  
April 16th - Day Shift : 903' to 913'  
              Night Shift: 913' to 923'  
  
April 17th - Day Shift: 923' to 937'  
              Night Shift: 937'-944'. - Pulled rods in 10's.

HOLE COMPLETED

Assoc. Mining Engineer.

PROGRESS REPORT / MERRITT DRILL HOLE #2 - April 12th to 15th

April 12th:	Night Shift:	Cored 831' to 838'
April 13th:	Day Shift :	Cored 838' to 848'
	Night Shift:	Cored 848' to 858'
April 14th:	Day Shift:	Cored 858' to 870'
	Night Shift:	Cored 870' to 879'
April 15th:	Day Shift :	Cored 879' to 893'

"Wm. H. White"

Assoc. Mining Engineer.

A

PROGRESS REPORT - MERRITT DRILL HOLE #2

April 10th to 12th

April 10th - Night Shift:	Cored 764' to 784'
Graveyard :	Cored 784' to 801'
April 11th - Day Shift :	Cored 801' to 811'
Night Shift:	Cored 811' to 818'
Graveyard :	Not working:
April 12th - Day Shift :	Cored 818' to 831'

NOTE: Due to labor shortage, work will continue temporarily on a basis of two ten-hour shifts per day.

"Wm. H. White"

Assoc. Mining Engineer

PROGRESS REPORT - MERRITT DRILL HOLE #2, - April 8th to 10th

April 8th - Night Shift: 680' to 700'  
Graveyard : 700' to 716'

April 9th - Day shift: 716' to 726'  
Night Shift: 726' to 737'  
Graveyard : 737' to 752'

April 10th. Day Shift: 752' to 764'

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE #2, - April 7th, - 8th

April 7th - Day shift:	Cored 632' to 638'
Night Shift:	Cored 638' to 647'
Graveyard :	Cored 647' to 667'

April 8th.- Day Shift : Cored 667' to 680'

"Wm. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE #2, - April 3rd to 6th

April 3rd, -	Night Shift:	Cored 472' to 486'
	Graveyard :	Cored 486' to 497'
April 4th, -	Day Shift:	Cored 497' to 510'
	Night Shift:	Cored 510' to 523'
	Graveyard :	Cored 523' to 542'
April 5th, -	Day Shift:	Cored 542' to 553'
	Night Shift:	Cored 553' to 568'
	Graveyard :	Cored 568' to 583'
April 6th, -	Day Shift:	Cored 583' to 593'
	Night Shift:	Cored 593' to 613'
	Graveyard :	Cored 613' to 632'

"Wm. H. White"

Assoc. Mining Engineer.



PROGRESS REPORT - MERRITT DRILL HOLE # 2, - April 1st. to 3rd

April 1st. - Day Shift:	Cored 387' to 405'	
Night Shift:	Cored 405' to 426'	
April 2nd. - Day Shift:	Cored 426' to 430'	Mixed fresh mud.
Night Shift:	Cored 430' to 436'	
Graveyard :	Cored 436' to 456'	
April 3rd. - Day Shift:	Cored 456' to 472'	

"Wm. H. White"

Assoc. Mining Engineer

PROGRESS REPORT - MERRITT DRILL HOLE #2 - Mar. 30th to Mar. 31 st.

Mar. 30th:	Day Shift :	Cored 326' to 346'
	Night Shift:	Cored 346' to 375'
Mar. 31st.	Day Shift:	Cored 375' to 387'
	Night Shift:	Not working

"Wm. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE #2, - 27th Mar. to 29th Mar.

Mar 27th - Night Shift:	Cored 253' to 274'
Mar. 28th - Day Shift:	Cored 274' to 289'
Night Shift:	Cored 289' to 295' (Got Rods Stuck in Hole)
Mar. 29th - Day Shift:	Cored 296' to 302' (Pump Trouble Remedied)
Night Shift:	Cored 302' to 326'

"Wm. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE #2, -- Mar. 25th to Mar. 27th.

Mar. 25th - Day Shift: Pulled casing and confirmed BEDROCK at 203'  
Drove pipe to 203'.

- Night Shift: Drilled casing down to 213' in loose and  
broken sandstone.

Mar. 26th - Day Shift: Cored 211 - 217'. Rearranged drilling set-  
up.

Night Shift: Setting up equipment for using mud.  
Cored 217' - 224'

Mar. 27th - Day Shift: Cored 224 to 243' up to 6 P.M.

NOTE: Starting Mar. 27th two 12 hour shifts per day will operate.

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE #2, - Mar. 20th to Mar. 24th.

- Mar. 20th - Day Shift Only: Washing sand and gravel out of pipe  
Drilling casing to 195' in sand and fine gravel.
- Mar. 21st - Day Shift: Driving pipe to 193' where it was stopped by a layer of larger boulders.
- Night Shift: Washing sand out of pipe, trying to chop boulders ahead of pipe.
- Mar. 22nd - Day Shift: Drilling casing down to 202' in fine sand with large boulders, some of which were shale with coal streaks.
- Night Shift: Attempted to blast thru casing but had a mis-fire probably due to hole caving and short-ing leads when casing was drawn back. Remainder of shift spent chopping out the hole again.
- March. 23rd - Day Shift: Drove pipe to 198'
- Night Shift: Drilled casing ahead to 208'. In the last five feet the ground was hard and smooth with fine grey clayey mud cuttings coming back - indicates either bedrock or a clay hard-pan.
- Mar. 24th - Neither Shift Working.

NOTE: Progress of 123', from depth 75' to 198' required 24 Shifts, exclusive of time wasted on testing Blanc Method.

Progress of the last 12' required 6 Shifts. The slow advance has been due to the hole caving ahead of the pipe and the necessity in consequence of frequent chopping.

"W. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE #2, Mar. 15th, to 19th.

- March 15th. - Day Shift of 6 Men  
Installing mud equipment for 'Blanc Method'  
No progress.
- March 16th. - Day Shift of 6 Men  
Installing mud equipment and testing 'Blanc  
Method'. No progress.
- March ;7th. - Day Shift of 5 Men  
Testing 'Blanc Method'  
No progress.
- Mar. 18th. - Day Shift of 5 Men  
Most of the day spent removing mud equipment  
preparing to resume driving operations, and  
in jaring the pipe loose. During the last  
two hours of the shift the pipe was driven 2  
feet, in ground that had been drilled before  
the Blanc experiment was made.
- Mar. 19th. - Day Shift of 5 Men  
Pipe driven to 186' in Coarse sand and gravel.

NOTE: Due to the difficulty of turning the pipe while driving, and the shortage of crew it is possible only to run one shift per day.

"W. H. White"

Assoc. Mining Engineer.

B

PROGRESS REPORT - MERRITT DRILL HOLE #2, - Mar. 12th to 14th.

Mar 12th - Day Shift: Drilled casing to 177 Feet.  
 Drilled core barrel down to 181 feet  
 in coarse gravel.

Night Shift: Re-threaded 4" Casing to be used as  
 standpipe.

Mar. 13th. - DayShift: Removed all casing; fixed waterline which  
 was frozen; and prepared to resume  
 driving pipe.

Night Shift: Not working (3 Men off sick)

Mar. 14th. - Day Shift: Drove 4" Pipe to 178 Feet (4-man crew)

Night Shift: Not working.

"Wm. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE #2, - MAR. 10th and 11th.

Mar. 10th - Day Shift: Drove pipe to 164' in Sand  
Night Shift: Not working.

Mar. 11th - Day Shift: Drilled casing down to 170' Gravel  
Drilled core-barrel down to 175' "  
Night Shift: Drilled core-barrel down to 177' "

"W. H. White"

Assoc. Mining Engineer.



Merritt Diamond Drill Hole #2

Progress Report - Mar. - 7th to Mar. 9th, Inclusive

- Mar. 7th - Day Shift: - Changed pump in forenoon.  
 Drilled to 132' and blasted -  
 Boulder clay.
- Night Shift: - Drove pipe to 132'.
- Mar. 8th - Day Shift: - Drove pipe to 138' - Boulder clay.
- Night Shift: - Drove pipe to 149' - Boulder clay.
- Mar. 9th - Day Shift: - Drove pipe to 159' - Material is medium  
 to coarse sand with some pebbles .  
 (7 Men required on this shift to turn  
 pipe while driving; the sand seems to  
 bind the pipe)
- Night Shift: - Not working.

"Wm. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT -- MERRITT DRILL HOLE #2, - March 4th to March 6th

Mar. 4th - Day Shift:	Drove pipe to 76' in clay (Depth 75' at Noon)
Night "	" " " 86' " "
Mar. 5th - Day Shift:	Drove pipe to 96' in Clay and gravel
Night "	" " " 106' in mostly gravel
Mar. 6th - Day Shift:	Drove pipe to 116' in clay, some boulders.
	Drilled to 126' in clay and gravel
Night "	Driving pipe to 126'

"Wm. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT of MERRITT DRILL HOLE #2

27/ Feb. to 3/March

- 27/Feb. - Day Shift: Collared Hole #2  
Night Shift: Drove 6" Pipe - Depth 30' in clay
- 28/Feb. - Day Shift: Driving 4" Pipe  
Night Shift: " " - Depth 45' in Boulder Clay
- 1/Mar. - Day Shift: Driving 4" Pipe  
Night Shift: " " - Depth 55' in Boulders and gravel beds.
- 2/Mar. - Day Shift: Driving 4" Pipe- Depth 65' in coarse sand  
Night Shift: no working.
- 3/Mar. - Day Shift: Not working.  
Night Shift: Driving 4" pipe

"Wm. H. White"

Assoc. Mining Engineer.

LOG OF #3, HOLE

Approximate Position: 760 feet on a line bearing 330° True from the Southeast corner of Lot 120

Approximate Elevation: 2420'

	Thickness	Core Depth	Missing
STREAM WASH	7' 0"	-	7' 0"
BEDROCK, very decomposed apparently sandy shale	33' 0"	33' 0"	40' 0"
SHALE, grey, sandy, coal marks, Soft decomposed.	1' 0"	-	41' 0"
SANDSTONE, grey, shaley with coal marks soft, decomposed. <u>Dip 15 to 22 Degrees</u>	1' 7"	-	42' 7"
SANDSTONE, light grey, coarse, friable	0' 9"	-	43' 4"
CLAY, probably ground up decomposed shaley sandstone	6' 8"	5' 0"	50' 0"
SHALE, light grey, sandy, soft and clayey	5' 2"	-	55' 2"
SHALE, dark, with leaf molds and coal streaks	1' 4"	-	56' 6"
SHALE, black, sheared, in part finely pulverized containing carbonaceous material	0' 3"	-	56' 9"
SHALE, dark, soft	0' 4"	-	57' 1"
SHALE, black, sheared, in part finely pulverized containing carbonaceous material	9' 8"	-	57' 9"
SHALE, light grey, sandy, soft	1' 0"	-	58' 9"
SANDSTONE, dark grey, shaley, Soft and clayey	1' 6"	-	60' 3"
SANDSTONE, light grey, medium to coarse, poorly sorted. Very friable	4' 0"	-	64' 3"
SHALE, grey, compact, but soft and clayey	6' 9"	-	71' 0"
SHALE, light grey, sandy, soft and clayey	7' 0"	-	78' 10"
SANDSTONE, light grey, medium grained. Very soft and muddy	2' 0"	-	80' 0"
SHALE, dark, finely brecciated, containing carbonaceous matrix	0' 3"	-	80' 3"
SHALE, dark, soft	1' 0"	-	81' 3"
SANDSTONE, dark grey, shaley, thin-bedded Soft and Clayey. <u>Dip Variable but Averages about 12°</u>	3' 7"	-	84' 10"
SHALE, dark, soft	5' 2"	-	90' 0"

"Wm. H. White"

Assoc. Mining Engineer.

LOG OF HOLE # 3, Continued

SANDSTONE, grey, shaley, thin-bedded, friable	5' 0"	3' 7"	95' 0"
SANDSTONE, light grey, medium grained, friable containing nodules of coal up to 1/2" across.	5' 0"	3' 9"	100' 0"
SANDSTONE, light grey, very coarse, poorly sorted. Contains indistinct beds of conglomerate, with several 1/4" coal streaks	19' 0"	16' 7"	119' 0"
SHALE, dark, soft, few coal streaks	1' 6"	0' 6"	120' 6"
SANDSTONE, dark grey, shaley, irregular bedding	2' 2"	-	122' 8"
SHALE, black, fissile, leaf molds, few coal streaks	0' 10"	-	123' 6"
SANDSTONE, Grey, shaley	2' 4"	-	125' 10"
SANDSTONE, light grey, coarse-grained, poorly sorted, friable	11' 8"	7' 8"	137' 6"
SHALE, dark, with few coal streaks	0' 10"	-	138' 4"
SANDSTONE, grey, mostly thin-bedded and shaley, but with irregular channeling of coarser material, few irregular coal streaks.	6' 8"	0' 8"	145' 0"
<u>Average Dip 12°</u>			
SHALE, dark, soft	1' 0"	0' 6"	146' 0"
SANDSTONE, grey, shaley, thin-bedded	1' 7"	-	147' 7"
COAL, hard, clean, dull conchoidal fracture	0' 1"	-	147' 8"
SANDSTONE, light grey, medium grain, some cross-bedding. Contains 1/4" streak hard coal	3' 2"	-	150' 10"
CONGLOMERATE, medium to fine grained	1' 0"	-	151' 10"
SANDSTONE, light grey, variable coarse grain	1' 8"	-	153' 6"
SANDSTONE, dark grey, shaley. Fine even grain. Soft	3' 6"	1' 6"	157' 0"
SHALE, grey, compact, soft	0' 11"	-	157' 11"
SANDSTONE, dark grey, shaley. Fine even grain. Soft	3' 1"	-	161' 0"
SHALE, dark, fissile, leaf molds. Soft and muddy	2' 4"	-	163' 4"
SANDSTONE, dark grey, shaley	1' 8"	-	165' 0"
SANDSTONE, light grey, medium to coarse grained	1' 8"	-	166' 8"
SANDSTONE, grey, thin-bedded, shaley bands	5' 0"	-	171' 8"
<u>Dip 9°</u>			
CONGLOMERATE, fine grain, Few coal streaks	4' 4"	-	176' 0"
SANDSTONE, grey, thin-bedded, shaley bands	1' 0"	-	177' 0"
CONGLOMERATE, fine-grained with few larger pebbles. One streak of hard coal near base	5' 0"	-	182' 0"
SHALE, grey, sandy, few thin coal streaks. Soft.	4' 0"	1' 0"	186' 0"
SANDSTONE, dark grey, shaley	2' 9"	-	188' 9"
CONGLOMERATE, Fine Grained	1' 0"	-	189' 9"
SANDSTONE, grey, thin-bedded showing cross-bedding	1' 9"	-	191' 6"
SHALE, grey, sandy with irregular sand lenses	3' 0"	-	194' 6"
SHALE, dark, fissile, thin coal streaks and			

	leaf molds. <u>Dip 9°</u>	2' 4"	-	196' 10"
SANDSTONE,	dark, shaley, fine grained, compact	5' 2"	-	202' 0"

"Wm H. White"  
 Assoc. Mining Engineer.

LOG OF #3, Hole, Continued

SANDSTONE, dark grey, shaley with narrow shale bands. Fine grained, with irregular cross-bedding.	4' 6"	-	206' 6"
SHALE, dark, compact, leaf molds and few coal streaks	1' 9"	-	208' 3"
SHALE, Grey, soft and muddy, many carbonized twigs	3' 9"	-	212' 0"
SANDSTONE, grey, thin bedded, shaley with complete leaf molds on bedding.	2' 2"	-	214' 2"
<u>DIP 12°</u>			
SHALE, dark, with few coal streaks	1' 2"	-	215' 4"
SANDSTONE, grey, thin-bedded, shaley. Shows cross-bedding and channelling	2' 10"	-	218' 2"
CONGLOMERATE, fine, friable	3' 10"	2' 8"	222' 0"
SANDSTONE, light grey, very coarse, friable	11' 0"	8' 6"	233' 0"
CONGLOMERATE, fine with indistinct bands of coarse sand. Friable	7' 0"	3' 6"	240' 0"
SANDSTONE, dark grey, shaley, with shale bands. Much irregular cross-bedding	4' 0"	1' 0"	244' 0"
SHALE, grey, compact, few coal streaks	1' 0"	-	245' 0"
SANDSTONE, Grey, thin bedded, with shaley bands containing thin coal streaks	8' 6"	-	253' 6"
SHALE, dark, with few coal streaks	1' 6"	-	255' 0"
SANDSTONE, grey, thin-bedded, shaley, soft	1' 4"	-	256' 4"
SHALE, dark, with few coal streaks	0' 10"	-	257' 2"
SANDSTONE, light grey, medium grained	6' 8"	-	263' 10"
SHALE, dark to black, sandy lenses	1' 7"	-	265' 5"
SANDSTONE, dark grey, fine grained, shaley Irregular bedding	1' 10"	-	267' 3"
SHALE, dark, Many very thin coal streaks	1' 4"	-	268' 7"
SANDSTONE, light grey, to grey. Medium to fine grain, Shaley bedding in places. <u>Dip 16°</u>	10' 0"	-	278' 7"
SHALE, grey, sandy	1' 9"	-	289' 4"
SANDSTONE, light grey, very coarse, friable	16' 8"	10' 2"	297' 0"
SANDSTONE, grey, fine-grained, compact	2' 1"	-	299' 0"
SHALE, grey, with few coal streaks	2' 0"	-	301' 1"
SANDSTONE, dark grey, thin-bedded, shaley	5' 11"	-	307' 0"
SHALE, dark with many carbonized twigs	1' 0"	-	308' 0"
SANDSTONE, dark grey, thin bedded, shaley with beds of coarser sand. <u>Dip variable 12 to 18°</u>	10' 0"	1' 0"	318' 0"

"Wm. H. White"

Assoc. Mining Engineer

LOG OF HOLE # 3, Continued

SANDSTONE, light grey, medium to coarse grain, friable	2' 6" -	320' 6"
SHALE, dark to black, fissile, with leaf molds. Dip 12°	0' 10" -	321' 4"
SANDSTONE, light grey, medium to coarse grained	2' 7" -	323' 11"
SANDSTONE, dark grey, shaley, irregular bedding	0' 8" -	324' 7"
SHALE, grey, few coal streaks	1' 10" -	326' 5"
SANDSTONE, light grey, fine to medium grain. in part thin-bedded. Dip 10°	10' 11" -	337' 4"
SHALE, Grey, few coal streaks, grading to sandy shale	1' 5" -	338' 9"
SANDSTONE, grey, thin-bedded and cross-bedded	3' 5" -	342' 2"
SANDSTONE, light grey, medium grain, Cross-bedded	1' 4" -	343' 6"
SANDSTONE, grey, fine even grain. Massive	1' 6" -	345' 0"
SHALE, dark, with few coal streaks	2' 0" 0" 6"	347' 0"
SANDSTONE, grey, medium to fine grain, in part thin-bedded	4' 6" -	351' 6"
SHALE, dark, grading to sandy. Contains 6" mud-seam.	1' 6" 0' -8"	353' 0"
SANDSTONE, grey, Med. to fine grain, in part thin-bedded	2' 0" -	355' 0"

"Wm. H. White"

Assoc. Mining Engineer



LOG OF HOLE # 3, Continued

SANDSTONE, light grey, medium to fine grain, compact	2' 6"	-	367' 6"
SANDSTONE, grey, medium to fine grained, in part thin-bedded. Two narrow shale bands. <u>Dip variable, but about 15°</u>	18' 0"	-	375' 6"
SANDSTONE, light grey, medium grained, $\frac{1}{4}$ " coal seam.	1' 0"	-	376' 6"
CONGLOMERATE, medium grain. Many red granite pebbles	8' 6"	-	377' 0"
SANDSTONE, light grey, medium to coarse, with conglomerate bands of unknown thickness	22' 0"	21' 0"	399' 0"
CONGLOMERATE, medium grained, arkosic, with red pebbles	2' 6"	1' 6"	401' 0"
SANDSTONE, dark grey, shaley, thin-bedded. Hard and compact. Contains many carbonized twigs	4' 0"	-	405' 0"
SANDSTONE, grey, <sup>fine</sup> even grain, Compact and massive	8' 6"	3' 0"	413' 6"
SANDSTONE, light grey, medium grain, Massive	2' 3"	0' 9"	415' 9"
CONGLOMERATE, fine to medium grain. Numerous pebbles of red granite	7' 3"	3' 3"	423' 0"
SANDSTONE, grey, fine even grain, <u>Variable Dip 0-5°</u>	7' 2"	-	430' 2"
SANDSTONE, light grey, coarse grain, few large pebbles	0' 10"	-	431' 0"
SHALE, dark, sandy with coarse sand grains. few coal streaks	0' 9"	-	431' 9"
SANDSTONE, light grey, medium to coarse grained. Poorly sorted with few larger pebbles	7' 3"	3' 3"	440' 0"
CONGLOMERATE, medium grained, with red granite Pebbles	9' 0"	7' 6"	449' 0"
SANDSTONE, grey, thin-bedded with carbonaceous partings. <u>Dip 7°</u>	7' 0"	1' 0"	456' 0"
SANDSTONE, light grey, Med. to coarse	3' 0"	1' 0"	459' 0"

Note: This completes the logging by the undersigned

"Wm. H. White"

Assoc. Mining Engineer

LOG OF HOLE NO. 3 (Continued)

SHALE, dark grey to black, carbonaceous, silty, slickensided in part	0' 8"	-	459' 8"
SHALE, grey, sandy, carbonized wood fragments	4' 4"	-	464'
SHALE, dark, carbonaceous, silty, carb. wood	5'	3'	469'
SHALE, grey, silty, with thin coaly partings	0' 8"	-	469' 8"
SHALE, dark, carbonaceous, coaly streak at base	1' 8"	-	471' 4"
SHALE, grey, sandy, carb. in part	2' 4"	-	473' 8"
SANDSTONE, light-colored, fine-grained, micaceous	0' 10"	-	474' 6"
SHALE, sandy, alternating fine grained sandstone and grey sandy shale (carb. in part)	4' 6"	3' 4"	479'
SANDSTONE, light-colored, coarse grained, cross-bedded, arkosic, (frags, carb. wood)	0' 4"	-	479' 4"
SANDSTONE, light grey, fine grained with dark carbonaceous silty partings (x-bedded)	0' 8"	9'	489'
SANDSTONE, medium to coarse grained, pebbles of quartz and greenstone (some reddish quartz pebbles)	0' 6"	9' 6"	499'
SANDSTONE, as above	0' 9"	-	499' 9"
COAL, slightly crushed, DIP 20 Degrees	0' 3"	-	500'
SANDSTONE, as above, with thin irregular lenses of coal	0' 5"	-	500' 5"
SHALE, dark brown, silty, coaly specks	1' 7"	0' 7"	502'
SHALE, almost black, carbonaceous, silty sheared in places (DIP 0 Degrees)	2' 6"	-	504' 6"
SANDSTONE AND SHALE - alternating thinly and irregularly bedded laminae of fine grained light grey ss, and dark grey silty sh. Specks of coal, plant frags.	7' 6"	-	512'
SANDSTONE AND SHALE, as above, some x-bedding	1'	-	513'
SANDSTONE, light grey, medium grained	4'	-	517'
SHALE, dark grey, to black, silty, carb. in part with occasional thin stringers of coal	4' 0"	1' 8"	521'
SANDSTONE, light grey, fine to med. grained with irregular dark silty laminae, occasional plant frags.	5' 0"	-	526'
SHALE, dark grey to black, silty, carb. plant fragments,	3'	-	529'
SHALE, as above, sheared in places	1'	-	530'
SANDSTONE, fine grained, light grey (grading into sandy shale in part) coal markings	8'	0' 5"	538'
SANDSTONE, light grey, fine to med. grained	1'	-	539'
SANDSTONE, and SHALE, alternating bands of fine to medium grained light grey ss. and dark silty shale. DIP 15 Degrees.	10'	-	549'

"C.B. Newmarch"  
Asst. Mining Engineer

## LOG OF HOLE NO. 3 (Continued)

SANDSTONE, and SHALE, as above, occasional coaly partings.	1' 6"	--	550' 6"
CONGLOMERATE, light grey, fine grained, (3' band of brown shale with coal lenses at center)	10' 6"	3' -- 6"	561'
CONGLOMERATE, coarse grained, (Pebbles 1"-3")	0' 4"	--	561' 4"
SANDSTONE, light grey, fine grained, with occasional dark grey shale bands carrying coaly fragments.	6' 8"	--	568'
SHALE, dark grey, silty, coaly partings	3' 0"	0' 8"	571'
SANDSTONE, light grey, fine grained, alternating with thin dark grey silty (carbonaceous in part) bands up to 3" thick, grading at base into 3" of fine grained conglomerate.	11'	1' 0"	582'
SHALE, dark, (almost black), silty, carbonaceous with a few coal markings.	0' 11"	--	582' 11"
SANDSTONE, light grey, medium grained	1' 1"	--	584'
CONGLOMERATE, light grey, fine grained, slight porosity (pebbles are quartz, feldspar, greenstone, occasional red granite)	2' 2"	--	586' 2"
SANDSTONE, light grey, fine grained, cut by thin irregular dark silty bands.	5' 10"	6' 6"	592'
SANDSTONE, light grey, fine to med. grained	6' 0"	--	598'
SANDSTONE, " " , med. - coarse grained	5' 0"	3' 3"	603'
SANDSTONE, as above	0' 4"	--	603' 4"
SANDSTONE, light grey, fine grained, with dark irregular silty laminae	10' 8"	8' 2"	614'
SANDSTONE, light grey, coarse grained, grading into fine grained conglomerate in part.	10'	1' 11"	624'
SANDSTONE, light grey, coarse grained, as above	3' 6"	--	627' 6"
SHALE, <u>greenish-grey</u> , silty, with occasional dark wavy laminae (1" band of coarse conglomerate at base)	5' 6"	3' 0"	633'
SANDSTONE, light grey, med.-coarse grained	10'	3' 5"	643'
SHALE, black, carbonaceous	0' 2"	--	643' 2"
SANDSTONE, light grey, fine grained, interbedded with greenish-grey silty shale	1' 5"	--	644' 7"
SHALE, dark grey, sandy in part, carbonaceous, frags. carbonized wood.	4' 0"	--	648' 7"
SANDSTONE, light grey, fine grained, with irregular dark silty laminae	4' 5"	1' -- 6"	653'
SANDSTONE, light grey, med.- coarse grained	4' 10"	--	657' 10"
SANDSTONE, light grey, fine grained	3' 2"	2' 4"	661'
SANDSTONE, as above	8' 0"	--	669'
SANDSTONE, alternating bands of fine and medium grained light grey sandstone with a few brownish grey silty bands	2' 0"	--	671'

"C.B. Newmarch"  
Asst. Mining Engineer

LOG OF HOLE No. 3 (Continued)

SANDSTONE, alternating irregularly bedded laminae of light grey fine grained sandstone and dark carbonaceous silty shale with coaly partings.	5' 10"	-	676' 10"
SHALE, black, silty, carbonaceous	4' 2"	1'-2"	681'
SHALE, black, silty, as above	1' 0"	-	682'
SANDSTONE, light grey, fine grained, with wavy irregular dark silty carb. bands.	4' 8"	-	686' 8"
SHALE, dark grey, soft, friable	1' 4"	-	688'
SHALE, " " " "	1' 0"	-	689'
SANDSTONE, light grey, fine grained, irregularly bedded	4' 0"	-	693'
SANDSTONE, light grey, medium - coarse grained conglomeratic in basal 3"	5' 0"	-	698'
SANDSTONE, light grey, medium grained	2' 0"	-	700'
SANDSTONE, Light grey, fine grained, with irregular dark silty laminae, grading to shale at base	2' 0"	-	702'
SHALE, dark grey to black, silty, carbonaceous	6' 0"	1'-7"	708'
SHALE, dark grey to black, sandy in part, carbonaceous	6' 0"	-	714'
SHALE, light grey, fine grained, sandy	2' 7"	-	716' 7"
SANDSTONE, light grey, fine to medium grained	1' 5"	-	718'
SANDSTONE, light grey, medium grained, interbedded with thin dark carb. laminae	5' 0"	-	723'
SHALE, dark grey to black, silty to sandy, with a few thin fine grained grey sandy bands.	2' 0"	-	725'
SHALE, almost black, silty, a few spores	4' 6"	-	729' 6"
SANDSTONE, light grey, fine grained, with occasional thin carbonaceous laminae Dip 15 degrees	2' 6"	-	732'
SHALE, dark grey, sandy in part, carb. in part	3' 0"	0'-9"	735'
SHALE, dark grey to black, carbonaceous	0' 9"	-	735' 9"
SHALE, light grey, sandy	2' 3"	-	738'
SANDSTONE, med.-coarse grained, light grey	7' 0"	4' 0"	745'
SANDSTONE, as above	2' 2"	-	747' 2"
SANDSTONE, light grey, fine grained, shaley interbedded with thin black wavy carb. laminae	0' 7"	-	747' 9"
CONGLOMERATE, light grey, fine grained	9' 3"	8' 6"	757'
CONGLOMERATE, light grey, fine grained	10' 0"	2' 8"	767'
SHALE, light grey, fine grained, silty	1' 4"	-	768' 4"
SANDSTONE, light grey, fine grained, shaley in part, numerous thin carb. laminae.	5' 4"	-	773' 8"
SANDSTONE, light grey, medium grained, compact	3' 4"	2' 4"	777'
SANDSTONE, fine - medium grained, as above	2' 0"	-	779'
SHALE, dark grey, carb. in part, wood frags. specks of coal	3' 10"	-	782' 10"

SHALE, black, carb. with a few thin crushed crushed Coal bands	1' 2" -	784'
SHALE, dark grey, carbonized wood frags.	0' 5" -	784' 5"
SANDSTONE, light grey, coarse grained, conglomeratic in part	4' 7" 1' 10"	789'
SANDSTONE, as above	0' 8" -	789' 8"
SANDSTONE, light grey, fine grained, with thin dark silty laminae	1' 1" -	790' 9"
SHALE, dark grey to black, carb. in part	4' 5" -	795' 2"
SANDSTONE, light grey, med. grained compact	4' 10" 3' 8"	800'

"C.B. Newmarch"

## LOG OF HOLE No. 3 (Continued)

SANDSTONE, light grey, fine grained to medium grained with a 3" dark grey shale band at center.	10' 0"	6' 6"	810'
SANDSTONE, light grey, medium grained to coarse grained with a few thin irregular crushed coal lenses.	2' 0"	-	812'
SANDSTONE, alternating bands (4" to 6") of fine and medium grained light grey, shaly in part.	3' 4"	-	815' 4"
SHALE, Chocolate brown to black, carbonaceous with coally partings and lenses at base.	1' 0"	-	816' 4"
SANDSTONE, light grey, fine grained with thin irregular silty laminae	1' 3"	-	817' 7"
SHALE, dark grey to black, sandy in part carbonaceous with several seams of crushed coal from 1" to 3" thick a few thin carbonate stringers.	2' 5"	0' 4"	820'
SANDSTONE, light grey, fine grained micaceous, shaly at base.	1' 0"	-	821'
SHALE, dark grey, sheared, with <u>gouge</u> , possible fault.	0' 4"	-	821' 4"
SANDSTONE, light grey, fine grained, with interbedded black silty shale bands	8' 8"	1' 8"	830'
SANDSTONE, as above	1' 4"	-	831' 4"
SHALE, black, silty, carbonaceous, coaly partings, leaf molds.	3' 8"	-	835'
SANDSTONE, light grey, fine grained, shaly	0' 10"	-	835' 10"
SHALE, black, silty carbonaceous as above	2' 2"	-	838'
COAL, badly crushed	0' 6"	-	838' 6"
SHALE, dark grey, sandy, shaly in part, coal specks.	1' 6"	0" 3"	840'
SHALE, dark grey, sandy in part, carbonaceous in part, occasional plant fragments and coally partings (Several fractures dipping at 75°)	2' 9"	-	842' 9"
SHALE, light grey, sandy, irregularly bedded, grades into coarse grained sandstone in part (3" Brown shale band with coally fragments at center.	5' 0"	-	847' 9"
SHALE, dark grey to black, carbonaceous (Carbonized plant fragments and coally lenses)	2' 3"	1' -2"	850'
SHALE, grey to dark grey, silty to sandy, carbonaceous in a few short sections, sheared in upper 2' dipping at 75°, scour and fill structure at one point 2" of coarse grained sandstone with shaly matrix at base.	10' 0"	0' 6"	860'
SHALE, pale greenish grey.	1' 1"	-	861' 1"

Asst. Mining Engineer

LOG OF HOLE No. 3 (Continued)

SANDSTONE, light grey, very fine grained, shaly in part.	2' 0"	-	863' 1"
CONGLOMERATE, light grey fairly coarse, with a few thin bands of sandy shale	2' 2"	-	865' 3"
SHALE, grey, sandy, irregular bedding	1' 4"	-	866' 7"
SHALE, black, carbonaceous, with 1" of crushed coal.	0' 5"	-	867'
SHALE, grey, sandy, occasional coal markings, grading into fine grained light grey sandstone in part.	3' 0"	1' 0"	870'
SHALE, dark grey to black, carbonaceous, coaly partings carbonized plant fragments.	2' 5"	-	872' 5"
CONGLOMERATE, light grey, fairly coarse grained	8' 7"	8' 0"	881'
SANDSTONE, light grey, coarse grained, few coal lenses (1/8") sheared at 45°	1' 0"	-	882'
SANDSTONE, light grey, very fine grained, shaly	2' 0"	-	884'
<u>DIP 10 - 15 degrees</u>			
SHALE, dark grey to black, carbonaceous, sandy in part, coaly partings	4' 5"	-	888' 5"
SANDSTONE, light grey, medium grained,	2' 7"	1' 4"	891'
SANDSTONE, light grey, medium-coarse grained	1' 0"	-	892'
SHALE, dark grey to black, carbonaceous, sandy in part, coaly partings	1' 7"	-	893' 7"
SANDSTONE, light grey, very fine grained, shaly	3' 5"	-	897'
SANDSTONE, light grey, fine grained, carries a little finely divided pyrite.	4' 0"	2' 7"	901'
SANDSTONE, light grey, fine grained with a few irregular coal lenses.	3' 0"	-	904'
CONGLOMERATE, light grey, rather coarse in part	8' 0"	5' 0"	912'
CONGLOMERATE, rather coarse, as above	2' 3"	-	914' 3"
SHALE, dark grey, coaly partings.	0' 9"	-	915'
SANDSTONE, light grey, medium grained with thin irregular bands of dark grey silty shale	3' 0"	-	918'
SANDSTONE, grey, very fine grained, shaly, occasional thin coal lenses.	4' 0"	2' 8"	922'
SANDSTONE, Light grey, fine grained, with thin grey silty bands.	12' 0"	11' 0"	934'
SANDSTONE, grey, medium grained	1' 6"	-	935' 6"
SANDSTONE, light grey, fine grained interbedded with dark grey to black sandy shale	1' 6"	-	937'
SHALE, Dark brown to black, carbonaceous, coaly partings (several shears at 55°)	2' 0"	-	939'
SHALE, dark grey, sandy	1' 8"	-	940' 8"
SANDSTONE, grey, fine grained, with dark irregular silty bands.	1' 4"	-	942'
SANDSTONE, fine - medium grained, salt and pepper, a few carbonaceous fragments, coarser at top.	4' 0"	1' 10"	946'

Asst. Mining Engineer  
Logged 8 June

LOG OF NO. 3 HOLE (Continued)

SANDSTONE, light grey, fine grained.	0' 5"	-	946' 5"
SHALE, dark grey, sandy, carbonaceous in part grading into fine grained sandstone in part.	4' 0"	-	950' 5"
SANDSTONE, light colored, fine grained compact.	2' 7"	-	953' 0"
SHALE, dark grey to black, sandy in part, carbonaceous at base with plant fragments.	3' 0"	0' 7"	956' 0"
SHALE, dark grey, sandy.	1' 0"	-	957' 0"
SHALE, dark to black, carbonaceous becoming sandy at base.	2' 6"	-	959' 6"
SANDSTONE, light grey, fine grained interbedded with dark irregular silty shale laminae	3' 6"	-	963' 0"
SHALE, black, carbonaceous, coaly partings, friable	1' 0"	-	964' 0"
SANDSTONE, light grey, fine grained, shaly at top with dark irregular silty bands.	2' 0"	-	966' 0"
SHALE, dark grey, sandy, irregularly bedded with thin (1" - 2") bands of grey medium grained sandstone, a few coaly partings.	11' 0"	9' 4"	977' 0"
SANDSTONE, light grey, fine grained with thin irregular carbonaceous or coaly laminae	10' 0"	3' 7"	987' 0"
<u>DIP 10°</u>			
CONGLOMERATE, quite coarse in part, pebbles of greenstone, qtz, and red granite.	6' 0"	1' 9"	993' 0"
SHALE, black, carbonaceous, with plant fragments	0' 8"	-	993' 8"
SANDSTONE, grey, fine grained, shaly at top	2' 7"	-	996' 3"
SANDSTONE, grey, medium to coarse grained, a few thin coaly lenses.	5' 9"	2' 9"	1002' 0"
SANDSTONE, grey, coarse, grained, with a few thin irregular coal lenses.	1' 0"	-	1003' 0"
CONGLOMERATE, light grey, fine grained	0' 8"	-	1003' 8"
SANDSTONE, grey, coarse grained with 1" of coarse grained conglomerate at base.	3' 2"	-	1006' 10"
SHALE, dark grey to black, with carbonaceous partings, thinly bedded.	2' 0"	-	1008' 10"
<u>DIP 10°-15°</u>			
CONGLOMERATE, rather coarse	5' 2"	2' 8"	1014' 0"
SHALE, dark grey to black, carbonaceous becoming sandy at base.	2' 3"	-	1016' 3"
CONGLOMERATE, fine grained.	7' 9"	5' 8"	1024' 0"

"C.B. Newmarch"

Asst. Mining Engineer

June 8/46



LOG OF HOLE No. 3 (Continued)

SANDSTONE, light grey, medium grained compact (Coarse grained at top)	6" 0"	-	1030' 0"
DIP - 15° - 10°			
CONGLOMERATE, fine grained	4' 0"	3' 4"	1034' 0"
SANDSTONE, grey, very coarse grained	4' 6"	-	1038' 6"
SHALE, dark brown to black, silty, carbonaceous	1' 0"	-	1039' 6"
SHALE, dark grey to black, sandy, micaceous	2' 6"	-	1042' 0"
SANDSTONE, grey, very fine grained, shaly at top, micaceous.	3' 0"	1' 5"	1045' 0"
SANDSTONE, grey, as above, coal markings.	0' 7"	-	1045' 7"
CONGLOMERATE, grey, fine grained at top	3' 10"	-	1049' 5"
SHALE, dark grey, brown to black, carbon- aceous, with a few thin (1/8") coal laminae.	3' 0"	-	1052' 5"
SANDSTONE, grey, medium-coarse grained compact	2' 7"	0' 2"	1055' 0"
SHALE, dark grey to black, carbonaceous, with coal partings	1' 2"	-	1057' 2"
SANDSTONE, grey, medium grained, compact with a few thin dark carbon- aceous shale laminae.	5' 3"	-	1062' 5"
SHALE, brownish black, silty, carbon- aceous with occasional coaly partings.	0' 7"	-	1063' 0"
SHALE, dark grey to black, carbonaceous, coaly partings.	1' 0"	-	1064' 0"
Sandstone, grey, medium-coarse grained, with a few thin dark silty shale bands.	3' 9"	-	1067' 9"
SHALE, dark grey to black, carbonaceous, with carbonized plant fragments, specks of resin.	3' 3"	-	1071' 0"
SANDSTONE, grey, fine grained shaly with numerous carbonized plant fragments specks of coal	2' 0"	-	1073' 0"
SHALE, dark grey, carbonaceous in part plant fragments.	0' 7"	-	1073' 7"
SANDSTONE, grey, medium grained, occasion- al coal markings.	1' 8"	-	1075' 3"
SHALE, dark grey, carbonaceous in part, sandy in part, carbonized plant fragments	3' 0"	-	1078' 3"
SANDSTONE, grey, medium grained compact	2' 9"	-	1081' 0"
SANDSTONE, grey fine grained, interbedded with thin bands of dark grey carbonaceous shale.	8' 1"	5' 6"	1089' 1"
SANDSTONE, grey, fine grained, shaly, with a few short carbonaceous shale sections.	4' 6"	-	1093' 7"

"C.B. Newmarch"  
Asst. Mining Engineer  
June 17/46

LOG OF NO. 3 HOLE (continued)

15

SANDSTONE, grey, coarse grained	5' 5"	4' 5"	1099' 0"
SANDSTONE, grey, fine grained, with dark grey silty shale bands	3' 6"	-	1102' 6"
SANDSTONE, grey, medium-coarse grained, grading into fine grained conglomerate in part	1' 1"	-	1103' 7"
SANDSTONE, grey, medium-coarse grained with short fine grained conglomerate sections, a few thin lenses of coal, slight porosity in 6" section.	4' 5"	0' 3"	1108' 0"
SANDSTONE, light grey, medium-coarse grained.	2' 5"	-	1110' 5"
<u>DIP - 10°</u>			
SANDSTONE, light grey, fine grained shaly at base, carbonaceous streaks	1' 3"	-	1111' 8"
SHALE, dark grey to black, carbonaceous, coaly partings.	2' 4"	1' 6"	1114' 0"
SANDSTONE, dark grey, coarse grained, with occasional carbonaceous or coaly streaks	9' 0"	4' 10"	1123' 0"
CONGLOMERATE, grey, fine grained	2' 7"	-	1125' 7"
SHALE, dark grey to black, carbonaceous, coaly partings	2' 0"	-	1127' 7"
SANDSTONE, grey, fine grained, with thinly bedded dark grey silty shale	2' 5"	-	1130' 0"
SANDSTONE, grey, medium grained, compact, occasional silty bands.	5' 0"	2' 0"	1135' 0"
SANDSTONE, grey, coarse grained, compact	5' 0"	-	1140' 0"
SANDSTONE, grey, coarse grained, compact, shaly at top	1' 8"	-	1141' 8"
SHALE, dark grey, to black, carbonaceous, sandy in part, few coaly partings.	5' 7"	-	1147' 3"
SANDSTONE, light grey, medium-coarse grained	2' 9"	-	1150' 0"
SHALE, light grey, crushed and slickensided occasional thin lenses of coal (1/8")	4' 0"	2' 2"	1154' 0"
SHALE, dark grey to black, carbonaceous, coaly partings, sandy at top and bottom	4' 4"	-	1158' 4"
SANDSTONE, grey, coarse, grained	0' 8"	-	1159' 0"
SHALE, dark grey to black, carbonaceous, coaly partings,	1' 5"	-	1160' 5"
SANDSTONE, grey, fine grained, with thin irregular dark silty shale bands	4' 7"	2' 2"	1165' 0"
SANDSTONE, grey, fine grained, as above	0' 4"	-	1165' 4"
CONGLOMERATE, compact with short coarse grained sandstone sections	3' 8"	-	1169' 0"
SANDSTONE, grey, grading from coarse grained at top to fine grained at bottom. shear plane at 45° at centre.	6' 0"	2' 7"	1175' 0"

"C.B. Newmarch"  
Asst. Mining engineer

June 17/46

LOG OF NO. 3 HOLE (Continued)

14

			1175' 0"
SHALE, grey to black, sandy in part, Carbonaceous in part, coaly partings	5' 0"	-	1180' 0"
SANDSTONE, grey, fine grained, with thin dark silty laminae	2' 5"	-	1182' 5"
SANDSTONE, grey, medium grained, compact (Coarse grained in part) with fragments of carbonized wood	3' 7"	0' 4"	1186' 0"
SANDSTONE, grey, coarse grained	4' 7"	-	1190' 7"
SANDSTONE, light grey, fine grained	1' 5"	-	1192'
SANDSTONE, grey, medium-coarse grained, occasional thin carbon lenses	5' 0"	1' 0"	1197'
SANDSTONE, as above	0' 8"	-	1197' 8"
SHALE, dark grey, carbonaceous in part, sandy	8' 4"	1' 7"	1206' 0"
SHALE, dark grey, silty to sandy, carbon in part	5' 0"	-	1211' 0"
SANDSTONE, light grey, with thin silty shale laminae	2' 0"	-	1213' 0"
SHALE, brown to black, silty, carbonaceous, plant fragments, coaly partings	3' 0"	0' 10"	1216' 0"
SANDSTONE, grey fine grained, shaly, carbonaceous in part	1' 9"	-	1217' 9"
SANDSTONE, light grey, medium grained, compact	2' 9"	-	1220' 6"
SHALE, dark grey, silty in part, compact (carbon in top 3")	3' 6"	-	1224' 0"
SHALE, dark grey to black, carbon, coaly partings	0' 8"	-	1224' 8"
COAL, bony crushed	1' 4"	0' 8"	1226' 0"
SHALE, dark grey, sandy at base	1' 0"	-	1227' 0"
SANDSTONE, light grey, course grained (fine grained at top)	3' 3"	-	1230' 2"
SHALE, dark grey to black, carbonaceous, $\frac{3}{4}$ " bony coal at centre)	5' 10"	5' 2"	1236' 0"
SHALE, dark grey sandy grading into fine-grained sandstone at base	5' 5"	-	1241' 5"
SANDSTONE, light & grey, fine-medium grained with thin irregular dark (Carb) laminae, specks of coal	3' 4"	-	1244' 9"
SANDSTONE, light grey, course grained	1' 3"	-	1246' 0"
SANDSTONE, light grey medium to course grain	4' 0"	-	1250' 0"
CONGLOMERATE, fine grained	4' 0"	-	1254' 0"
SANDSTONE, light grey, fine grain, micaceous	4' 0"	2' 0"	1258' 0"
SANDSTONE, light grey, medium grained with shaly laminae at base and $1\frac{1}{2}$ " coaly shale in middle	2' 6"	-	1260' 6"

SHALE, dark, silty	0' 6"	-	1261' 0"
SANDSTONE, light grey medium grain with dark laminae and 12" Dark grey shale with coaly laminae	4' 0"	0' 6"	1265' 0"
<u>DIP 15 - 18°</u>			
SANDSTONE, dark, fine and medium grained drilling stopped here			

"J.M. Black"

Asst. Mining Engineer

18 June 46

PROGRESS REPORT MERRITT D.D.H. No. 3, June 17 - June 18

June 17

Graveyard Shift:	Coring 1246' - 1258'
Morning Shift:	Coring 1258' -
Afternoon Shift:	Coring 1258' -

June 18

Graveyard Shift:	Coring 1258' - 1270'
Drilling stopped here	

June 19

First drill used, is being set up on #4 site

"J.M. Black"

Asst. Mining Engineer

19 June 46

PROGRESS REPORT MERRITT D.D.H. No. 3 June 13 - June 16

June 13

Graveyard Shift	Coring 1165' - 1175'
Morning Shift	Coring 1175' - 1186'
Afternoon Shift	Coring 1186' - 1192'

June 14

Graveyard Shift	Coring 1192' - 1197'
Morning Shift	Coring 1197' - 1206'
Afternoon Shift	Coring 1206' - 1216'

June 15

Graveyard Shift	Coring 1216' - 1226'
Morning Shift	Coring 1226' - 1236'
Afternoon Shift	Shut down

June 16

Graveyard Shift	Shut down
Morning Shift	Shut down
Afternoon Shift	Coring 1236' - 1246'

Depth at 8:00 A.M. June 17th was 1258'

Dr. J. Black has taken over here.

At a depth of 1225' a coal seam with a thickness of 1' 4" was encountered (bony coal) This seam may allow us to make a tentative correlation with the No. 1 hole on the Indian Reserve (1225' in hole No. 3 being equivalent 550' in the Indian Reserve hole) I am bringing the graphic logs with me and will discuss the matter with you.

"C.B. Newmarch"

Asst. Mining Engineer.

PROGRESS REPORT MERRITT D.D.H. No. 3, June 10 - June 12

June 10

Graveyard shift:	Coring 1083' - 1099'
Morning Shift:	Coring 1099' - 1108'
Afternoon Shift:	Coring 1108' - 1114'

June 11

Graveyard shift:	Coring 1114' - 1123'
Morning Shift:	Coring 1123' - 1135'
Afternoon Shift:	Coring 1135' - 1140'

June 12

Graveyard Shift:	Coring 1140' - 1150'
Morning Shift:	Coring 1150' - 1154'
Afternoon Shift:	Coring 1154' - 1165'

Depth at 8:00 A.M. June 13 was 1175'

Section is mostly sandstone with a little carbonaceous shale.

"Charles B. Newmarch"  
Asst. Mining Engineer

PROGRESS REPORT MERRITT D.D.H. No. 3, June 5 - 9

June 5

Graveyard Shift: Coring 1018' - 1014'  
Morning Shift : Coring 1014' - 1024'  
Afternoon Shift: Coring 1024' - 1034'

June 6

Graveyard Shift: Coring 1034' - 1045'  
Morning Shift : Coring 1045' - 1063'  
Afternoon Shift: Shut down waiting for drill rods

June 7

Graveyard Shift: Shut down waiting for drill rods  
Morning Shift : " " " " " "  
Afternoon Shift: " " " " " "

June 8

Graveyard Shift: Shut down " " " "  
Morning Shift : " " " " " "  
Afternoon Shift: Coring 1063' - 1068'

June 9

Graveyard Shift: Coring 1068' - 1073'  
Morning Shift : Coring 1073' - 1083'  
Afternoon Shift: Coring 1083' - 1093'

Depth at 8:00 A.M. June 10 was 1099'  
No coal to date.

"C.B. Newmarch"

Asst. Mining Engineer.

Will core to 1123 and advise C.B.N.



PROGRESS REPORT MERRITT D.D.H. No. 3 June 3 - 4

June 3

Graveyard Shift:  
Morning Shift:  
Afternoon Shift:

Coring 956' - 963'  
Coring 963' - 977'  
Coring 977'-987'

June 4

Graveyard Shift:  
Morning Shift:  
Afternoon Shift:

Coring 987' - 1002'  
Coring 1002' - 1003'  
Mixing Mud and Coring 1003'-1008'

Depth at 11:30 A.M. June 5 was 1024'

Now coring conglomerate and sandy shale.

"Charles B. Newmarch"

Asst. Mining Engineer .

PROGRESS REPORT MERRITT D.D.H. No. 3, June 1 - 2June 1

Graveyard Shift:	Coring 939' - 946'
Morning Shift:	Coring 946' - 956'
Afternoon Shift:	Shut down.

June 2

Graveyard Shift:	Shut down
Morning Shift:	Shut down
Afternoon Shift:	Shut down

Depth at 11:00 A.M. June 3 was 977'

No coal to date.

"C.B. Newmarch"

Asst. Mining Engineer.

PROGRESS REPORT MERRITT D.D.H. NO. 3, May 30 - 31

May 30

Graveyard Shift:	Coring 880' - 890'
Morning Shift:	Coring 890' - 911'
Afternoon Shift:	Coring 911' - 922'

May 31

Graveyard Shift:	Coring 922' - 932'
Morning Shift:	Coring 932' - 934'
Afternoon Shift:	Coring 934' - 939'

Depth at 11:00 A.M. June 1st was 956'

The section remain unchanged; no coal to date.

"Charles B. Newmarch"

Asst. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE NO. 3, May 28 - 29

MAY 28

Graveyard Shift:	Coring 830' - 840'
Morning Shift:	Coring 840' - 850'
Afternoon Shift:	Coring 850' - 855'

May 29

Graveyard Shift:	Coring 855' - 860'
Morning Shift:	Coring 860' - 870'
Afternoon Shift:	Coring 870' - 880'

Depth at 12:30 P.M. May 30 was 911'

Coring is now continuing without unusual difficulty at about 30 feet per day.

"C.B. Newmarch"

Asst. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE No. 3 - May 26 - 27

MAY 26

Graveyard Shift:	Shut down.
Morning Shift:	Coring 800' - 805'
Afternoon Shift:	Coring 805' - 812'

May 27

Graveyard Shift:	Coring 812' - 817'
Morning Shift:	Coring 817' - 820'
Afternoon Shift:	Coring 820' - 830'

Depth at 12:00 P.M. May 28 was 850'

"C.B. Newmarch"

Asst. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE NO.3 - May 21 - 25

May 21

Graveyard Shift:	Coring 688' - 698'
Morning Shift:	Coring 698' - 708'
Afternoon Shift:	Coring 708' - 714'

May 22

Graveyard Shift:	Coring 714' - 723'
Morning Shift:	Coring 723' - 735'
Afternoon Shift:	Coring 735' - 757'

May 23

Graveyard Shift:	Coring 757' - 767'
Morning Shift:	Coring 767' - 777'
Afternoon Shift:	Coring 777' - 789'

May 24

Graveyard Shift:	Coring 789' - 800'
Morning Shift:	Shut down
Afternoon Shift:	Shut down.

May 25

Graveyard Shift:	Shut down.
Morning Shift:	Shut down.
Afternoon Shift:	Shut down.

Note: Will resume coring at 8:00 A.M. May 26

"C.B. Newmarch"

Asst. Mining Engineer.

May 24, 1946

PROGRESS REPORT - MERRITT DRILL HOLE No. 3 May 18 - 20

May 18

Graveyard Shift:	Coring 561' - 571'
Morning Shift:	Coring 571' - 582'
Afternoon Shift:	Coring 582' - 598'

May 19

Graveyard Shift:	Coring 598' - 614'
Morning Shift:	Coring 614' - 633'
Afternoon Shift:	Coring 633' - 653'

May 20

Graveyard Shift:	Coring 653' - 671'
Morning Shift:	Coring 671' - 681'
Afternoon Shift:	Coring 681' - 688'

Total Depth at 4:00 P.M. May 21 was 708'.

"C.B. Newmarch"

Asst. Mining Engineer.

PROGRESS REPORT MERRITT DRILL HOLE NO #3, May 16 - 17

MAY 16

Graveyard Shift:	Goring 512' to 516'
Morning Shift:	Coring 516' to 521'
Afternoon Shift:	Coring 521'-529'

May 17

Graveyard Shift:	Coring 529' to 539'
Morning Shift:	Coring 539' to 549'
Afternoon Shift:	Coring 549' to 561'

Total Depth at 5:00 P.M. May 18 was 590'

No coal encountered during the week.

"C.B. Newmarch"

Asst. Mining Engineer.



PROGRESS REPORT MERRITT DRILL HOLE No. 3, May 14 - 15

May 14

Graveyard Shift:	Reaming Hole from 140' to 499'
Morning Shift:	Running 420' of Casing
Afternoon Shift:	Running Casing

May 15

Graveyard Shift:	Running Casing
Morning Shift:	Setting Casing at 498' and cored 499' - 502'
Afternoon Shift:	Cored 502' to 512'

Total Depth at 5:00 P.M. May 16 was 521'

"C.B. Newmarch"  
Asst. Mining Engineer.

PROGRESS REPORT -MERRITT DRILL HOLE # 3, - May 11th to 13th.

May 11th: Morning Shift: Cored 449' to 459'  
Afternoon Shift: Shut Down.

May 12th: Graveyard Shift: Shut Down  
Morning Shift: Shut Down  
Afternoon Shift: Cored 459 to 467'

May 13th: Graveyard Shift: Cored 467' to 479'  
Morning Shift: Cored 479' to 489'  
Afternoon Shift: Cored 489' to 499'

Decision made to case hole to 450' to shut off artesian  
Water encountered from 430' to 450'.

"C.B. Newmarch"

Asst. Mining Engineer.

PROGRESS REPORT - MERRITT HOLE # 3, - May 8th to 10th.

May 8th - Night Shift: Sank casing easily to 140 feet which appears to be the bottom of the caved area which caused the trouble. If more trouble develops later on the casing can be sunk farther.

Graveyard : Cored 365' to 387'

May 9th - Day Shift : Cored 387' to 405'

Night Shift : Cored 405'-416'

Graveyard : Cored 416'-430'

May 10th- Day Shift : Cored 430' to 449'

Night Shift : Pump trouble - Hole making Water

Graveyard : Not working

May 11th- Day Shift Only: Repaired Pump. Cored 449' - 459'

Note: Mr. Newmarch has taken over here at this point.

" W.H. White"

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE # 3 - May 6th to 8th

May 6th: NightShift : 318' to 326'  
Graveyard : 326' to 345'

May 7th: Day Shift : 345' to 355'  
Night Shift : 355' to 365' Caving Trouble.  
Graveyard : Caving below the casing, set at 40' re-  
sulted in the casing breaking off near  
the bottom and dropping to 100' in the  
caved hole. This was recovered and new  
casing run in to 100'.

May 8th: Day Shift : Decision made to case the hole down to  
solid ground, which, on account of the  
friable nature of the sandstones and  
conglomerates, may have to go to bottom  
(365')

"Wm. H. White"

Assoc. Mining Engineer .

PROGRESS REPORT: MERRITT DRILL HOLE #3 - May 4th - 6th

May 4th - Night Shift: Cored 202' to 222'  
Graveyard : Cored 222' to 232' (Engine Trouble)

May 5th - Day Shift : Cored 233' to 253'  
Night Shift: Cored 253' to 274'  
Graveyard : Cored 274' to 297'

May 6th - Day Shift: Cored 297' to 318'

"Wm. H. White"

Assoc. Mining Engineer.

46

PROGRESS REPORT - #3 Hole, MERRITT, B.C. April 29th to May 2nd

April 29th: Day Shift Only: Set up completed and hole collared.

April 30th: Day Shift : Drove 4" Pipe to Depth of 11 feet in stream wash, encountering decomposed rock at 7 feet.

Night Shift: Drilling casing Down

May 1st: Day Shift: Drilled casing down to 40 feet in decomposed bedrock.  
Cored 40' to 50' in decomposed sandy shale

Night Shift: Cored 50' to 70'

May 2nd: Day Shift: Cored 70' to 90'

"Wm. H. White"

Assoc. Mining Engineer.

PROGRESS REPORT - MERRITT DRILL HOLE # 3 - May 2nd to May 4th.

May 2nd:	Night Shift:	Cored 90' to 120'
May 3rd:	Day Shift :	Cored 120' to 146'
	Night Shift:	Cored 146' to 166'
	Grave- yard:	Cored 166' to 193'
May 4th:	Day Shift:	Cored 193' to 202'

"Wm. H. White"

Assoc. Mining Engineer .

LOG OF DRILL HOLE #4, MERRITT, B.C.

Located on NE Quarter Section 14, 675' N 18° E true from Hole #1.  
Elevation 1975'. Hole started June 20, 1946.

Boulder clay and gravel 181' 181'

BEDROCK	Thickness	Core Missing	Depth
SANDSTONE, medium to fine grained, cross bedded with dark laminae, three thin beds conglomerate. Dip 18°	5' 0"	-	186' 0"
SANDSTONE, medium to fine grained, with dark laminae, shaly towards base and 4" of Friable Coal and mud, probably some coal that is missing. Dip 10°	5' 9"	1' 9"	191' 9"
SANDSTONE, Coarse	3' 3"	-	195' 0"
SHALE, dark grey shattered, getting more sandy to base, Dip 14°	6' 0"	3' 8"	201' 0"
SANDSTONE, medium grained, dark grey with darker laminae, has one near vertical slip of about 1/2", another dip about 45°, breccia and gouge about 2" thick, calcite stringer	6' 0"	9"	207' 0"
SHALE, dark grey, micaceous, near base, sandy. Dip 7°	10' 0"	10"	217' 0"
SHALE, dark sandy, micaceous, at base two seams 1/8 and 1/2" bony Coal	5' 6"	-	222' 6"
SANDSTONE, medium grained, light grey with dark laminae, Dip 5 - 18° several strike fractures. Dip 30-60°N - with Calcite	4' 6"	-	227' 0"
SANDSTONE, coarse, light colored, micaceous, massive - contact with shale below Dips 30°	4' 0"	-	231' 0"
SHALE, dark grey, fractured at contact	4' 0"	8"	235' 0"
COAL,	6"	2"	235' 6"
SHALE, dark grey, sandy, fractured, coal partings, 2 - 3" broken Coal at base	4' 6"	6"	240' 0"
SANDSTONE, grey, medium grained, fractured shaly toward base - at 242' black shale	5' 0"	2' 0"	245' 0"

"J.M. Black"  
Asst. Mining Engineer  
26 June 46



LOG OF DRILL HOLE # 4, MERRITT, B.C. (Con't) 28 4

	Thickness	Core Missing	Depth
SHALE, dark grey, some coal partings, some sandy and micaceous beds Dip 30°	3' 0"	-	248' 0"
SANDSTONE, with dark laminae, some cross bedding medium grain to 250' 3" coarse massive to 258' 3" with few conglomerate beds, coal fragments	10' 3"	-	258' 3"
SANDSTONE, brown, medium grain, compact, with very many angular coal fragments up to 1" across oriented parallel to bedding which dips 20°	9"	-	259' 0"
SANDSTONE, coarse with conglomerate	3' 10"	7"	262' 10"
SHALE, Dark grey, numerous coal partings some mud seams, dip 20°	10' 2"	-	273' 0"
SHALE, Dark grey	4' 0"	5"	277' 0"
SHALE, Dark grey	2' 0"	-	279' 0"
SANDSTONE, medium grained, light and dark grey, dip 10°	1' 9"	-	280' 9"
SHALE, dark with coal partings	2' 0"	-	282' 9"
SANDSTONE, medium to coarse grained	2' 0"	-	284' 9"
SHALE, Dark	1' 3"	-	286' 0"

"J.M. Black"

Asst. Mining Engineer

26 June 46

3

LOG OF DRILL HOLE #4, MERRITT, B.C. (Cont.)

	Thickness	Core Missing	Depth
SHALE, dark grey, coal partings	1' 8"	-	286' 0"
SANDSTONE, dark compact becoming coarser at base. Dip 11°	5' 7"	-	287' 8"
SHALE, dark to black, coal partings, broken	3' 9"	6"	293' 3"
SANDSTONE, medium grained, some dark laminae. Dip 20°	2' 0"	-	297' 0"
SHALE, Dark fissile, coal partings	2' 0"	6"	299' 0"
SANDSTONE, medium grained, dark laminae. Dip 12°	1' 6"	-	301' 0"
SHALE, dark with coal partings	3' 6"	1' 0"	306' 0"
SANDSTONE, medium grained, getting coarser downwards - at base massive some cross bedding	13' 0"	-	319' 0"
CONGLOMERATE, fine, few sandy beds, coal fragments 331' 9"	21' 3"	-	340' 3"
SANDSTONE, medium grained, laminae. Dip 13° at base, massive, light colored, irregular	10' 9"	-	351' 0"
SANDSTONE, medium grained with dark laminae getting shaly towards base	10' 0"	1' 0"	361' 0"
SANDSTONE, dark and light, few coarse beds	3' 3"	-	364' 3"
SHALE, dark with coal partings	2' 0"	3"	366' 3"
COAL	1' 0"	10"	367' 3"
SHALE, dark with coal partings	1' 4"	2"	368' 7"
COAL	3' 3"	-	371' 10"
SHALE, boney	3"	-	372' 1"
COAL	3"	-	372' 4"
SHALE, boney	2"	-	372' 6"
COAL, 4 Shaly seams totalling 6"	4' 6"	1' 9"	377' 0"
SHALE, dark sandy, coal partings, mud seam	3' 0"	1' 6"	380' 0"
SANDSTONE, dark, compact, shaly Dip 10-18°	5' 0"	-	385' 0"

"J.M. Black"

Asst. Mining Engineer

28 June 46

## LOG OF DRILL HOLE #4, MERRITT, B.C. (Cont)

			385' 0"
SANDSTONE, Medium grain, dark and light, some coal partings	1' 6"	-	386' 6"
CONGLOMERATE, dark, fairly coarse to 1", few coal fragments	8' 6"	3' 0"	395' 0"
CONGLOMERATE, light colored with few coaly streaks	10' 0"	-	405' 0"
CONGLOMERATE	5' 0"	2' 3"	410' 0"
CONGLOMERATE, some coarse sandy beds, coal fragments at 413, at 420' 6" very coarse, pebbles to 2" closely packed	11' 0"	1' 3"	421' 0"
SANDSTONE, medium grained thin dark and light, beds dip 15-18°, some mica, towards base beds thicker and coarser	10' 0"	-	431' 0"
SANDSTONE, coarse, light with few dark fine beds some coal fragments, dis- turbed	5'	10"	436' 0"
SANDSTONE, medium grained, dark and light beds, some coarser beds, dip 8°-12°-14°, getting shaly at base	7' 0"	-	443' 0"
SHALE, sandy, with coal marks	4' 0"	1' 8"	447' 0"
SHALE, sandy, <sup>black</sup> with abundant coal partings	2' 6"	-	449' 6"
SANDSTONE, brown fine grained	4"	-	449' 10"
SHALE, black, much broken	5' 2"	3' 8"	455' 0"
SHALE, black, fissile, broken	2' 0"	1' 6"	457' 0"
COAL, and boney, <sup>shale</sup> 5" coal	2' 0"	1' 3"	459' 0"
COAL, and shale, 4" shale	1' 10"	10"	460' 10"
SANDSTONE, shaley, dip 18°, some irregular bedding	3' 2"	-	464' 0"
SANDSTONE, shaly	4' 0"	1' 0"	468' 0"
SANDSTONE, dark and light, fine to medium grain	4' 0"	6"	472' 0"
SANDSTONE, medium grained, light with dark laminae, dips 10°, 20°	9' 0"	-	481' 0"
SANDSTONE, Medium to fine grained, some shaly beds	4' 9"	3"	485' 9"
SHALE, Dark, dip 13°, some calcite filled fractures	2' 3"	6"	488' 0"
SANDSTONE, medium and coarse grain, some silty beds	3' 0"	-	491' 0"

"J.M. Black"

Asst. Mining Engineer

2 July 1946

LOG OF DRILL HOLE #4, MERRITT, B.C. (Cont)

				491' 0"
SANDSTONE, Light, Massive, Medium grain, few coal partings, at 500' coarser	10' 0"	-		501' 0"
SANDSTONE, massive, medium grain, coarse 504-08	10' 0"	-		511' 0"
SANDSTONE, Massive	2' 9"	-		513' 9"
CONGLOMERATE, fine and sandy at top	5' 0"	6"		518' 9"
SANDSTONE, medium to fine grain dark grey dip 5°	1' 3"	-		520' 0"
SANDSTONE, grading down to shaly sandstone	3' 0"	-		523' 0"
SANDSTONE, massive, light, medium grain dip 17°, some silty beds dip 5°	7' 0"	1' 0"		530' 0"
SANDSTONE, light, medium grain few silty beds dip 4° - 8° somewhat coarser at 535 and few coal fragments there	7' 0"	-		537' 0"
SANDSTONE, light, medium grain, mostly massive few silty beds dip 5°, coaly partings 538	9' 0"	-		546' 0"
SANDSTONE, massive, light colored	5' 0"	-		551' 0"
SANDSTONE, thin bedded, silty, dip 5°	2' 0"	-		553' 0"
SANDSTONE, Massive, light, medium to fine grain, few silty beds, coaly partings 557, 560, dip 5°, few irregular dips	8' 0"	6"		561' 0"
SANDSTONE, massive, calcite stringer at base	8' 0"	3' 9"		569' 0"
SANDSTONE, light and dark, thin bedded, shaly	3' 0"	1' 0"		572' 0"

"J.M. Black"

Asst. Mining Engineer

4 July 46

Hole stoped Jy 4 @ 575' in sandstone  
(H.S.)

6

PROGRESS REPORT MERRITT D.D.H. # 4, July 2, - July 4

JULY 2

Morning Shift:  
Afternoon Shift:  
Graveyard Shift:

Coring 481 - 501  
Coring 501 - 520  
Coring 520 - 530

JULY 3

Morning Shift:  
Afternoon Shift:  
Graveyard Shift:

Coring 530 - 546  
Coring 546 - 556  
Coring 556 - 569

JULY 4

Morning shift to noon:

Cored to 572'

"J.M. Black"

Asst. Mining Engineer

4 July 46

7  
PROGRESS REPORT MERRITT D.D.H. No 4, June 28 - July 2

June 28

Morning Shift:  
Afternoon " :  
Graveyard " :

Coring 380 - 395  
" 395 - 411  
" 411 - 431

June 29

Morning Shift:  
Afternoon " :  
Graveyard " :

Fishing for bit  
Coring 431 - 436  
" 436 - 447

June 30

Morning Shift:  
Afternoon " :  
Graveyard " :

Coring 447 - 459  
" 459 - 472  
Not working

July 1

Morning shift:  
Afternoon " :  
Graveyard " :

Not working  
" "  
Coring 472 - 481

July 2

Morning Shift:

Cored to 491 at noon

"J.M. Black"

Asst. Mining Engineer

2 July 46

8

PROGRESS REPORT MERRITT D.D.H. No 4, June 26 - June 28

June 26

Morning shift:	Coring 277 - 296
Afternoon Shift:	Coring 296 - 311
Graveyard Shift:	Coring 311 - 334

June 27

Morning Shift:	Coring 334 - 341
Afternoon Shift:	Coring 341 - 361
Graveyard Shift:	Coring 361 - 379

June 28

Morning Shift to Noon

Cored to 385'

"J.M. Black"  
Asst. Mining Engineer,

28 June 46

PROGRESS REPORT MERRITT D.D.H. No 4, June 24 - June 26

June 24

Morning Shift:  
Afternoon Shift:  
Graveyard Shift:

Coring 186 - 195  
Coring 195 - 207  
Coring 207 - 217

June 25

Morning Shift:  
Afternoon Shift:  
Graveyard Shift:

Coring 217 - 245  
Coring 245 - 263  
Coring 263 - 277

June 26

Morning Shift to noon:

Cored to 286'

"J.M. Black"

Asst. Mining Engineer

26 June 46



PROGRESS REPORT MERRITT D.D.H. No 4, June 19 - June 24

June 19

Setting up drill.

June 20

Till noon completing set up.

Morning Shift:

Casing to 15'

Afternoon Shift:

Casing to 35'

Graveyard Shift:

Casing to 60'

June 21

Morning Shift:

Casing to 90'

Afternoon Shift:

Casing to 120'

Graveyard Shift:

Casing to 150'

June 22

Morning Shift:

Casing to 160, lost bit and fished for it till end of shift

Afternoon Shift:

Not working

Graveyard Shift:

Not working

June 23

Morning Shift:

Not working

Afternoon Shift:

Casing to 170'

Graveyard Shift

Casing to 181 - bedrock

Coring 181 - 186

June 24

Morning Shift Noon

Drilling to 190 had trouble with Pump

"J.M. Black"

Asst. Mining Engineer

29 June 46

LOG OF DRILL HOLE #5, MERRITT, B.C.

Elevation 1975', approximately 471' N 28° W from Hole #1. Started July 18, 1946.

Clay and boulders 178'

	<u>Thickness</u>	<u>Cora Missing</u>	<u>Depth</u>
SANDSTONE, light, medium to coarse grain dip 10°, few shaly beds	4' 0"	-	182' 0"
SANDSTONE, light, medium to coarse, massive, getting shaly towards base	8' 0"	-	190' 0"
SHALE, dark, many coal partings, some pyrite	9") 4")		
COAL,	2' 0"	11"	192' 0"
SHALE, with many coal partings	6"	-	192' 6"
COAL, with little shale	6"	-	193' 0"
SHALE, with many coal partings	4"	-	193' 4"
SHALE, dark grey with few coal partings	6' 8"	8"	200' 0"
SHALE, mud, and coal particles	2' 0"	1' 6"	202' 0"
SHALE, dark grey, few coal partings, few sandy beds, dip 5° - 10°	5' 0"	3"	207' 0"
SHALE, dark grey	2' 3"	-	209' 3"
SANDSTONE, light, medium to fine grain, massive, shaly at 212'.	7' 9"	6"	217' 0"
SANDSTONE, light, medium grain	9' 0"	6"	226' 0"
SANDSTONE, light massive, medium to coarse	10' 2"	-	236' 2"
SHALE, dark grey, few coal partings sandy towards base	4' 10"	3"	241' 0"
SANDSTONE, light, medium grained, few shale beds	3' 0"	-	244' 0"
SHALE, dark grey	2' 0"	3"	246' 0"
SHALE, dark grey mud seam	4' 6"	3"	250' 6"
SANDSTONE, light grey, fine-medium grain, massive	5' 6"	-	256' 0"
SANDSTONE, light and dark, few shale beds dip 10°	5' 6"	-	261' 6"
SHALE, dark and medium grey, few sandy beds, dip 0° - 20°	14' 6"	6"	276' 0"
SHALE, dark, broken at 277'	2' 6"	-	278' 6"
MUD, shale, coal	1' 0"	6"	279' 6"
SHALE, dark	3' 6"	-	283' 0"

28

SHALE, medium to dark grey, fractured	6' 0"	-	289' 0"
SANDSTONE, dark and light, medium to fine grain, dip 25°	4' 9"	3"	293' 9"
SHALE, dark	1' 3"	-	295' 0"
SANDSTONE, medium grain thin bedded	3' 6"	1' 0"	298' 6"
SANDSTONE, coarse, massive	4' 0"	-	302' 6"
SANDSTONE, grey, medium to fine grain broken at 303' 6", dip 30°	3' 6"	6"	306' 0"
SHALE, dark grey some sandy beds coal partings at 306' 6"	4' 6"	6"	310' 6"

J.M. Black

Asst. Mining Engineer

25 July 46

LOG OF DRILL HOLE #5, HERRITT, B.C.

28

			310' 6"
SHALE, grey	2' 0"	-	312' 6"
SHALE, grey, broken, little mud	3' 6"	3"	316' 0"
SHALE, sandy, coal partings 317'	1' 0"	-	317' 0"
SANDSTONE, shaly, fine grain, dip 5-10° few coal partings	12' 6"	-	329' 6"
SANDSTONE, light, medium grained	7' 0"	6"	336' 6"
SANDSTONE, shaly, dip 15°	4' 0"	-	340' 6"
SANDSTONE, light and dark, medium and fine grain, dip 12°	2' 0"	-	342' 6"
SHALE, sandy, coal partings 344'	2' 6"	3"	345' 0"
SANDSTONE, fine and medium	1' 6"	-	346' 6"
SANDSTONE, light, massive coarse, very coarse 352 - 56	10' 6"	2' 0"	357' 0"
SHALE, sandy, dip 10°	2' 0"	-	362' 0"
SANDSTONE, few shaly beds, fine grained	2' 0"	-	364' 0"
SANDSTONE, coarse, lowest 6" fine grained	3' 6"	3"	367' 6"
SANDSTONE, light, coarse massive, dip 13°	2' 0"	6"	394' 6"
SANDSTONE, light, coarse massive	3' 6"	-	403' 0"
SANDSTONE, shaly	2' 0"	-	405' 0"
SANDSTONE, shaly, poorly sorted, few coal partings	7' 0"	-	412' 0"
SHALE, with abundant coal partings	1' 6"	-	413' 6"
COAL, (2½" bone 2 seams), dip 13°	1' 6"	3"	415' 0"
COAL, (5" bone 5 seams)	2' 0"	6"	417' 0"
COAL, (1" bone 1 seam)	2' 0"	9"	419' 0"
COAL, (4" bone 3 seams)	2' 0"	1' 3"	421' 0"
SHALE, with abundant coal partings 2" coal	2' 0"	9"	423' 0"
SANDSTONE, shaly, dip 10°	2' 0"	-	424' 0"
CONGLOMERATE, few sandy beds, very coarse at base	17' 9"	6"	441' 9"
SHALE, black, fissile, broken, few coal partings	1' 3"	-	443' 0"

J.H. Black

Asst. Mining Engineer

27 July 46

LOG OF #5, D.D.H. MERRITT, B.C.

SHALE, sandy, few coal partings, dip 5°	8' 0"	-	451' 0"
SANDSTONE, light and dark, medium and fine grain few shaly beds, dip 5-20°	19' 0"	2' 0"	470' 0"
SHALE, sandy, many leaf impressions, dip 10°	6' 0"	3"	476' 0"
SHALE, few sandy beds, many coal partings two 1" seams coal, broken and slickensided	5' 0"	2' 0"	481' 0"
SHALE, and coal broken, probable loss of coal 5' - 6'	9' 0"	7' 0"	490' 0"
SANDSTONE, medium grain, few shale beds	3' 0"	3"	493' 0"
SHALE, sandy, much broken	2' 6"	-	495' 6"
SANDSTONE, fine grained, broken	3' 0"	3"	498' 6"
SHALE, dark	1' 0"	-	499' 6"
SANDSTONE, dark and light, fine grained, thin bedded, broken, dips to 35°	4' 6"	3"	504' 0"
SANDSTONE, grey, massive, medium grained	4' 6"	-	408' 6"
SANDSTONE, thin bedded, fine grained, dip 25°	4' 6"	-	513' 0"
SHALE, sandy	2' 6"	-	515' 6"
SANDSTONE, dark, fine grained, some shale beds, broken	4' 6"	-	520' 0"

J.A. Black

Asst. Mining Engineer

29 July 46

LOG OF MERRITT D.D.H. #5

SANDSTONE, dark and light, thin bedded, upper part broken, dip 30°	10' 0"	-	530' 0"
SANDSTONE, light and dark broken, dip 25-30°	5' 0"	-	535' 0"
SANDSTONE, light, coarse, massive, fine at 540', conglomerate at 543', dip 35°	15' 0"	1' 0"	550' 0"
SANDSTONE, coarse, broken	5' 0"	3' 0"	555' 0"

J.M. Black

Asst. Mining Engineer

PROGRESS REPORT MERRITT D.D.H. 35, July 17 - 23.

July 17

Setting up.

July 18

Till 2 p.m. completing set up.

Afternoon shift

Graveyard shift

Casing to 30

Casing to 60

July 19

Morning shift

Afternoon shift

Casing to 80

Casing to 110

July 20

Morning shift

Afternoon not drilling

Casing to 140

July 21

Morning not drilling

Afternoon shift

Casing to 160

July 22

Morning shift

Afternoon shift

Casing to 170

Casing to 175

Bedrock 178

July 23

Morning to noon

Coring to 182

J.M. Black

Asst. Mining Engineer

PROGRESS REPORT MERRITT D.D.H. #5, July 23-25

28

July 23

Morning shift:  
Afternoon  
Graveyard

Coring to 194  
Coring to 217  
Coring to 246

July 24

Morning shift  
Afternoon  
Graveyard

Coring to 266  
Coring to 283  
Coring to 302

July 25

Morning to noon

Coring to 311

J.M. Black  
Asst. Min. Engr.



PROGRESS REPORT MERRITT D.D.H. #5, July 25-27

28

July 25

Morning shift  
Afternoon  
Graveyard

Coring to 327  
Coring to 357  
Coring to 374

July 26

Morning shift  
Afternoon  
Graveyard

Coring to 395  
Coring to 417  
Coring to 439

July 27

Morning to 10 a.m.

Coring to 443

J.M. Black

Asst. Mining Engineer

28

PROGRESS REPORT, MERRITT D.D.M. #5, July 27-29

July 27

Morning shift  
Afternoon  
Graveyard

Coring to 451  
Coring to 470  
Coring to 481

July 28

Morning shift  
Afternoon  
Graveyard

Coring to 493  
Coring to 503  
Coring to 513

July 29

Morning to 10 a.m.

Coring to 520

J.M. Black

Asst. Mining Engineer

PROGRESS REPORT, MERITT D.D.H. #5, July 29-30

July 29

Morning shift  
Afternoon  
Graveyard

Coring to 530  
Coring to 550  
Reaming out to 550

July 30

Morning shift to 10 a.m.

555

J.M. Black

Asst. Mining Engineer

Merritt, B.C.

Log of D.D.H. #6. Drilled August 1946.

Located approx. 680' N 42° 30' E (True) from Hole #4  
Elevation approx. 1985'

Checked by [unclear]  
28 820117  
Returned to [unclear]  
[unclear]

Core examined October 4, 1946

Overburden

210' 6"

	Core	Missing	Depth
Shale, sandy	2' 6"		213'
Shale and sandstone	2'		215'
Sandstone, grey, fine grained few shaly beds	4' 6"		219' 6"
Shale, sandy, grey	5' 6"		225'
Sandstone, light, fine grained Dip 15-20°	9'		234'
Shale, grey, sandy	4'		238'
Sandstone, light, fine grained, massive	5' 9"		243' 9"
Sandstone and shale, interbedded Dip 5-10°	5' 3"		249'
Sandstone, massive, few shaly beds 254-255 grading to very coarse at base	7'		256'
Shale, grey sandy with sandy interbeds	4'		260'
Shale, dark, few sandy beds	10'		270'
Coal	6"		270' 6"
Shale sandy	1' 6"		272'
Sandstone, grey, massive, few shaly beds	3'		275'
Sandstone, grading down to shale	5'		280'
Sandstone, fine at top grading down to coarse and massive at base	9'		289'
Conglomerate	1'		290'
Sandstone, light, massive, medium to coarse with conglomerate beds	24'		314'
Shale, dark, some sandy beds, abundant coal partings at 325'	12'		326'
Shale, with many sandy interbeds	5'		331'
Coaly partings	6"		331' 6"
Sandstone, grey thin bedded, fine grained Dips 5-10°	2' 6"		334'
Coal partings	1'		335'
Shale, grey, sandy	2'		337'
Shale, broken and slickensided, some coal partings	6'		343'
Shale, dark with coal partings	8'		351'
Shale grey and getting very sandy at base	5'		356'
Shale, grey	2'		358'
Shale, dark, with coal partings	1' 5"		359' 3"
Sandstone, light, medium grained, few coal streaks	7' 9"		367'

38 367'

Conglomerate, light, mostly fine grain, some medium fairly coarse at 370-71, 375-76, 404-05	68'		435'
Sandstone, light medium grain, few coal partings	10' 9"		445' 9"
Sandstone, light, fine grain	1' 3"		447'
Shale, dark few coal partings	1' 6"		448' 6"
Coal and shale	1' 6"		450'
Shale, dark, broken	2'	1' 6"	452'
Shale, grey with coal partings	1'	6"	453'
Coal, 4" bone in 2 seams	2'		455'
Shale with 4" coal	1'		456'
Coal with 7" bone in 6 seams	3'		459'
Coal with 9" bone in 7 seams Dip 10°	2' 6"		461' 6"
Shale with abundant coal partings	5' 6"		465'
Shale, grey	4'		469'

J.M. Black

Asst. Mining Engineer.

COPY OF LOG OF NO. 11 HOLE, DIAMOND VALE COLLIERIES.

89

Location near centre of N.W. Quarter Section 14, Tp. 91  
 Elevation of surface, 1976.47  
 Started March 30th, 1909.

	<u>THICKNESS</u>		<u>DEPTH</u>	
Sand and clay	16			
Coarse gravel with clay and sand	10'	7"	26'	7"
Sand	1	0"	27	
Coarse gravel	4	4	31	11
Clay and gravel	64	2	96	11
			<u>BEDROCK</u>	
Conglomerate	5	4	101	5
Sandy shale	4	0	105	5
Coarse sandstone	8	3	113	8
Conglomerate	1	2	114	8
Light sandy shale	7	8	122	4
Dark sandy shale	3	10	126	2
Light sandy shale .....	10	0	136	2
Conglomerate	1		137	2
Light sandy shale	1		138	2
Dark sandy shale	5	6	143	8
Conglomerate	0	11	144	7
Sandstone .....	1	7	146	2
Sandy shale	5	2	151	2
Conglomerate	5	2	156	
Light sandy shale	2	0	158	
Conglomerate	1	10	160	0
Dark brown shale with coal markings .....	1	3	161	3
Sandy shale	3	0	164	
Sandstone	2	0	166	
Sandy shale	1	9	168	0
Conglomerate	2	3	170	3
Sandy shale	5	6	175	9
Sandstone .....	1	0	176	9
Sandy shale (Dip 20 degrees)	1	0	177	
Conglomerate	3	0	180	
dark sandy shale	5	0	185	
Conglomerate	1	6		
Sandy shale		6		
Conglomerate .....	1	0		
Dark sandy shale with coal marks	3	0	191	9
Sandstone	1			
Dark sandy shale	1			
Conglomerate	1			
Dark sandy shale .....	1			
Conglomerate	1		196	9
Dark sandy shale	1			
Sandstone (Dip 47 degrees)	3			
Sandy shale	1			
Dark sandy shale with coal marks .....	5	4	206	1
Sandy shale	2	0	208	1
Sandy shale	6			
Dark sandy shale	14	4	228	5

LOG OF NO. 11 HOLE CONTINUED

	<u>THICKNESS</u>		<u>DEPTH</u>
Sandstone	1		
Dark sandy shale	5	234	5
Light sandy shale .....	3	.....	
Dark sandy shale	2		
Sandstone (Dip 38 degrees)	2	241	5
Light sandy shale (Dip 30 degrees)	3	244	8
Dark sandy shale	2		
Sandy shale	8	254	8
Dark sandy shale	3		
Light sandy shale .....	5	262	8
Sandstone (Dip 22 degrees)	8		
Dark sandy shale	9	280	2
Sandstone (dip 14 degrees)	8		
Light sandy shale (Dip 14 degrees)	5	302	2
Dark sandy shale	1	303	11
COAL .....	2		
DARK brown shale	5		
Dark sandy shale	13	319	4
Sandstone	1		
Sandy shale	2		
Sandstone (Dip 15 degrees) .....	8	330	0
Dark sandy shale	13		
Sandstone	1		
<del>Sandstone</del>			
Sandy shale	2		
Sandstone	1		
Dark sandy shale .....	5	353	4
Sandstone	2		
Sandy shale	4		
Dark sandy shale	6		
Sandstone	1		
Dark sandy shale .....	1		
Sandstone	4	372	1
Conglomerate	2		
Sandy shale	4		
Conglomerate	2		
Sandstone .....	11	392	1
Conglomerate	2		
Sandstone	2		
Light sandy shale	6		
Sandstone	2		
Coarse Conglomerate .....	16	419	1
Dark sandy shale (Dip 15 degrees)	89	427	9
Sandstone	2		
Dark sandy shale (Dip 27 - 38 degrees)	6		
Sandstone (Dip 33-20 degrees)	11	446	9
Light sandy shale .....	3		
Dark sandy shale	7		
Conglomerate	1		
Dark shale with coal marks	3		
COAL .....	4	469	9
Dark sandy shale	2		

LOG OF NO. 11 HOLE CONTINUED

	<u>THICKNESS</u>		<u>DEPTH</u>	
COAL .....	1	4½		
COAL, bony		3		
COAL	2	4½		
COAL, bony	2	2		
COAL .....		4	...	472
Dark brown sandy shale	2	3		
COAL .....		9		
DARK brown shale	1	10		
COAL		6½		
Dark brown shale .....		7½		
COAL	1	6	...	479
DARK, brown shale, coal markings	3	4		482
COAL		7		11
Dark brown shale occasional coal streaks	9	5		
COAL		2		
Dark brown shale		4		
COAL		4		
BROWN SHALE		2		
COAL .....		6		
Brown shale		6		
Light sandy shale (Dip 20 degrees)	14	3		
Sandstone	9			
Light sandy shale	8	10		
COAL .....		8		
Sandy shale	1			
COAL		3		
Light sandy shale	38	9		568
Sandstone	11			
Light sandy shale	5			
Sandstone ( Dip 25 degrees	18			
Light sandy shale (dip 18 degrees) .....		9		610
COAL 6'5"				4
COAL, bony 6" .....	13	2	...	638
COAL 6'3"				3
Dark brown shale	3	6		
COAL	3	8		
DARK brown shale	7			
Light sandy shale	2			
Sandstone .....	1			
Light sandy shale	2	6		
COAL		10	...	658
Light sandy shale	8	4		9
Dark sandy shale	2			
Sandstone	32	6		
Dark sandy shale	5			
COAL 1' 10")				
COAL, bony 2")				
COAL, 9") .....	2	9	...	709
Dark sandy shale	6	9		4
Light sandy shale	9			



LOG OF NO. 11 HOLE CONTINUED

	<u>THICKNESS</u>	<u>DEPTH</u>
SANDSTONE	5	
Light sandy shale	2	
Sandstone .....	3	
Light sandy shale	11	6
Sandstone	2	
Light sandy shale	3	... 750 7

Original log apparently signed by Alfred T Wall, Benjamin Browitt, and N.L. Wimmeler.



DEPARTMENT OF MINES  
VICTORIA

20

SAMPLE RECEIVED FROM Mr. J. Dickson, Chief Inspector of Mines,

ADDRESS Dept. of Mines, Buildings.

LABORATORY NO.	SUBMITTER'S MARK.	LABORATORY REPORT.	
1364 C	Sample coal taken by Ins. of Mines - E.R. Hughes No. 4 Mine Horriet Coal Mines Ltd., Mar. 24, 1944	Moisture Volatile Combustible Matter Fixed Carbon Ash British Thermal Units	2.3 33.9 50.6 13.4 12,470
		The above figures, except the British Thermal Units, are in per cent.	

*Inspected & analyzed  
Coal & dynamite file "C"  
L.S. 1129 4358/24*

DATE SCOTT'S Oct, 1944

*signed by J.L. [unclear]*  
CHIEF ANALYST AND ASSAYER

28

December 16, 1944.

Dr. John F. Walker,  
Deputy Minister of Mines,  
Victoria, B. C.

Memo. re Merritt Coal Mines Ltd.,  
George Murray, Manager.

The Merritt Coal Mines Ltd. started prospecting operations on the old Diamond Vale property during 1942 and after a considerable time spent in investigating several of the seams exposed by the previous operations work was concentrated on what is now known as No. 4 Mine (this was formerly known as the new No. 3 Mine).

Coal production was started in 1943 during which year 2275 tons was produced and sold.

During the current year 2689 tons have been produced to the end of November. During the last three months the production has fallen off. An inflow of water into the mine caused a curtailment of operations pending discovery of the source of this water but it is more probable that the reduction of output is due to a lack of demand.

Chief Inspector of Mines.

28

December 4, 1944.

The Honourable E. C. Carson,  
Minister of Mines,  
Victoria, B. C.

Dear Sir:

Re: Letter of Dr. J. J. Gillis, M.L.A.,  
re diamond drilling Diamond Vale coal  
property.

I fully agree with Dr. Gillis that the Diamond Vale property should be diamond drilled for the dual purpose of establishing the value of this property in regard to coal mining and to determine the most advantageous point and means of operating any seams that may be found by drilling.

However, I note Dr. Gillis infers that the Provincial Government should do this drilling or assist in same but I am not aware of any present provision whereby the Provincial Government could do such work, directly or indirectly, even if it felt inclined to practically enter the coal-mining industry.

If the Government assisted the Diamond Vale property to the extent suggested by Dr. Gillis there are a number of other coal fields from which a demand for similar assistance could be expected, viz, Inceston, Hat Creek, Hudson Hope, Campbell River, Knaiko and others in most of which there are small mining operations working against the handicap of lack of knowledge that would be removed by diamond drilling their holdings. These people would have an equal right to expect governmental assistance.

I note that Mr. Murray and his associates have not the necessary money to cover a diamond drilling programme and as diamond drilling is only a small fraction of the cost of developing any seam, or seams, that may be found at depth they would be far short of the necessary money to develop the property unless they were able to induce outside capital to participate and, if ultimately, why not now.

I note the opinion of Boyle Bros., per Dr. Gillis, that the necessary drilling could be done for about eight thousand dollars but I am of the opinion that to efficiently drill the Diamond Vale property the cost would far exceed this; with the proviso, of course, that any lesser drilling may provide valuable information.

As an alternative to the suggested assistance by the Provincial Government, I would suggest that the office of the Coal Controller be contacted to see whether he would consider the drilling of the Diamond Vale property as part of the Dominion scheme of coal production. That office has full authority in such a matter and has already done diamond drilling at two British Columbia coal properties, viz, at the Telkoal property and the Fulkley Valley property, both near Telkwa.

In conclusion, I may say that diamond drilling of the Diamond Vale property should prove of great value to the owners of the property, of considerable value to the community and to the Province generally but, as mentioned above, it is difficult to see how the Provincial Government could undertake, or assist, the drilling of the Diamond Vale property unless it is prepared to do similar work in other areas where it would certainly be requested.

Respectfully submitted,

Chief Inspector of Mines.

28

December 4, 1944.

The Honourable E. C. Carson,  
Minister of Mines,  
Victoria, B. C.

Dear Sir:

Re: Letter of Dr. J. J. Gillis, M.L.A.,  
re diamond drilling Diamond Vale coal  
property.

I fully agree with Dr. Gillis that the Diamond Vale property should be diamond drilled for the dual purpose of establishing the value of this property in regard to coal mining and to determine the most advantageous point and means of operating any seams that may be found by drilling.

However, I note Dr. Gillis infers that the Provincial Government should do this drilling or assist in same but I am not aware of any present provision whereby the Provincial Government could do such work, directly or indirectly, even if it felt inclined to practically enter the coal-mining industry.

If the Government assisted the Diamond Vale property to the extent suggested by Dr. Gillis there are a number of other coal fields from which a demand for similar assistance could be expected, viz, Princeton, Hat Creek, Hudson Hope, Campbell River, Nanaimo and others in most of which there are small mining operations working against the handicap of lack of knowledge that would be removed by diamond drilling their holdings. These people would have an equal right to expect governmental assistance.

I note that Mr. Murray and his associates have not the necessary money to cover a diamond drilling programme and as diamond drilling is only a small fraction of the cost of developing any seam, or seams, that may be found at depth they would be far short of the necessary money to develop the property unless they were able to induce outside capital to participate and, if ultimately, why not now.

I note the opinion of Doyle Bros., per Dr. Gillis, that the necessary drilling could be done for about eight thousand dollars but I am of the opinion that to efficiently drill the Diamond Vale property the cost would far exceed this; with the proviso, of course, that any lesser drilling may provide valuable information.

As an alternative to the suggested assistance by the Provincial Government, I would suggest that the office of the Coal Controller be contacted to see whether he would consider the drilling of the Diamond Vale property as part of the Dominion scheme of coal production. That office has full authority in such a matter and has already done diamond drilling at two British Columbia coal properties, viz, at the Telkoal property and the Bulkeley Valley property, both near Telkwa.

In conclusion, I may say that diamond drilling of the Diamond Vale property should prove of great value to the owners of the property, of considerable value to the community and to the Province generally but, as mentioned above, it is difficult to see how the Provincial Government could undertake, or assist, the drilling of the Diamond Vale property unless it is prepared to do similar work in other areas where it would certainly be requested.

Respectfully submitted,

Chief Inspector of Mines.

MEMORANDUM

TO James Dickson, Esq.,  
Chief Inspector of Mines,  
Buildings.

FROM THE

MINISTER OF MINES

Chief Inspector of Mines  
DEC 4 1944  
Referred to  
ANSU


VICTORIA, B.C. December 4 1944

1M-138-9929

4148

Attached is a letter from Dr. J. J. Gillis, M. L. A., Merritt, in which he urges that the Government carry on diamond drilling at the Diamond Vale Coal property.

I would appreciate your opinion as to whether or not such a programme would be of value.



Minister.

Encl.



28

November 8, 1944.

3776-44

E. R. Hughes, Esq.,  
Inspector of Mines,  
Princeton, E. C.

Dear Sir:

I am in receipt of your letter of October 28th further to the matter of the water inflow in No. 4 Mine, Merritt Coal Mines Ltd., and note that Mr. Murray is now fluming the surface water from No. 3 Mine but that the ground over No. 4 Mine may take some time to drain off.

I also note that both mines are idle except for pumping operations but that he is anxious to have the ban lifted on the advance of No. 4 Mine slope. This is in his own hands as you have told him that the advance would be governed by the lowering of the water level in No. 3 Mine so that the whole matter will depend on the progress he makes with the pumping out of No. 3 Mine to a point satisfactory to you.

Also note that when work is resumed no workings will be permitted within 200' from the Nicola River.

Yours very truly,

Chief Inspector of Mines.



28

## DEPARTMENT OF MINES

Princeton, B.C.      October 28th, 1944.

3778

James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

Dear Sir:

I am in receipt of your letter of October 21st acknowledging receipt of a blueprint of plan of Nos. 3 & 4 Mines, Merritt Coal Mines Ltd. and note your remarks on the possible source of the water entering No. 2 Right level of No. 4 Mine.

As mentioned in my letter of October 7th I do not believe that the inflow could be coming from any unsurveyed original prospect as any workings of such magnitude would have been known. The distance of No. 2 Right level face from the Nicola River and also from the No. 3 mine eliminates both these as possible sources; the water level in No. 3 mine is at a lower elevation than No. 2 Right level. Therefore this leaves the alternate solution that I have previously mentioned; that the water pumped out of No. 3 mine is seeping through the measures. Also as previously mentioned this theory was given to Mr. Murray who disagreed. He now however, has changed his mind and as a result is fluming the water to a culvet under the railway. The ground in the vicinity above the face of No. 2 Right level is thoroughly saturated and it will take some time to drain off.

Both mines are idle except for dewatering and Mr. Murray is anxious to have the prohibition of advance in the Main slope lifted and I believe this would be in order as soon as the water level in No. 3 mine has been lowered as far as the old East level; this providing that further dewatering keeps pace with the advance. There is no intention of advancing the Nos. 2 and 3 Right levels but when work in the slope is resumed no workings will be permitted within 200' of the river.

Yours very truly,  
*Edward R. Hoyle*  
Inspector of Mines.

P/C

28

October 21, 1944.

E. R. Hughes, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

I am in receipt of a blue-print of the plan, dated October 2nd, of the workings of Nos. 3 and 4 Mines, Merritt Coal Mines Ltd., together with the various prospecting workings in the immediate vicinity and, as you mentioned in our telephonic talk yesterday the plan does not throw any light on the possible source of the water entering No. 2 right level of No. 4 Mine.

The three possible sources are the river, 200' distant, the water pumped from No. 3 Mine, or the existence of some unknown abandoned workings.

The smell given off by the water underground would seem to discount the river water, and the water pumped from No. 3 Mine would probably be aerated to the extent that much of the characteristic odor of old mine water would be lost so that if these two possibilities are ruled out the presence of unknown workings may be suspected.

Has any attempt been made to flume the water from No. 3 Mine to a point where it could be definitely eliminated as a source of the water entering No. 4 Mine or has any attempt been made by drilling from No. 2 Level to locate the source of the water?

(P.T.O.)

It seems to me that the management is very dilatory in taking the necessary steps to definitely ascertain the source of the above inflow.

However as the face of No. 2 Right Level is within approximately 150' from the Nicola River and the face of No. 3 Right Level approximately 200' from the river and both levels only a few feet below the river level there can be no further advance of these levels in any case and suggest that you write the management on this point and prohibit any further advance at any time. Also have a barrier line placed on the plan prohibiting any workings within 200' of the river as a protection against future workings tapping the river water.

Yours very truly,

Chief Inspector of Mines.

28

October 2, 1944.

3424-44

E. R. Hughes, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

I am in receipt of your letter of September 28th, further to the inflow of water experienced at the face of No. 2 Right Level, No. 4 Mine, Merritt Coal Mines Ltd., and note this point is about 400' from the main slope and approximately 200' from the line of the Nicola river at this point and also note that the upper level in the abandoned No. 3 Mine, overhead, is almost immediately above the No. 2 Right Level in No. 4 Mine and that both levels are in about the same distance and that the upper level is dry and partly accessible although the inside pillars have been extracted. Should the fact that this level in No. 3 Mine is dry not preclude any accumulation of water towards the inner end unless, of course, there is sufficient caving somewhere to form a dam.

However I note that Mr. P. W. Gregory is at present making a survey of the mine and this should give some definite information on the above point.

The point you mention regarding the sulphurous odour of the water would naturally incline one to the belief that the water was from abandoned workings and in any case it is satisfactory

(P.T.C.)

to know that no advance will be made in the working faces on the right side of the mine until this matter is cleared up.

It would be appreciated if you will have a copy of Mr. Gregory's plan forwarded to this office as soon as available.

Yours very truly,

Chief Inspector of Mines.



DEPARTMENT OF MINES

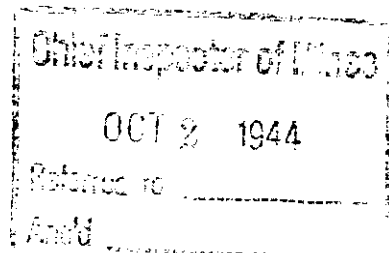
28

3424

Princeton, B.C.

Sept. 28th, 1944.

James Dickson, Esq.,  
 Chief Inspector of Mines,  
 Parliament Buildings,  
 Victoria, B.C.



Dear Sir:

I am in receipt of your letter of September 25th acknowledging receipt of my letter of September 23rd and note your enquiries re the Merritt Coal Mines Ltd.

During my visit of September 25th the inflow of water at the face of the No.2 Right level appeared to be less than on the occasion of my previous visit of September 20th. The No.2 Right level is in approximately 400' from the Main slope of No.4 mine and is thus approximately 200' from the Nicola river. The water has a slight sulphurous odour indicating it to be probably mine water. The uppermost level to the right in the old No.3 mine is almost immediately above the No.2 Right level of No.4 mine and the faces of these two levels are advanced ~~at~~ almost the same distance in a westerly direction; this uppermost level is dry and partly accessible, pillars have been taken out of the inside area.

Although the water in No.3 mine has been lowered by about 100-feet down the slope since dewatering began it may still have a slightly higher elevation than No.2 Right level in No.4 mine. Mr.P.W.Gregory, Mine Surveyor, is presently making a survey of the mine which will give more detail than is presently available. In any case no work is being done on the right side of No.4 mine and according to Mr.Geo.Murray the mine will cease operations on Saturday September 30th; he is having trouble with the executors of the T.G.Smith Estate and a lawsuit is pending. It is possible that when the lawsuit is settled that operations will be resumed; although there is very little coal obtainable on the left side of the No.4 mine Main slope and the slope and right side is stopped. Resumption of development in the Main slope will not be permitted until the water elevation in No.3

mine is shown to be lower than any new slope advance. Development in the slope was prohibited last January for the same reason.

Drippers of water were always present in the No.1 Right level, No.4 mine, but as the level was so near the outcrop it was thought to be surface water, and probably was. So that when similar drippers were met in No.2 Right level little attention was given to the matter, especially insomuch as when the face advanced the further back drippers dried up. However, the recent inflow of water was considerably greater than formerly encountered, but since this occurrence the former seepage in No.1 Right level has disappeared.

A further visit will be made to this mine on Monday next, October 2nd.

Yours very truly,

*Edward R. H. H.*  
Inspector of Mines.



P/C

20

September 25, 1944.

3317-44

E. R. Hughes, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

I am in receipt of your letter of  
September 23rd, enclosing copies of your report  
of inspection of:

Jackson No. 1 Mine	Princeton	on Sept. 5th,
Tulareen No. 3 Mine	"	" " 6th
Hedley Mascot Mine	Hedley	" " 8th
No. 1 Granby Mine	Princeton	" " 12th
Copper Mountain Mine	Copper Mountain	" " 15th
Fat Creek Mine	Hat Creek	" " 18th
Coldwater Coal Mine	Herritt	" " 19th
No. 3 Mine, Merritt Coal Mines		" " 20th
No. 4 Mine, Merritt Coal Mines		" " 20th

I note that you found general conditions  
to be satisfactory at above operations and also  
note your comments and recommendations on the points  
requiring your special attention, viz, the more  
general use of goggles at the Hedley Mascot and  
Copper Mountain mines.

Re the water inflow at the ace of No. 2  
Right Level, No. 4 Mine, Merritt Coal Mines, which  
amounted to 20 to 30 gallons per minute it is most  
unlikely that this comes from a natural underground  
source and I am inclined to suspect the proximity  
of some unrecorded and unknown abandoned workings or,

(P. T. O.)

as an alternative a thinning of the strata between the present working and workings in an adjacent seam as pointed out in your letter of January 12th to Mr. G. Murray, manager, Merritt Coal Mines Limited.

I note that you have extended your prohibition of advance of the main slope, as per the above letter, to include all workings on the right (West) side of the slope and fully agree with this precaution and if the face of 2 Right Level can be reached it would be advisable to have some exploratory drill holes put in to discover any information possible as in the event of any unknown workings being in the vicinity a thin barrier may fail at any time and unless the source of this water can be determined and the volume drained off it would require a dam in this place to make sure of safety.

I note you expect to visit this mine again on September 25th (today) and have tried to contact you by phone to learn of any further developments.

How far has the No. 3 mine workings been dewatered beyond the No. 4 Mine workings? From a plan here I note that the portal and upper part of #4 slope is approximately 600' from the Nicola river and with the pitch given, 25°, a level starting at 200' from the portal would have a minus elevation of 87' from that point and 40' below the rail level of the C.P. Rwy so if the No. 2 Level has been driven anywhere near this distance (600') it is probably getting river water and if so this level should be securely dammed at once and suggest that you look into this angle without delay.

Yours very truly,

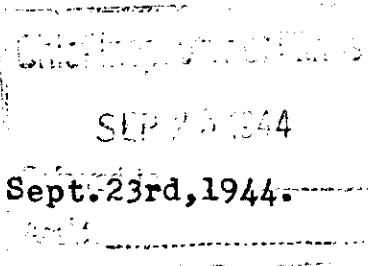
Chief Inspector of Mines.



THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA  
DEPARTMENT OF MINES

Princeton, B.C.

28



3317

James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

Dear Sir:

Herewith enclosed please find the following  
copies of inspection reports:-

Jackson No.1 mine: British Lands Ltd.,  
on Sept.5th,1944.  
Tulameen No.3 mine: Tulameen Collieries Ltd.,  
on Sept.6th,1944.  
Mascot mine: Hedley Mascot Gold Mines Ltd.,  
on Sept.8th,1944.  
No.1 mine: Granby Cons.M.S.& P.Co.Ltd.,  
on Sept.12th,1944.  
Copper Mountain mine: Granby Cons.M.S.& P.Co.Ltd.,  
on Sept.15th,1944.  
Hat Creek Coal Mine: St.Eugene Mining Corp.Ltd.,  
on Sept.18th,1944.  
Coldwater Coal Mine: A.D.Allan & Partners,  
on Sept.19th,1944.  
No.3 mine: Merritt Coal Mines Ltd.,  
on Sept.20th,1944.  
No.4 mine: Merritt Coal Mines Ltd.,  
on Sept.20th,1944.

With regard to the remarks on the report of  
the Merritt Coal Mines Ltd's Diamond Vale No.4 mine. A flow  
of water estimated at about 20 to 30 gallons per minute began  
to seep through near the face about one hour after a shot had  
been fired in No.2 Right level and officials decided to stop  
work in this place. The prohibition of advancement is merely to  
prevent any attempts at working on this side of the mine, which  
anyway was idle, until a further inspection has been made. According  
to mine plans this place is outside the boundary of the old mine,  
and the water level in this mine is now down to about 180' from  
the portal. The water may be coming from surface breaks or from  
some original prospect in another seam. I expect to visit this  
mine again on Monday Sept.25th.

Yours very truly,

*Gowan R. Hagedorn*  
Inspector of Mines.

September 21, 1944.

P. Richards, Esq.,  
Secretary to the Honourable Premier,  
Victoria, B. C.

Memo. on Coal Properties in Merritt District.

Coal has been produced in the Nicola Valley for well over thirty-five years.

The first colliery to operate being Middlesboro, which is situated across the Coldwater river a short distance from the town of Merritt. The year of highest production of this colliery was in 1911 when the output was 191,000 tons. This colliery closed down in March 1944. It was considered by the owners as not profitable to work it after the Dominion subsidy was cut off.

Under favourable circumstances this colliery could still be a large producer. At the present time a few men who formerly worked in Middlesboro colliery have leased a part of this coal field from the owners with the intention of working out some of the old pillars of coal left in No. 2 Mine. A. D. Allan and associates are the men in question.

Across the Coldwater river from the Middlesboro Colliery, the Merritt Coal Mines Ltd. has opened up the old Diamond Vale property which was worked for about ten years and produced over 30,000 tons of coal until it was closed down. The present company is operating No. 4 Mine Diamond Vale and last month produced over 1200 tons. They are also dewatering No. 2 Mine. This is all the mining at present in the Merritt district. The Merritt Coal Mines Ltd. employs about 25 men under the supervision of George Murray, Manager.

(P.T.C.)

28

820

Princeton, B.C.

February 25th, 1944.

Geo. Murray, Esq.,  
Manager,  
Merritt Coal Mines Ltd.,  
Merritt, B.C.

Chief Inspector of Mines
MAR 2 1944
Referred to _____
Ans'd _____

Dear Sir:

Confirming my reports of inspection of the No. 4 mine, Merritt Coal Mines Ltd. on February 22nd and 23rd, 1944. A gas cap estimated at 3% of methane was found in the No. 2 Raise, No. 2 Left level, on February 22nd, and a gas cap estimated at between 3½% to 4% was found in the same raise on February 23rd. The first inspection was made shortly after the workmen had left the raise at the end of the working shift, and the second inspection was made during the working shift but workmen were not mining coal in the raise on this later visit.

The mine is ventilated by natural means, and whilst this may have provided sufficient ventilation for initial development, the mine has now reached the stage where such natural ventilation is insufficient to furnish an adequate supply of pure air to dilute and render harmless noxious gases. Gas has been found in the above mentioned raise on each of the daily fireboss examinations made during the present month, and when miners are at work in the raise the place is ventilated by a small hand-driven fan installed at the foot of the raise. The foregoing facts are sufficient evidence that the present ventilation system is inadequate and that fan ventilation is required to be installed without delay.

The fact that methane has been found so early in the mine development makes it evident that this is a potentially gassy mine where careful detailed attention is needed in planning future development with regard to efficient ventilation, and where particular attention is required to be given to the strict observance of the regulations governing shot-firing and the treatment of roadways to prevent the accumulation of dangerous dust.

The prohibition of shotfiring in the No. 2 Left level and the adjacent No. 2 Raise was ordered by me because of the hazard attendant on the firing of shots where the normal



28

DEPARTMENT OF MINES

Princeton, B.C. February 25th, 1944.

James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

Dear Sir:

As recently requested by you, I am today forwarding, by C.P.R. Express, a sample ~~is~~ of coal taken from the No.4 Mine, Merritt Collieries Ltd. The sample was collected from the face of No.2 Right level, on February 22nd. This sample is representative of the seam being worked, a section of which is as follows:-

Coal	1' 2".	
Rock		3".
Coal	1' 8".	
Rock		2".
Coal	8"	
	<u>3' 4".</u>	<u>5".</u>

Yours very truly,

*Edward R. H. ...*  
Inspector of Mines.

*Prepared at  
Dr. Walker's request*

*28*

June 23, 1944.

Output of coal from Diamond Vale Colliery,  
Merritt Coal Mines Ltd., George Murray, Manager,  
August 1943 to May 1944.

<u>Month</u>	<u>Run of Mine</u>	<u>Slack</u>	<u>Total Output</u>
1943			
August	87 tons	--	87 tons
September	92 "	450 tons	542 "
October	113 "	545 "	658 "
November	186 "	445 "	631 "
December	136 "	503 "	639 "
1944			
January	75 "	783 "	858 "
February	48 "	195 "	243 "
March	18 "	207 "	225 "
April	57 "	704 "	761 "
May	184 "	902 "	1086 "
Total	1006 "	4734 "	5740 "



DEPARTMENT OF MINES  
VICTORIA

28

James Dickson, Esq., Inspector of Mines,

SAMPLE RECEIVED FROM

BUILDINGS.

ADDRESS

LABORATORY NO.	SUBMITTER'S MARK.	Provisional	LABORATORY REPORT.
13709 B	C. Graham Sample of coal taken at face of Main level, Hasler-Creech, Mine (No. 1)	Moisture	0.7
		Volatile Combustable Matter	21.3
		Fixed Carbon	68.3
		Ash	9.7
		British Thermal Units	13,660
13710 B	E.R. Hughes Sample of coal taken in No. 4 Mine (No. 2) Herritt, B.C.	Moisture	2.6
		Volatile Combustable Matter	35.4
		Fixed Carbon	53.6
		Ash	8.4
		British Thermal Units	13,800
13711 B	Samp. of coal from core of Diamond-Grill at 400' depth, Australian- samp.-collected from Old Core by J.A. Mitchell (No. 3)	Moisture	9.9
		Volatile Combustable Matter	37.5
		Fixed Carbon	36.3
		Ash	16.3
		British Thermal Units	8,900
		The above figures, except the British Thermal Units, are in per cent.	

March 7th, 1944.

DATE

CHIEF ANALYST AND ASSAYER



28

February 28, 1944.

749-44

E. R. Hughes, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

I am in receipt of your letter of February 25th, covering a sample of coal from No. 4 Mine, Merritt Collieries Ltd., and will have same analysed and forward you a copy of the analysis as soon as available.

Yours very truly,

Chief Inspector of Mines.

28

January 19, 1944.

264-44

E. R. Hughes, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

I am in receipt of your letter of January 17th, enclosing a copy of your letter of January 12th to Mr. George Murray prohibiting the further advance of the face of the Main Slope of No. 4 Mine, Merritt Coal Mines Ltd., until the workings of the adjacent No. 3 Mine (overlying No. 4 Mine workings) are dewatered to a point not less than 150' in advance of the No. 4 Mine, Main Slope. This condition to be observed until such time as No. 3 Mine may be completely dewatered.

I fully endorse your action in this matter and your reasons for same.

Yours very truly,

Chief Inspector of Mines.

P.S. On your next visit to Diamond Vale please take a sample of the coal and forward here for analysis.



28

DEPARTMENT OF MINES

Princeton, B.C.

January 17th, 1944.

James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

JAN 19 1944  
RECEIVED  
DEPARTMENT OF MINES  
PRINCETON B.C.

Dear Sir:

Herewith enclosed please find copy of a letter sent to Mr. Geo. Murray, Manager, Merritt Coal Mines Ltd. restricting further advance in the Main Slope, No. 4 Mine, until the workings of the abandoned, and flooded, No. 3 Mine have been dewatered to a point of more than 150-feet in advance of the Main Slope faceline.

This face was not working at the time of my inspection but it was the managements intention to resume work there in the near future. It was understood when this mine commenced that the old No. 3 Mine would be kept dewatered in advance of new workings and some dewatering was done but insufficient to keep pace with developments. Whilst the management intended to continue slope development no provision was being made for advance dewatering; therefore I believe it is in the best intrests of safety to curtail further downward development until sufficient dewatering has been done.

Yours very truly,

*Edward R. Hughes*  
Inspector of Mines.

Princeton, B.C.

28

Merritt, B.C.      January 12th, 1944.

Geo. Murray, Esq.,  
Manager,  
Merritt Coal Mines Ltd.,  
Merritt, B.C.

Dear Sir:

Herewith enclosed please find, in duplicate, my report covering today's inspection of the No. 4 Mine, Merritt Coal Mines Ltd. It would be appreciated if you would kindly have the original posted up at the mine, retaining the duplicate for your own files.

The General Remarks on the enclosed report reads as follows:- "No work is presently being done at the face of the Main Slope and notice is hereby given that this face must not be further advanced until the abandoned workings of the adjacent No. 3 Line have been dewatered to a point at least 150-feet in advance of the slope face. This margin of at least 150-feet must at all times be strictly maintained until the No. 3 Line has been completely dewatered. The above order is given as a precautionary measure to safeguard against the possibility of inundation from the nearby flooded workings of the abandoned No. 3 Line and is given in accordance with Section 87 of the Coal Mines Regulation Act."

The seams presently being developed in the No. 4 Mine underlies the workings of the abandoned No. 3 Line, these workings are known to be flooded to within approximately 100-feet from the portal. A peculiar feature of the coal seams of the Nicola Valley coalfield is their departure from conformability. Thus two seams which at one point may be 60-feet apart, may later converge, or almost so. This peculiarity may exist in the present workings and if so could permit of the penetration of the flooded workings by the present active workings, with possible loss of life. You are therefore directed to strictly comply with this order and an early acknowledgement of this letter is requested.

Yours very truly,

*Edward R. H. [Signature]*  
Inspector of Mines.

c.c. James Dickson.



DEPARTMENT OF MINES

28

3313

Princeton, B.C. August 26th, 1943.

James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

AUG 26 1943

Dear Sir:

I am in receipt of a copy of your letter to Mr. George Murray, Manager, Merritt Coal Mines Ltd., dated August 14th approving the second copy of the proposed plan of development of the No. 4 mine, Merritt Coal Mines Ltd. and note that Mr. Murray objected to the adoption of a panel system in this development on the grounds that only a limited area will be included in the present operation.

Yours very truly,

*Edward R. Hagedorn*  
Inspector of Mines.



THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF MINES  
OFFICE OF THE INSPECTOR

28

Princeton, B.C.

August 13th, 1943.

James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

Dear Sir:

I am in receipt of a copy of your letter to George Murray, manager, Merritt Coal Mines Ltd. dated August 7th, 1943, re proposed plan of development of the underground workings of the No. 4 mine. It is noted that the submitted plan has been returned with the suggestion that marked portions be omitted.

Mr. Murray said he was having another proposed plan of development drawn and I expect to obtain a copy on my next visit to the mine. So whilst at present I am unaware of the nature of the marked portions on the plan it is noted that Mr. Murray's attention was directed to the provision of barrier pillars rather than depending on stoppings at a later date.

It is difficult to understand why, in this day and age, responsible coal-mine officials should continue to be obsessed with the antiquated idea of continuous open pillar work, with its eventual costly, and sometimes dangerous, sealing at a later date.

Yours very truly,

*Edward R. Hoyle*  
Inspector of Mines.

28

August 14, 1943.

2889-43

George Murray, Esq.,  
Manager,  
Merritt Coal Mines Ltd.,  
Box 305,  
Merritt, B. C.

Dear Sir:

I am in receipt of your letter of August 11th, enclosing the second copy of your proposed plan of development of No. 4 Mine, Merritt Coal Mines Ltd., and note your objection to adopting a system of panels in this development.

I am of the opinion that this is a short sighted policy if there is a possibility of a large mine being developed. However, as you anticipate that a limited area will be included in the present proposed operation your plan, as submitted, is hereby approved.

Yours very truly,

Chief Inspector of Mines.

c.c. Mr. E. B. Hughes.

# MERRITT COAL MINES LIMITED

P. MALONE, President.

J. SISCO, Vice-President.

G. MURRAY, Manager.

2888

Box 305

MERRITT, B.C.

28  
August 11th. 1943.

Mr. James Dickson  
Chief Inspector of Mines  
Victoria B.C.

AUG 14 1943

Dear SIR

I am in receipt of your letter of the 7th, inst. & also plan which was submitted for your approval.

I do not take the same view of proposed present development which you apparently do; as I do not consider that the site of the present development will be the area in which any long-term plan of development would be planned.

The present plan of development; as far as the area of operations are concerned; was decided upon following a discussion which I had with Mr G.S. Vissac (Engineer for the Emergency Coal Production Board) at Ottawa.

The modern practice; or panneling; was evolved some 35 years ago: but has been practised but little in the western part of B.C.

This has not been due to a lack of appreciation of the merits of this method of operation & development; but is due to the very faulted nature of the coal-areas in this part of the Province.

Prospecting done to date by the above Co. has proven the existence of faulting within the area in the plan submitted to you.

While panneling, as a method of development, is an ideal method in very large and regular coal-fields, it also has its disadvantages, such as higher initial development costs, and the retarding of production in the initial stages of development.

Having in view the possible limited area of the proposed present development the questions of development costs & initial production are very



# MERRITT COAL MINES LIMITED

P. MALONE, President.

J. SISCO, Vice-President.

G. MURRAY, Manager.

28  
✂

Page # 2

Box 305  
MERRITT, B.C. August 11th. 1943

Mr. James Dickson  
Chief Inspector of Mines  
Victoria B.C.

important items as far as our Co. is concerned, & I presume that higher production,

in the quickest possible time is or should be very desirable to you.

We are ready to produce coal tomorrow, and I feel that this is the most important consideration for the present, and am again submitting a copy of our plan of development for your approval; which we must have before starting to produce.

Yours very truly

G. Murray Mgr.

Merritt Coal Mines Ltd.

28

August 12, 1943.

2856. 43

W. J. McFadyen, Esq.,  
Manager,  
The Royal Park of Canada,  
New Westminster, B. C.

Dear Sir:

Re: Diamond Vale Collieries.

Your letter of August 7th to the Deputy Minister of Mines re above was referred to this office, and in reply beg to say that the above property, or at least part of it, is now being operated by the Merritt Coal Mines Ltd. and the work to date has consisted of prospecting in the immediate vicinity of abandoned slope workings and, more recently the dewatering of some of these abandoned workings. This has now been done and I believe the Company expects to start the production of coal during the present month.

I believe the Merritt Coal Mines Ltd. has control of an extensive area but it will require considerable development and prospecting before the value of the property can be established.

Yours very truly,

Chief Inspector of Mines.



28  
August 7, 1943.

2752-43

George Murray, Esq.,  
Manager,  
Herritt Coal Mines Ltd.,  
Herritt, B. C.

Dear Sir:

I am in receipt of your letter of August 1st, enclosing a blue-print showing the plan of proposed development of the underground workings of No. 4 mine of the Herritt Coal Mines Ltd., this plan being on a scale of 1" = 100' and signed by E. S. Corbett, B. C. Mine Surveyor.

I note that it is proposed to follow a straight pillar and stall system involving the three main slopes and suggest that you consider the advisability of omitting the part of the levels marked on the print, which I am returning for your further consideration.

As this is practically a new field with the possibility of the workings extending for a considerable distance it would make for greater efficiency if the main slopes were isolated from the general workings as much as possible by means of a barrier pillar rather than having to depend on stoppings at a later date. This would also be of material assistance in the matter of forming the workings into separate panels in accordance with modern practice.

Please let me have your comments on above and a copy of any revised plan.

Yours very truly,

Chief Inspector of Mines.

C. S. Dr. J. J. Phillips

# MERRITT COAL MINES LIMITED

2753

MERRITT, B.C. Aug. 1, 1943. 194

Jas. Dickson, Esq.,  
Chief Inspector of Mines,  
Victoria, B.C.

28

AUG 4 1943

Dear Sir:

Please find enclosed herewith Plan of No. 4 Mine of this Company (formerly No. 2 Mine of the Diamond Vale Colliery) showing in dotted lines the scheme of proposed development.

The pillars are to be 80 ft. throughout, with levels right and left off the slope.

The fan shaft is to be repaired and when it becomes necessary a fan withhouse to be set up on the surface.

On the right side a connection is to be made with the new travelling road which will be the return in due course from that side by way of the proposed overcast shown on the plan.

For the relationship of this to the other seams we refer you to the plan of May 25<sup>th</sup>, 1943 already in your office.

We trust to receive your early approval of this scheme of development.

Yours truly,

Merritt Coal Mines Ltd.

per

G. Murray  
Manager.

MEMORANDUM

TO James Dickson, Esq.,  
Chief Inspector of Mines,  
Buildings.

FROM THE

JUL 15 1948

DEPARTMENT OF MINES,

28 VICTORIA, B.C. July 14th, 19 43

Aubrey F. Roberts, who is interested in the Diamond Vale property, has asked if it would be possible to obtain a map showing the relative position of the Middlesboro operations with the Diamond Vale property. Some suggestion has been made that Diamond Vale should permit Middlesboro to go into the Diamond Vale property through the old No. 2 shaft and he would like to be clear of the relative positions.

Is there anything you can do about this request?

*John F. Walker*  
Deputy Minister of Mines.

JFW:JP

P/C

28

July 15, 1943.

2543-43

John F. Walker, Esq.,  
Deputy Minister of Mines,  
Victoria, B. C.

Dear Sir:

Re your memo. of July 14th re the request of Mr. A. F. Roberts for a map showing the relative position of the Middlesboro Colleries with the Diamond Vale property, I beg to say the above properties have a common boundary, viz, the middle of the Soldierer river, on the side of the Diamond Vale property where the Diamond Vale shafts (abandoned) are situated and where the No. 2 slope of Middlesboro Colleries approaches that boundary from the Middlesboro side. This No. 2 slope has been abandoned and flooded for many years so that no one has any knowledge of its condition.

In the absence of definite information, I am under the impression that the part of the former Diamond Vale property now held by Mr. Roberts is on the opposite side of the basin from the above-mentioned boundary and area and some 100 feet north of it.

I have a plan showing the Diamond Vale shafts and workings from some time ago. Roberts should have a copy of the plan it would be very acceptable for our files. The late Mr. T. J. Smith provided several ideas to forward this plan but failed to do so.

(1. .0.)

25

Off the record I may say that when our Minister and I were in Herritt on June 25th the possibility of using the abandoned No. 2 Slope of Middlesboro Collieries to reach the seams on that side of the Diamond Vale property was discussed with Mr. Fairfoull, manager, Middlesboro Collieries, and from that discussion I am under the impression that the Middlesboro would be willing to enter negotiations to this end with responsible parties.

Yours very truly,

Chief Inspector of Mines.





THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF MINES  
OFFICE OF INSPECTOR

Princeton, B.C. June 18th, 1943.

207C  
James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

Dear Sir:

I am in receipt of a copy of your letter to Mr. George Murray, Manager, Merritt Coal Mines Ltd., dated June 4th, approving of proposed plan of development of the Browitt mine.

During my recent visit to Merritt, June 15th it was found that this new development had already been abandoned; the material and track had been removed from the new slope and surface preparations were being made for a new opening near the old No. 2 mine. Mr. Murray was not present at the time of my visit but he had three workmen employed on this new surface work.

I believe that in any further new proposed plans of development at this property consideration should be given to blocking off the proposed development into panels requiring minimum sealing and minimum loss of coal in the event of heaving. This would obviate having extensive gob areas open which, in the Princeton District, has already given some trouble.

Yours very truly,

*Edward R. Wright*  
Inspector of Mines.

June 4, 1943.

2015-43

George Murray, Esq.,  
Manager,  
Merritt Coal Mines Ltd.,  
Merritt, B. C.

Dear Sir:

I am in receipt of your letter of May 25th, and a copy of your plan of proposed development of the Merritt mine, situated on Section 14, Township 91, near Merritt, the said plan being dated May 25th, 1943. I note this plan was made by Mr. S. S. Corbett, chief surveyor, but as it is unsigned, I am withholding this plan for your signature or that of Mr. Corbett.

I note that the detouring of the old workings will be carried out in advance of this new development. I also note that three main parallel slopes are proposed.

The general proposed plan of development is satisfactory and hereby approved. However I note that the chain pillars of your main slope system are from 15' to 20' in the line of the slope have actually a thickness only 10' at right angles to the pitch with the result that at considerable depth this small size of pillar may be susceptible to crushing. I would suggest that you give full consideration to the advisability of having larger chain pillars in your main slope system.

Yours very truly,

c.c. E.R. Hughes

Chief Inspector of Mines.

# MERRITT COAL MINES LIMITED

2018 MERRITT, B.C. May 29th 1943

Mr James Dickson  
Chief Inspector of Mines  
Victoria B.C.

28

Dear Sir:

I am enclosing, under separate cover, a plan of the proposed method of development of the Browitt Seam situated on Sect. #14. ; Township #91; near town of Merritt B.C.

The plan was prepared by Mr. G.S. Corbett, Mine Surveyor.

Dewatering of the old workings will be carried out in advance of the new development .

Please advise me if the proposed plan of development meets with your approval.

YOURS TRULY

G. Murray Mgr.  
Merritt Coal Mines Ltd.

# MERRITT COAL MINES LIMITED

2003 MERRITT, B.C. May 3, 1943.

James Dickson, Esq.,  
Chief Inspector of Mines,  
Victoria, B.C.

Dear Sir:

We are in receipt of your letter of May 1st with print of plan of No. 3 Mine, Diamond Vale Colliery, filed with your office in 1915.

We are enclosing a print of our plan shewing the extended workings of this mine as shewn on plan secured with documents from the executor of the Smith Estate; you will note that the position of the extended workings are not shown to be as extensive as the markings on your print would indicate.

However, we are not at present contemplating any mining of that seam, but are confining our efforts to develop workings in the Snowitt seam which has approximately 140 feet of solid measures between it and the No. 3 Mine.

The prospect shewn on the lower right hand part of the plan has been abandoned for the present (marked New Prospect).

As no bench mark was available at the time we assumed an elevation of 130.00 on top of rail on the C.P.Ry. line to Nicola North of the Tipple.

The plan of No. 2 Mine shown was obtained from description by Mr. Thomas Rowbottom who was Mine Foreman in that Mine when it was closed.

Yours very truly,

Merritt Coal Mines Ltd.,

per

*L. M. ...*  
*Mgr.*

# MERRITT COAL MINES LIMITED

2003 MERRITT, B.C.

28  
May 3,

1943.

James Dickson, Esq.,  
Chief Inspector of Mines,  
Victoria, B.C.

Dear Sir:

We are in receipt of your letter of May 1st with print of plan of No. 3 Mine, Diamond Vale Colliery, filed with your office in 1915.

We are enclosing a print of our plan shewing the extended workings of this mine as shewn on plan secured with documents from the executor of the Smith Estate; you will note that the position of the extended workings are not shown to be as extensive as the markings on your print would indicate.

However, we are not at present contemplating any mining of that seam, but are confining our efforts to develop workings in the Browitt seam which has approximately 140 feet of solid measures between it and the No. 3 Mine.

The prospect shewn on the lower right hand part of the plan has been abandoned for the present (marked New Prospect).

As no bench mark was available at the time we assumed an elevation of 100.00 on top of rail on the C.P.Ry. line to Nicola North of the Tipple.

The plan of No. 2 Mine shown was obtained from description by Mr. Thomas Rowbottom who was Mine Foreman in that mine when it was closed.

Yours very truly,

Merritt Coal Mines Ltd.,

per \_\_\_\_\_  
J. J. Murray  
Mgr.

May 28, 1943.

1663-43

George Murray, Esq.,  
Manager,  
Herritt Coal Mines Ltd.,  
Herritt, B. C.

Dear Sir:

This will acknowledge receipt of your letter of May 3rd, in which you enclosed a print showing the workings of No. 3 mine, Gilsord Vale Colliery, and note that this would indicate that the workings were less extensive than assumed in the marked blue print I forwarded to you on May 1st.

I also note that your print shows the other small prospecting operations that have been carried out in this immediate area and this is of much service.

However, I note that the print is undated except for the notation March 31st, 1943, which is probably the date of printing for your new company purposes, and there is no mention of who made the survey or plan and there is, of course, no means of establishing whether the print shows the workings at date of abandonment.

With the above doubtful points in mind I am of the opinion that the precautionary safety line as indicated on the print sent to you on May 1st offers the only satisfactory safeguard should any approach be made to the workings of No. 3 mine from any point below the surface level of the water in that mine.

(P.T.O.)

I note that you have discontinued your prospecting operation to contact the No. 2 seam and that you are confining your efforts to develop the Brownitt seam some 140' above the No. 3 mine in No. 2 seam.

I have been away from Victoria for some time hence the delay in replying.

Yours very truly,

Chief Inspector of Mines.



DEPARTMENT OF MINES

Princeton, B.C.

May 6th, 1943

DEPT. OF MINES

 28  
 Referred to *JJ*  
 Ans'd

 1943  
 James Dickson, Esq.,  
 Chief Inspector of Mines,  
 Parliament Buildings,  
 Victoria, B.C.

Dear Sir:

I am in receipt of your letter of May 1st, 1943 enclosing a copy of your letter to Mr. George Murray, Manager, Diamond Vale Colliery, accompanying a print of plan of No. 3 Mine, Diamond Vale Colliery filed in your office in 1915.

The position of the red line circumscribing the assumed old workings of this mine is noted. During my last visit to Merritt, April 21st, the new slope was down a distance of approximately 200' and was yet in surface gravels and sand, no solid measures having been encountered. Being disappointed in not having contacted the coal Mr. Murray said he did not intend driving any further in this working. He intends to start a new drive in the uppermost seam of the series - the Browitt seam. The workings of this old mine were not very extensive and the slope is still open and accessible for some distance down. Mr. Murray intends to drive a counter, with cross-cuts, to this slope, until the water level is reached, then praping out of the lower part of the slope will be necessary.

During my last visit Mr. Murray gave me a blue-print of a plan showing the old workings of the No. 3 Mine, No. 2 & No. 3 seams, old prospects and the present new slope; also showing a section of the five seams in this area. Mr. Murray was informed that before mining coal was commenced he must submit a plan of the old and proposed workings, he said he would send you a copy of the plans in the near future. I expect to visit Merritt next week in connection with the War-time Prospectors Grub-stake Act and will attend to the points mentioned in your letter.

Yours very truly,

*James R. Hargrave*  
 Inspector of Mines.



May 1, 1943.

E. H. Hughes, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

Accompanying herewith please find a copy of self-explanatory letter to Mr. George Murray, Manager, Diamond Vale Colliery, and a copy of the plan of No. 3 Mine, Diamond Vale Colliery referred to in the letter.

If not already done a survey should be made showing the location of the new prospect on this property in relation to the position of the abandoned Nos. 2 and 3 Mines, and I suggest that you look into the different points mentioned at once.

Yours very truly,

Chief Inspector of Mines.

Eres.

May 1, 1943.

George Murray, Esq.,  
Manager,  
Diamond Vale Colliery,  
Verritt, B. C.

Dear Sir:

Accompanying herewith please find a print of plan of No. 3 Mine, Diamond Vale Colliery, filed in this office in 1915. To this has been added the assumed position of additional workings reported in the 1917 Annual Report of the Minister of Mines, these additional workings being shown by hatched lines with the red line showing the assumed position of the extremity of the workings of this No. 3 Mine.

The provisions of the Coal-mines Regulation Act, Section 80 (1917 Amendment) shall apply to any workings approaching to within 500 feet from this red line.

There is no plan on file of the abandoned No. 2 mine of the Diamond Vale Colliery, so that additional precautions will have to be observed in the case of any workings approaching the general vicinity of the No. 2 Mine area.

If you have a plan showing the workings of the abandoned Nos. 2 and 3 mines a copy would be appreciated. Any plan, or plans, you may have could be reproduced here should you have only one copy.

Your early reply and comments on above will be appreciated.

Yours very truly,

Chief Inspector of Mines.

c.c. No. 5. . 1943.



28

October 3rd, 1941

3009

MEMORANDUM FOR THE CHIEF INSPECTOR OF  
MINES

Chief Inspector of Mines  
OCT 4 1941  
Referred to  
File

Re: name Diamond Vale Coal  
Company Limited

Application has been received at this office to know whether the above name is available for incorporating a new company and I shall be glad to hear from you if you have any record of any company of this name or of any coal company which is using the name, Diamond Vale.

About ten years ago your office supplied this office with a list of registered names of coals under the "Coal Sales Act" showing producing mines and companies. Could you oblige me with an up-to-date list?

*list in  
1940 A.R.*

*Phonetic Mr. [unclear]  
Oct 4/41*

I am,

Your obedient servant,

*N. S. [unclear]*

Deputy Registrar of Companies.

WLL/MS

# THE VANCOUVER DAILY PROVINCE

28

Vancouver, B.C.

October 2, 1941.

3011

Mr. James Dickson,  
Inspector of Mines,  
Victoria, B.C.

Chief Inspector of Mines
OCT 2 1941
Referred to
File

Dear Mr. Dickson:

Thanks very much for your kindness in permitting me the use of Diamond Vale reports and maps, which I trust have been returned to you safely.

Our project is well under way now and I will let you know how it progresses.

Yours sincerely,

*Aubrey Roberts*

AFR:EW

December 31st, 1940.

J. P. Walker, Esq.,  
Deputy Minister of Mines,  
Victoria, B. C.

Dear Sir:

As per your memorandum of December 11th, I enclose herewith a copy of report by Inspector J. G. Biggs on Lot 167 and part of Section 14, Township 91, both in the Kamloops Division of Yale District, and situated near Nassibit.

The above as requested by the Hon. A. Wells Gray, Minister of Lands.

Yours very truly,

Chief Inspector of Mines.

Encl.

3631/40.

Princeton, B.C., Dec. 21st, 1940.

James Dickson, Esq.,  
Chief Inspector of Mines,  
Department of Mines,  
VICTORIA, B. C.

Dear Sir:-

I am in receipt of your letter of the 13th instant, and note you have had a request from the Lands Department for information regarding lot 167, comprising 116 acres, and part of Section 14, Township 91, both in the Kamloops Division of the Yale District and situated adjacent to Merritt; also a report on any mining equipment at present on the above-mentioned lots, covering boilers, hoists, screening plant etc., giving sizes and apparent conditions. If the mine is on the above property, give any information regarding the accessibility of the workings etc.

In reply would state that while in Merritt on the 19th day of December, I interviewed Mr. Robert Couper, the Government Agent, in regard to the information required, and found he had no large district plan and had to refer to a district plan scaled one mile to the inch.

You are quite right in assuming the lands referred to in your letter were part of the holdings of the old Diamond Vale Collieries, who had large holdings in the Nicola Valley coal basin, and comprised most of the coal rights under the land lying between the Coldwater and the Nicola Rivers, and included a large part of T.P. 91 in the City of Merritt, and known as the Diamond Vale Flats.

There have been no coal-mining operations conducted on lot 167, and the coal-mining operations you have reference to are located in Section 14 that contains 640 acres in that part of Section 14 situated in close proximity to the Nicola River and the K.V. Railway, South.

I am advised by the Government Agent that Section 14 at the present time is Crown Land with the exception of 17 acres upon which the mining operations are located, and this 17 acres is held by Mr. T. J. Smith, who I understand was the president and promoter of the Diamond Vale Collieries.

The Lot 170, that is the south-west portion of Section 14, only covers surface rights and not the coal rights, and is held by William Lauder, a local rancher.

The following is a description of the location of these 17 acres as shown by Plan "B" 1503, and deposited with the Government Agent's Office in Merritt, reading as follows:-

Section 14, T.P. 91, K. Dy. D. except that part lying north of the Nicola River and part lying within Lot 122, and that part containing 17 acres, more or less, as shown on plan 1503.

#### Description of Mining Developments.

The location of these coal mine developments is in proximity to the K.V. Railway that runs between the town of Merritt and the village of Nicola. The measures generally in this section of the basin are of a hard "blockey sandstone", and have a general pitch south of from 35 to 45 degrees with three seams of coal exposed, which have been developed in varying degrees by slopes following the pitch of the seams from the surface.

There has been a very small amount of work done in the development of the upper or the No. 1 seam that appears to be about 3 1/2 feet in thickness and a very dirty section of coal, and it is possible this is the reason for the small amount of development.

The No. 3 Mine is probably the most important coal-mining development, and is located approximately 500 feet north of the No. 1, follows the same conformation and has the same general pitch. This is the mine where the explosion occurred during the year 1912. The portal of this mine is badly caved and not accessible, and there are at least two surface adves a short distance south of the mine portal. There was a good description of this mine in the Minister of Mines Report for the year 1912.

The No. 2 Mine is situated approximately 300 feet north of the No. 3 Mine, and has been developed from the surface by a highly inclined slope following the full pitch of the seam, and this main slope is open to the No. 1 left level and the water is showing in the slope a short distance below. This is probably 125' from the portal.

While the coal may be of an excellent quality it is intersected by bands of rock and will be hard to clean for the commercial trade. It is rather hard to get a correct sample of this seam.

Report on plant.

I am afraid there is not much to report in regard to the plant on this property. There are no buildings, mine cars, mine hoists, pumps, pipes, or rails, with the exception of a few lying in the No. 2 mine slope. The following is an inventory of the equipment at this property:-

1. Two medium-sized Loco Type tubular steam boilers, lying in the open, one at the No. 2 Mine and the other at the No. 3 Mine. There are no fittings on these boilers and no smoke stacks, and it is quite possible the boiler shells may be in good condition.
2. One small vertical tubular steam boiler without fittings lying at the foot of the hill below the No. 3 Mine.
3. One old Rand, single stage, steam-driven air compressor, that has been generally stripped, and there are parts of the machine missing. I think this will be about a 300-foot machine.
4. Six-foot steam-driven enclosed type sheldon mine fan, situated near the portal of the return airway of the No. 3 Mine. This is an old machine, but think it may be possible to put the same into service.

There is a trestle with bar screens and coal bunkers situated near the portal of the No. 2 Mine that has been standing for the past thirty years, so that it is now in poor condition. This comprises all the machinery at this mine.

During the early history of the Diamond Vale Collieries, probably during the year 1907, there were two vertical shafts sunk near the south side of the Coldwater River; as a matter of fact, one of these shafts is in the river today and it is hardly likely that it would be possible to locate these corner posts today, but think they would be located on Lot 122.

Yours very truly,

"JOHN G. BIGGS"

Inspector of Mines.



28

3631/40.

December 27th, 1940.

John G. Biggs, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

I am in receipt of your letter of December 21st enclosing your report on the Diamond Vale property, as per my letter of December 13th, and note the different points of interest, and also your inventory of the equipment at present on the property.

Yours very truly,

Chief Inspector of Mines.



THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF MINES  
OFFICE OF THE INSPECTOR

DEC 27 1940

3691

Princeton, B.C. December 21st 1940.

James Dickson, Esq.  
Chief Inspector of Mines.  
Department of Mines.  
VICTORIA, B.C.

Dear Sir:-

I am in receipt of your letter of the 13rd instant and note you have had a request from the Lands Department for information regarding lot 167, comprising 116 acres, and part of Section 14, Township 91, both in the Kamloops Division of the Yale District and situated adjacent to Merritt. Also make a report on any mining equipment at present on the above mentioned lots, covering boilers; hoists; screening plant etc, giving sizes and apparent conditions, if the mine is on the above property, give any information regarding the accessibility of the workings etc.

In reply would state while in Merritt on the 19th Day of December I interviewed Mr Robert Couper, the Government Agent in regard to the information required and found he had no large district plan and had to refer to a District Plan scaled One Mile to the Inch and you will find attached a tracing taken from this district plan showing the location of the land you have reference to.

You are quite right in assuming the land referred to in your letter were part of the holdings of the old Diamond Vale Collieries who had large holdings in the Nicola Valley Coal Basin and comprised most of the coal rights under the land laying between the Coldwater and the Nicola Rivers and included a large part of T.P. 91 in the City of Merritt and known as the Diamond Vale Flats.

There has been no coal mining operations conducted on lot 167 and the coal mining operations you have reference to are located in Section 14 that contains 840 acres and in that part of Section 14 situated in close proximity to the Nicola River and the K.V. Railway, South.

I am advised by the Government Agent that Section 14 at the present time is Crown Land with the exception of 17 acres upon which the mining operations are located and this 17 acres

is held by Mr. T. J. Smith, who I understand was the President and the Promoter of the Diamond Vale Collieries. The Lot 170, that is the South West Portion of Section 14 only covers surface rights and not the coal rights and is held by William Lauder a local rancher. (-see copy of plan attached)

The following is the description of the location of these 17 acres as shown by Plan "B" 1503 and deposited with the Government Agent Office in Merritt and reads as follows:-

Section 14, T.P. 91 N.Dy. D. except that part laying North of the Nicola River and Part Laying within Lot 122 . and that part containing 17 acres , more or less, as shown on plan, 1503.

#### Description of Mining Developments

The location of these coal mine developments are in close proximity to the K.V. Railway that runs between the town of Merritt and the Village of Nicola and in a rolling hill some 100 feet in elevation above and the measures generally in this section of the basin are of a hard "Blockey Sandstone" and have a general pitch S. of from 35 to 45 degrees with three seams of coal exposed at the surface and have been developed in varying degrees by slopes following the pitch of the seams from the surface and think are located in the upper series of the coal measures .

There has been a very small amount of work done in the development of the upper or the No 1 seam that appears to be about 35 feet in thickness and appears to me as a very dirty section of coal and it is possible this is the reason for the small amount of development .

The No 2 Mine is probably the most important coal mining development and is located approx 500 feet North of the No 1, follows the same conformation and has the same general pitch and is the mine where the explosion happened during the year 1912 . The portal of this mine is badly caved and not accessible and there are at least two surface caves a short distance South of the mine portal ; there was a good description given of this mine by Mr. Ellet-Robinson in the Minister of Mines Report of the year 1912 .

The No 2 Mine is situated approx 500 feet North of the No 1 Mine and has been developed from the surface by an highly inclined slope following the full pitch of the seam and this main slope is open to the No 1 left level and the water is showing in the slope a short distance below , this is probably 125 feet from the portal of the mine and while the coal may be of an excellent quality, it is intersected by bands of rock and will be hard to clean for the commercial trade , it is rather hard to get a correct of this seam , as the seam contains "floaters" and appears to vary in thickness , you will find what I would consider a fair average sample of the seam.

Report on Plant. I am afraid there is not much to report in regard to the plant on this property, There are no buildings, Mine cars, Mine Hoists, Pumps, Pipes and no rails with the exception of a few laying in the No 2 mine slope, the following is an inventory of the equipment at this mining property.

(1) Two medium size Loco Type tubular steam boilers, laying in the open, One at the No 2 Mine and the other at the No 3 Mine, there are no fittings on these boilers and no smoke stacks. and it is quite possible the boiler shells may be in good condition

(2) One small vertical tubular steam boiler without fittings laying at the foot of the hill below the No 3 mine.

(3) One old Rand, single stage, steam driven air compressor, that has been generally stripped and there are parts of the machine missing, think this will be about a 500 feet machine.

(4) Six feet steam driven enclosed type sheldon mine fan, situated near the portal of the return airway of the No 3 mine this is an old machine, but think it may be possible to put the same into service.

This comprises all the machinery ~~uses~~ at this mine.

There is <sup>a trestle</sup> rather a high trestle with bar screens and coal bunkers situated near the portal of the No 2 mine that is set in the ground and has been standing for the past thirty years ~~or so and it~~ <sup>to</sup> can hardly be expected this structure can be in good condition.

There was a test shipment of coal taken from these mines some three years ago by Mr Howell John under the instructions of Mr T. J. Smith, I understand at that time there was a car load of coal shipped to the coast, about 12 months ago under the instructions of Mr Smith shipped four sacks of coal to the coast this coal was mined in the lower or the No 2 seam in a crosscut on the right side of the slope.

During the early history of the Diamond Vale Collieries probably during the year 1907 there was two vertical shafts sunk near the South side of the Coldwater River, as a matter of fact one of them shafts is in the river to day and it is hardly to be expected a person would be able to locate these corner posts to day, but think these shafts would be located on lot 122, as shown by the attached copy of plan.

I have the honor to be,

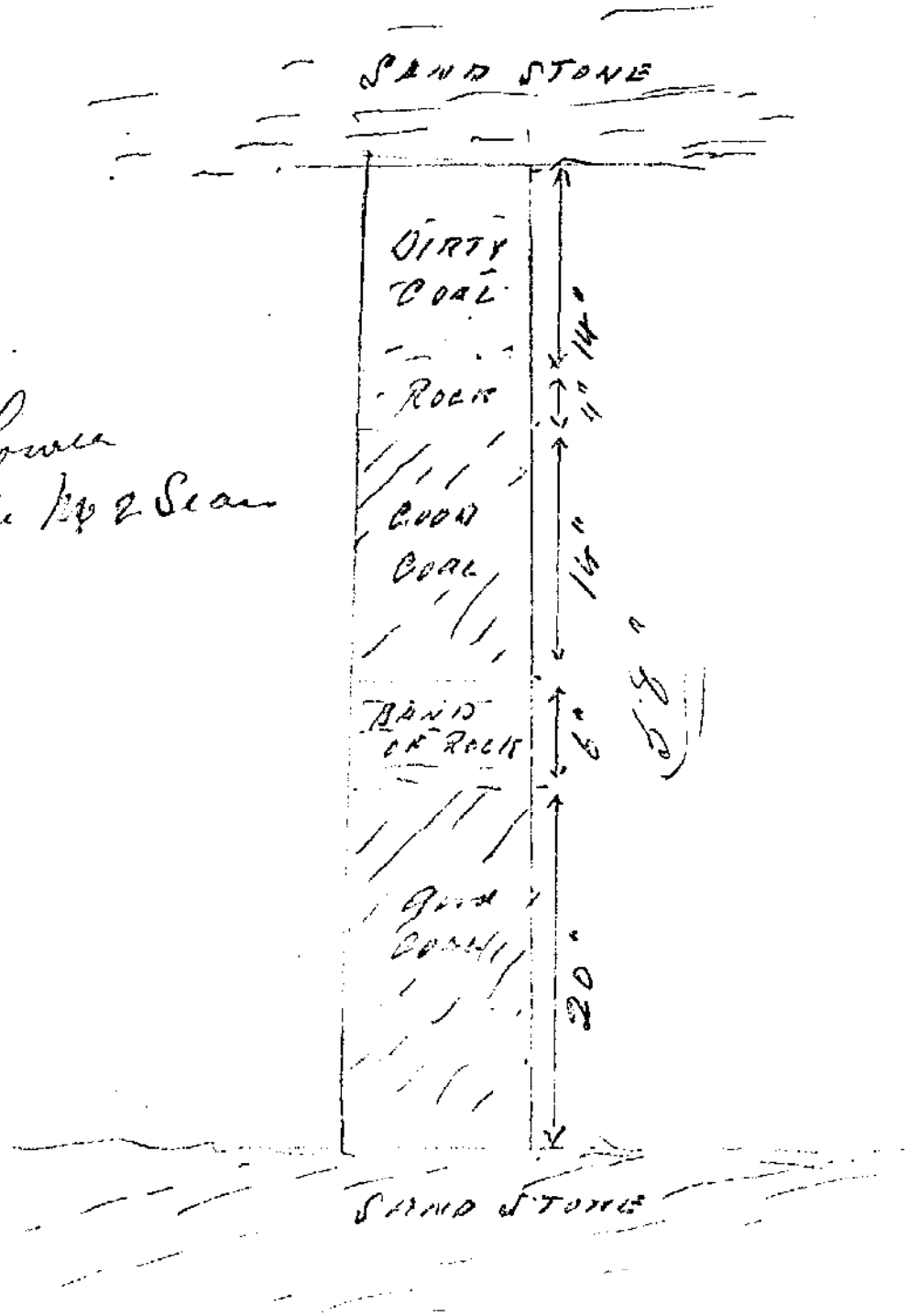
Sir,

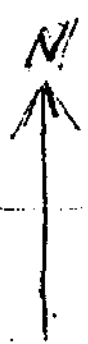
Your obedient servant,

*John G. Wiggins*  
Inspector of Mines.

This is what I would consider a fair average section of the seam of coal in the No 2 Mine of the Diamond Vale showing 24 inches of coal intersected by a 6" band of rock the section above is very dirty and little if any commercial value, but would have to be taken down during mining operations to the good roof above.

*up the Lower  
in the No 2 Seam*





NIGELA RIVER To Nicela

MERRITT

T. 91  
123

L  
122

L  
170

I.R.

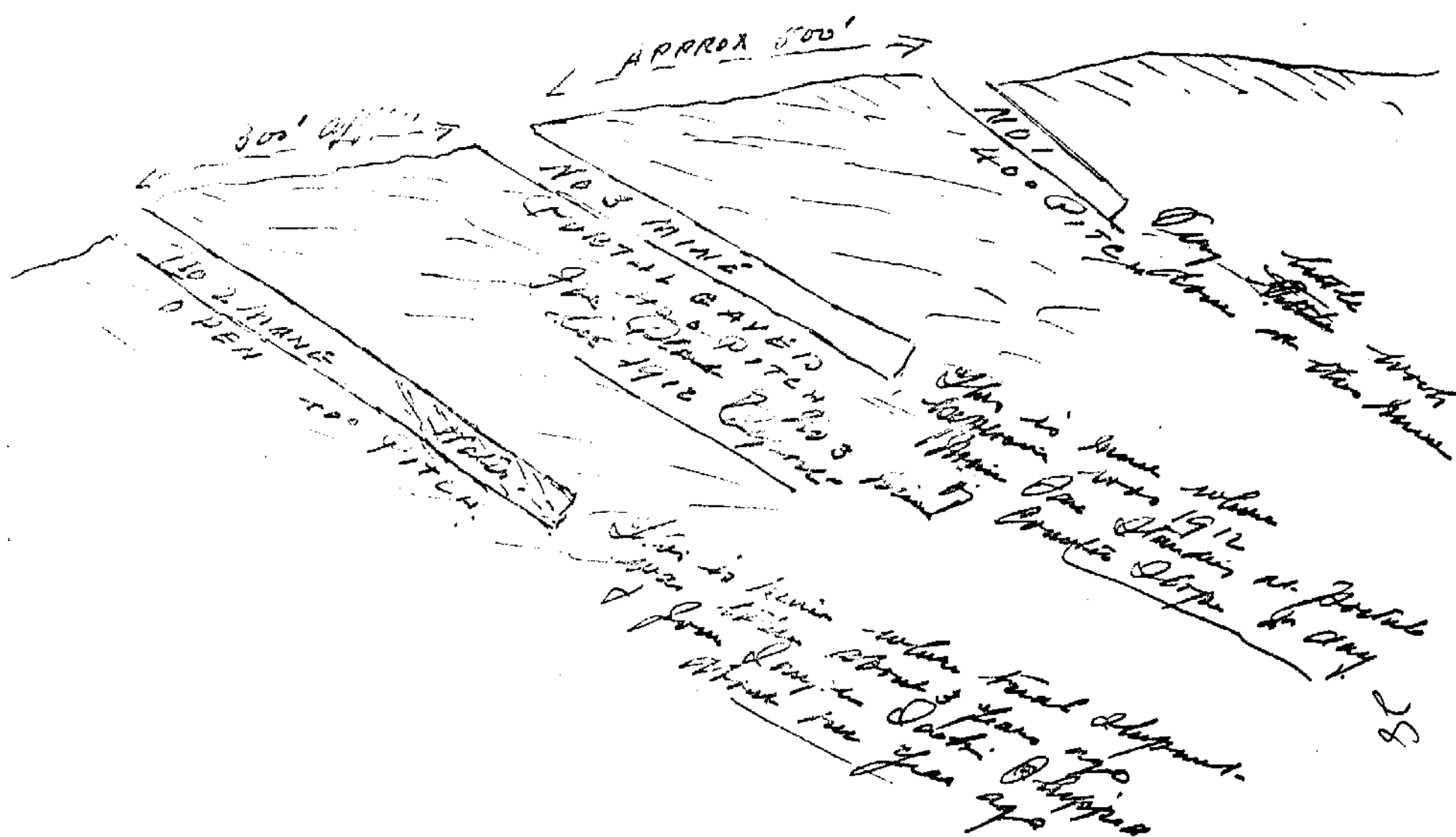
MINES HERE

HAMILTON

17 ACRES HELD BY  
T.J. SMITH

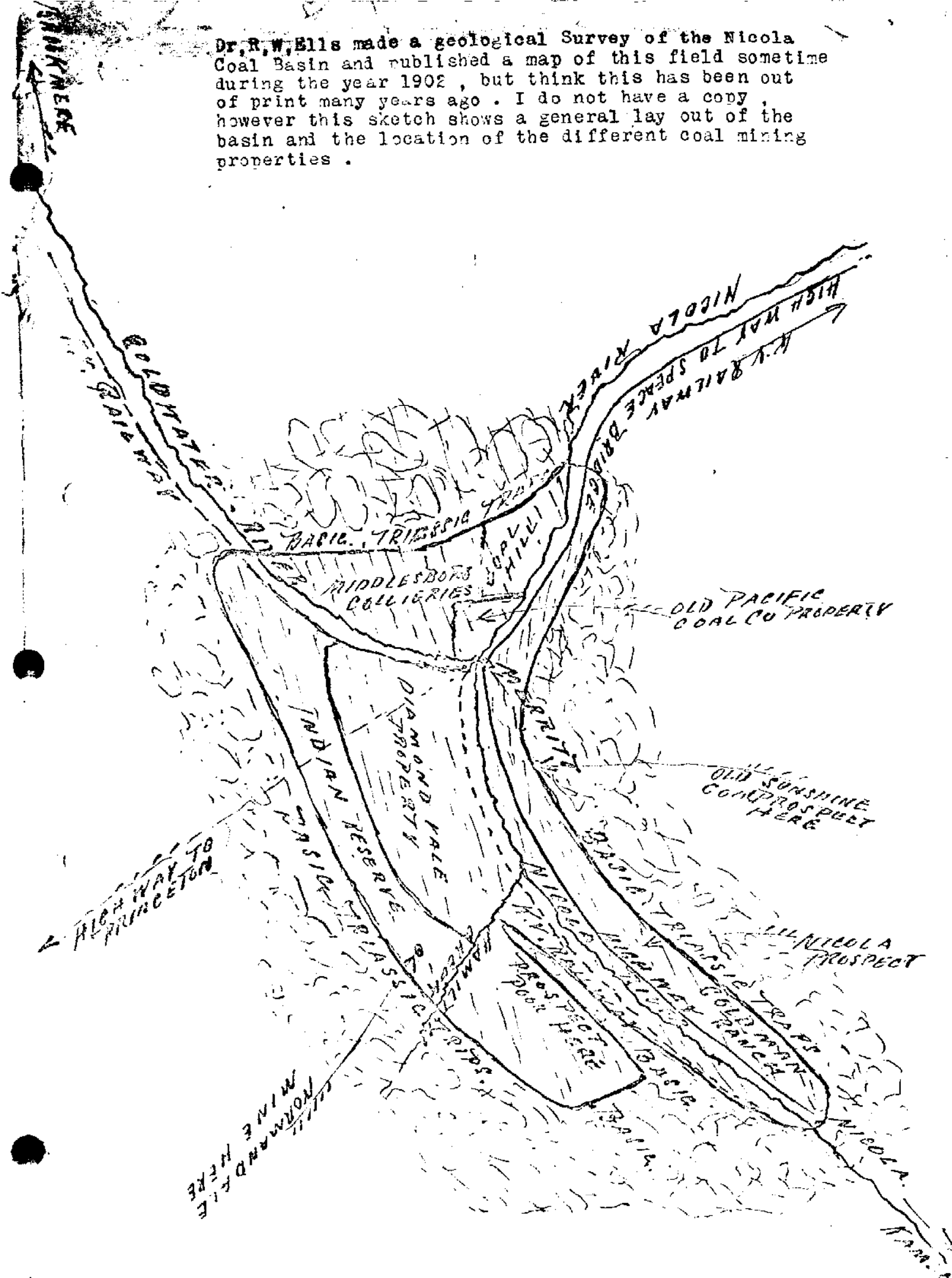
CO. OF

Goldwater River



28

Dr. R. W. Ellis made a geological Survey of the Nicola Coal Basin and published a map of this field sometime during the year 1902, but think this has been out of print many years ago. I do not have a copy, however this sketch shows a general lay out of the basin and the location of the different coal mining properties.





3504/40.

December 13th, 1940.

John G. Biggs, Esq.,  
Inspector of Mines,  
PRINCETON, B. C.

Dear Sir:

I am in receipt of a request from the Lands Department for information regarding Lot 167, comprising 116 acres, and part of Section 14, Township 91, both in the Kamloops Division of Yale District and situated adjacent to Merritt.

The above properties are, I believe, part of the old Diamond Vale property including that part containing the No. 3 Slope or Mine (where the explosion occurred in 1912), but check up on this point, from records and plans at the Government Buildings at Merritt. If possible get a district plan and indicate on the plan the position of the mine.

Make a report on any mining equipment at present on above-mentioned lots, covering boilers, hoists, screening plant, etc., giving sizes and apparent condition. If the mine is on the above property, give any information regarding the accessibility of the workings, that is, if the slopes are still open and when last operated. I am under the impression that some coal was taken out a few years ago for a test shipment.

The above information is required as soon as possible.

Yours very truly,

Chief Inspector of Mines.

3504/40.

December 13th, 1940.

John F. Walker, Esq.,  
Deputy Minister of Mines,  
Victoria, B. C.

Dear Sir:

I am in receipt of your memo. of December 11th accompanied by memo. from the Hon. A. Wells Gray to our Minister, requesting information regarding the mining value of Lot 167 and part of Section 14, Township 91, (a total of 699 acres), in the Kamloops Division of Yale District, and adjacent to Merritt.

I believe the above is part of the old Diamond Vale property and contains the No. 3 Diamond Vale slope which consisted of two slopes driven in coal from the outcrop for some 500', with levels off right and left to a distance of 600', with some development driven from these levels in the direction of the outcrop; this seam is 3' thick.

I have not been at this property for a number of years, but from my recollection I believe the equipment consisted of a small steam boiler and hoist, neither of which has been used for over twenty years, and which will have very little value.

However, I am writing Inspector Biggs to enquire specifically into this matter.

Yours very truly,

Chief Inspector of Mines.

MEMORANDUM

TO James Dickson, Esq.,  
Chief Inspector of Mines,  
Buildings.

FROM THE

DEPARTMENT OF MINES,

VICTORIA, B.C. Dec. 11, 40.

3504

I enclose copy of a memorandum to our Minister from the Honourable Wells Gray, which is self-explanatory.

Will you please have Mr. Biggs make the examination and let me have a copy of his report at as early a date as possible.

*John F. Wilken*  
Deputy Minister of Mines.

Encl.  
JP

copy

Victoria, B.C.,  
Dec. 7, 1940.

Memorandum for the Hon. the Minister of Mines

My dear Colleague:

The coal rights carried by the following two parcels of land have reverted to the Crown for unpaid taxes, viz: Lot 167, comprising 116 acres, and part of Section 14, Township 91: 583 acres, both in the Kamloops Division of Yale District, and situated adjacent to the Town of Merritt.

A considerable amount of taxes was in arrear in respect to these two parcels at the time of forfeiture, and it is understood that the property contains a quantity of Mining equipment and has been developed as a producing mine. On account of former transactions which have taken place in respect to this property and conditions generally in the neighbourhood, this Department is at a loss to determine the best method of dealing with the property in the event of applications being made in respect thereto. Under the circumstances, it is considered advisable to have a thorough inspection made and obtain a report covering the amount of machinery and equipment in the mine, and its estimated value; and conditions generally. I have therefore to request that you will be good enough to issue instructions to the District Engineer, or any other competent person, to make such a survey and report.

Faithfully yours,

"A. Wells Gray"

Minister.

NEW WESTMINSTER OFFICE  
200 WESTMINSTER TRUST BUILDING  
PHONE 615

DAVID WHITESIDE, K. C.  
ALEXANDER S. DUNCAN

ALEXANDER S. DUNCAN  
Successor to  
**WHITESIDE & DUNCAN**  
BARRISTERS AND SOLICITORS

MISSION CITY OFFICE  
GATHERWOOD BUILDING  
PHONE 88  
**DEPT. OF MINES**

Rec'd AUG 10 1938

Referred to.....

Ans'd.....

New Westminster, B.C.  
August 9th 1938.

3049  
38

Department of Mines,

Victoria, B.C.

Attention of Chief Inspector.

Dear Sirs:

I am acting for the Diamond Vale Coal Co.Ltd. who hold coal lands at Nicola adjacent to the Middlesborough Coal Co. I understand that the workings of the latter company now extend to the boundary of the Diamond Vale Coal Co.Ltd. property.

My clients are anxious to know if in the event of them commencing operations what barriers the Department would require to be left between the workings of the two companies.

I would also like to obtain if possible a blue print showing the workings of the Middlesborough Company. I understand a certain fee would be payable for this and I will remit on being advised as to the amount.

Your early reply would be greatly appreciated.

Yours truly,

ALEXANDER S. DUNCAN.  
D

ASD:DR

August 12th, 1938.

3049/38

Alexander S. Duncan, Esq.,  
Barrister & Solicitor,  
500 Westminster Trust Bldg.,  
NEW WESTMINSTER, B.C.

Dear Sir:

In reply to your letter of August 9th re the mining properties of the Middlesboro Collieries Ltd., and the Diamond Vale Coal Company Ltd., requesting information on same I beg to say plans of the mines are not filed with this Department until said mines are abandoned (this except under special circumstances).

Any plans so filed may not be shown to any person except with the permission of the owner.

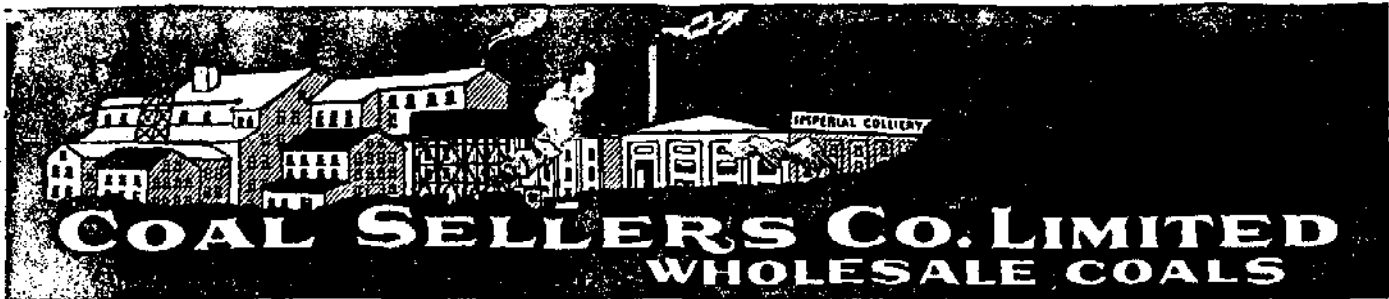
Re Barriers Between Workings:

Where a mine is abandoned and cannot be readily examined any other workings approaching the abandoned mine are prohibited from approaching closer than 500' from the abandoned mine until a satisfactory method of approach has been submitted to the Inspector of Mines and approved by him.

In no case shall the new workings approach closer than 150' from an abandoned mine unless the abandoned mine can be readily examined or proved to be safe for such approach.

Yours very truly,

Chief Inspector of Mines.



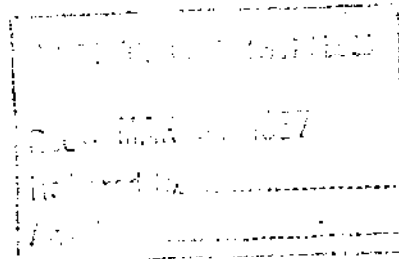
DOMESTIC AND STEAM COALS FROM EVERY FIELD

W. E. ROBI,  
RESIDENT DIRECTOR

Phone SEY. 1622

852 HORNBY STREET  
VANCOUVER, B. C.  
March 25th, 1937.

Mr. James Dixon,  
Prov. Mines Inspector,  
Victoria, B. C.



Dear Mr. Dixon:-

I have been approached to interest capital in the Diamondvale property at Merritt. Understand there are several million tons of coal proven by diamond drilling, that there are two seams of which one is non-coking. If I could interest capital we would be interested in the coking seam.

Is there any information you can give me regarding an approximate operating cost for minerun and if the property lends itself to economical operation.

From everything I have read about this area I am not sold on the district as I understand the measures are badly broken. If you would be kind enough to give me a frank expression of opinion, and an analysis or two if you have any, it would be greatly appreciated.

Thanking you, I remain,

Yours faithfully,

WER:N.

April 10th, 1937.

1307/37

Walter E. Robt, Esq.,  
Coal Sellers Co. Ltd.,  
852 Hornby St.,  
VANCOUVER, B.C.

Dear Mr. Robt:

On my return to Victoria I received your letter of March 25th re the Diamond Vale area at Merritt and note the different points mentioned viz., that it is reported that there are several million tons of coal in this property and that there are two seams, one coking and one non-coking coal, and that the field is considerably broken up and requesting my opinion of this property.

I may say that there are no records of the results of drilling of the Diamond Vale at this office by which I could check up on the probable tonnage in this part of the field. The limited operations formerly carried on were not sufficient to give information regarding whether the field is much broken or otherwise, however as some of the seams come to the surface at the former slope entrances to the mine I would say that this offers an easy and economical means of prospecting and developing at least part of this area.

The only analysis I have of coal on this property is from the Minister of Mines Report - 1909 and is as follows:

Moisture	....	2.677
V.C.M.	....	37.10
F.C.	....	52.27
Ash	....	7.25
Sulphur	....	0.77



28

Page 2.

April 10th, 1937.

I suggest that your best interest would be served by having a reputable engineer make an examination of the property with particular reference to the probable output of coal that you could market.

Yours very truly,

Chief Inspector of Mines.

28

March 31st, 1937.

1307/37

W.E. Robi, Esq.,  
Resident Director,  
Coal Sellers Co. Ltd.,  
852 Hornby St.,  
VANCOUVER, B.C.

Dear Sir:

I have the honour to acknowledge the receipt of your letter of March 25th requesting information re the Diamond Vale property at Merritt B.C.

Mr. Dickson is at present away on an inspection tour in the East but will probably be returning to the office the latter part of next week, at which time the above letter will be placed before him for immediate attention.

Yours very truly,

Stenographer.

1M-428-1855

MEMORANDUM

*Memorandum  
file property*

*1364  
3*

To Jas. Dickson, Esq.,  
Chief Inspector of Mines,  
Buildings.

FROM THE

DEPARTMENT OF MINES.

VICTORIA, B.C. 26th October 19 32.

8284/52.

re: Diamond Vale Coal Property

RECEIVED  
DEPT. OF MINES  
NOV 1 1932

I shall be obliged if you will let me have a report, for information of the Deputy Minister of Lands, in connection with the attached copy of Memorandum from said official, regarding the above matter.

*[Signature]*  
Deputy Minister of Mines.

ENCL.

COPY

P/C

DEPARTMENT OF LANDS  
Office of  
The Deputy Minister  
Victoria, B.C.

October 21st, 1932.

Memorandum to the Deputy Minister of Mines.

Following exposure at tax sale in 1932, certain areas hereinafter described and known as the Diamond Vale coal property at Merritt, B. C., have reverted to the Crown for non payment of taxes under the provisions of the Taxation Act.

Certain enquiries with regard to the purchase of this property have been received and it is considered that the Department would hardly be justified in considering same without a special and more or less expert report as to the present market value of the holdings of this Company, which are now vested in the Crown.

I shall therefore be pleased if you can arrange to have your chief Inspector of some other competent official make a formal report in view of the circumstances noted above.

The areas concerned are described as follows:

1. Part Lot 121, Gp. 1, K.D.Y.D. lying south of Nicola river - 80 acres (coal rights only).
2. Lot 122, K.D.Y.D. - 308 acres (coal rights only) and surface rights of that part Lot 122 registered under Certificate of Title 5956D - 10 acs.
3. Lot 123, K.D.Y.D. - 323 acres (coal rights only) and surface rights of that part Lot 123, registered under Certificate of Title 5956D, except C.P.R. right-of-way - 35.88 acres.
4. Lot 167, K.D.Y.D. - 116 acres (coal rights only).

5. W.  $\frac{1}{2}$  Sec. 13, Tp. 91, - 320 acres (coal rights only).
6. Sec. 14, Tp. 91 (except 40 acres described in C.G. Nov. 19, 1906 and except part lying within Lot 122) - 600 acres (coal rights only) - part Sec. 14, Tp. 91, registered under Certificate of Title 5956D - 17 acres surface rights only.
7. S.E.  $\frac{1}{4}$  Sec. 23, Tp. 91 - 160 acres (coal rights only).
8. S. ~~W.~~  $\frac{1}{2}$  Sec. 24, Tp. 91, - 160 acres (coal rights only).

"H. Cathcart"

Deputy Minister.

*Diamond Vale  
Co Ltd*

28

October 29th, 1932.

Robt. Dunn, Esq.,  
Deputy Minister of Mines,  
VICTORIA, B.C.

Dear Sir:

Memo. re: Diamond Vale Coal Property.

This property, containing some 2,000 acres (coal rights) has several definitely proved seams of coal as some of the work of the Diamond Vale Collieries from year 1903 to 1917 in actual mining, though of an intermittent nature, produced some 30,000 tons of coal.

This mining was carried on in the north-eastern part of the property after shafts, started near the westerly boundary, had been abandoned.

The Diamond Vale property on the westerly side adjoins the property of the Middlesboro Collieries and the latter company mined coal along their property boundary (where it joins the Diamond Vale property) for over 3,000 feet in No. 2 mine; the coal produced from the No. 2 mine was reported as being of good quality.

In the Middlesboro Collieries a number of separate seams have been proved and worked and there can be no reasonable doubt that most, if not all of these seams, continue in the Diamond Vale property.

I have no information regarding the boreholes put down on the Diamond Vale property but the facts that seams exist along the Diamond Vale-Middlesboro property boundary and that a mine, worked haphazardly, on the opposite side of the property produced 30,000 tons of coal are very definite proofs of the potential value of the Diamond Vale property.

October 29th, 1932.

The analyses of coal from the Diamond Vale property (from Report of Minister of Mines) gives:

Moisture.....	2.68%
Volatile combustible matter.....	37.84%
Fixed carbon.....	55.14%
Ash.....	4.36%

This coal area is in the nature of a basin with the result that the position of the seams will be at a greater depth in the central area of the property and if not sold as a unit the coal in the central area would be more difficult of access than the other parts and would naturally be more costly to mine; also be of a lower sale value per acre.

Regarding the sale value of the Diamond Vale coal property I am of the opinion that, in normal times, \$20.00 per acre would be a fair price.

At the present time however I believe that, owing to the subnormal business conditions, there would be few, if any, prospective purchasers and the price should be reduced to the point where it would attract a reliable buyer who would operate the property.

It should be remembered that in addition to the sale price of this coal property the royalty tax on coal (10% per ton) is approximately equivalent to \$100.00 per acre per foot thickness of coal so that from such an operation the revenue is not less important than the selling price.

The early operation of this property would do much to benefit the Merritt area and provide such needed employment to this mining community.

To make a specific detailed report and estimate the probable tonnage of coal on this property would require considerable time but trust the above may be of service.

Respectfully submitted,

Chief Inspector of Mines.

28

October 29th, 1932.

Robt. Dunn, Esq.,  
Deputy Minister of Mines,  
VICTORIA, B.C.

Dear Sir:

Memo. re: Diamond Vale Coal Property.

This property, containing some 2,000 acres (coal rights) has several definitely proven seams of coal as some of the work of the Diamond Vale Collieries from year 1903 to 1917 in actual mining, though of an intermittent nature, produced some 30,000 tons of coal.

This mining was carried on in the north-eastern part of the property after shafts, started near the westerly boundary, had been abandoned.

The Diamond Vale property on the westerly side adjoins the property of the Middlesboro Collieries and the latter company mined coal along their property boundary (where it joins the Diamond Vale property) for over 3,000 feet in No. 2 mine; the coal produced from the No. 2 mine was reported as being of good quality.

In the Middlesboro Collieries a number of separated seams have been proved and worked and there can be no reasonable doubt that most, if not all of these seams, continue in the Diamond Vale property.

I have no information regarding the boreholes put down on the Diamond Vale property but the facts that seams exist along the Diamond Vale-Middlesboro property boundary and that a mine, worked haphazardly, on the opposite side of the property produced 30,000 tons of coal are very definite proofs of the potential value of the Diamond Vale property.



October 29th, 1932.

The analyses of coal from the Diamond Vale property (from Report of Minister of Mines) gives:

Moisture.....	2.66%
Volatile combustible matter.....	37.84%
Fixed carbon.....	55.14%
Ash.....	4.36%

This coal area is in the nature of a basin with the result that the position of the seams will be at a greater depth in the central area of the property and if not sold as a unit the coal in the central area would be more difficult of access than the other parts and would naturally be more costly to mine; also be of a lower sale value per acre.

Regarding the sale value of the Diamond Vale coal property I am of the opinion that, in normal times, \$20.00 per acre would be a fair price.

At the present time however I believe that, owing to the subnormal business conditions, there would be few, if any, prospective purchasers and the price should be reduced to the point where it would attract a reliable buyer who would operate the property.

It should be remembered that in addition to the sale price of this coal property the royalty tax on coal (10% per ton) is approximately equivalent to \$100.00 per acre per foot thickness of coal so that from such an operation the revenue is not less important than the selling price.

The early operation of this property would do much to benefit the Verritt area and provide much needed employment to this mining community.

To make a specific detailed report and estimate the probable tonnage of coal on this property would require considerable time but trust the above may be of service.

Respectfully submitted,

Chief Inspector of Mines.

A/C  
Memo Dept. M. M.

October 11th, 1930.

Re: Diamond Vale Collieries Ltd.

Detailed reports of Diamond Vale Collieries given in Minister of Mines reports for years 1906 to 1913, and Merritt Collieries Ltd., from 1916 to 1917.

Only one copy of plan is filed in the Chief Inspector of Mines office and would suggest they see Mr. Dickson to have copy of plan made.

September 14th, 1949.

E. R. Hughes, Esq.,  
Inspector of Mines,  
PRINCETON, B.C.

Dear Sir:-

I have received the copy of your letter to Mr. C. Y. Crossley, Regional Development Division, Department of Trade and Industry, re the Merritt Coal Field. Your reply to his enquiry is appreciated here and shows both thoughtfulness and discretion on your part.

This will be placed on file for future reference. We will find it very useful if anything comes up at the next session of the House.

Yours very truly,

Chief Inspector of Mines.

JS/13



THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF MINES

Chief Inspector of Mines

SEP 14 1949

Referred to \_\_\_\_\_

Ans'd \_\_\_\_\_

Princeton, B.C.,  
September 12th, 1949.

James Strang, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

2237

Dear Sir:

Herewith enclosed please find copy of letter to Mr. G. Y. L. Crossley, Regional Development Division, Department of Trade and Industry, Kelowna, B.C., dated September 10th, in answer to an enquiry regarding the Merritt coalfield. This information being requested for the benefit of the Department of Trade and Industry in compiling the 1949 Industrial Index.

Yours very truly,

*E. R. H. S.*  
Inspector of Mines.

May 26, 1949.

Thomas Mordy, Esq.,  
1838 West 13th Avenue,  
VANCOUVER, B.C.

Dear Sir:-

Our plan for the Merritt Coal Field was received from you today and I wish to thank you for same. We trust you found it of benefit in your investigation.

Yours very truly,

Chief Inspector of Mines.

JS/IC

1838-13th W.

Vancouver B.C.

1369

Mr. Jas. Strang.  
Chief Inspector of Mines  
Mines Dept.  
Victoria.

Chief Inspector of Mines

MAY 26 1949

Referred to \_\_\_\_\_

Ans'd \_\_\_\_\_

My dear Jim,

Sorry you have had to write for the sketch you so kindly loaned me, but I had intended to make an enlargement of it and put more data on. However my good intentions were frustrated by an overstrained back, so much so I had to lay off work altogether for two weeks. However, that's under the bridge now & I managed to take a tracing of your plan which will serve my purpose I think.

Many many thanks. If I'm in Victoria in the near future I'll look you up.

Sincerely yours

J. Morley

May 20th, 1949.

Thomas Mordy, Esq.,  
1838 West 13th Ave.,  
Vancouver, B.C.

Dear Tom:-

I would appreciate it very much  
if you sent back the map of the Merritt Coal  
Field I sent you, as I need it for some checking  
up I have to do.

Kindest regards.

Yours very truly,

Chief Inspector of Mines.

JS/RAE

28

March 24th, 1949.

Thomas Moriy, Esq.,  
1838 West 13th Ave.,  
Vancouver, B.C.

Dear Tom:-

Enclosed is the map I mentioned on the phone to you. Would you please send this back to me as it is the only one I have.

I am also sending you the 1946 Annual Report giving very complete information of the drilling done there by the Department. You can keep this copy. See page A. 250.

Kindest regards.

Yours very truly,

Chief Inspector of Mines.

Incl.



ALL COMMUNICATIONS IN REFERENCE TO LAND  
MATTERS SHOULD BE ADDRESSED TO THE  
SUPERINTENDENT OF LANDS



THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA

VICTORIA, B.C.

March 31, 1948.

LANDS BRANCH  
DEPARTMENT OF LANDS AND FORESTS

854

Chief Inspector of Mines,  
BUILDINGS.

Y.F. 809-48 Chief Inspector of Mines

MEMORANDUM

Please refer to File No. 0108615 #2

APR 1 - 1948

Referred to

Ans'd

Re special coal lease in favour of George Murray  
of the Merritt Coal Mines Ltd.

DEAR SIR OR MADAM:

This will acknowledge your letter of March 25  
received March 30, 1948, together with enclosure of  
notice of abandonment relative to the above-noted property, which  
is receiving attention. You will be further advised respecting same at the  
earliest possible date.

Yours truly,

C. E. HOPPER,  
Superintendent of Lands.

March 25th, 1948.

C. E. Hopper, Esq.,  
Superintendent of Lands,  
Buildings.

Dear Sir:-

Your File No. 0108615 #2,  
Attention "LEASES"

Re the above special coal lease  
in favour of George Murray of the Merritt Coal  
Mines Ltd.

The Merritt Coal Mines closed down  
on June 21st, 1945, and all the equipment was  
withdrawn from the mine. Since then no work has  
been done at the mine. We do not know where  
Mr. Murray is at the present time, but so far as  
we are concerned it is considered an abandoned mine.

Enclosed is a copy of the notice of  
abandonment received from Mr. Murray, dated the  
10th of September, 1945.

Yours very truly,

Chief Inspector of Mines.

Encl.

ALL COMMUNICATIONS IN REFERENCE TO LAND  
MATTERS SHOULD BE ADDRESSED TO THE  
SUPERINTENDENT OF LANDS



VICTORIA, B.C. 28 809

March 23, 1948.

LANDS BRANCH  
DEPARTMENT OF LANDS AND FORESTS

Chief Inspector of Mines
MAR 25 1948
Referred to.....
Ans'd.....

Chief Inspector of Mines,  
B U I L D I N G S.

Please refer to File 0108615 #2  
Attention "LEASES"

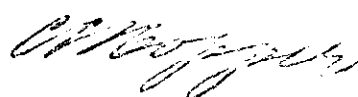
Dear Sir:

The Department issued a special Coal Lease in favour of George Murray of the Merritt Coal Mines Ltd., covering the S.W. $\frac{1}{4}$  of Sec. 13 and Fr. Sec. 14, save and except that portion thereof included in Certificate of Title No. 5956D, Tp. 91 and Lot 167 all in Kamloops Division of Yale District, containing 898.5 acres, situated 1 mile East of Merritt, for a period of 21 years at the rental of \$134.75 per annum, under authority of Order-in-Council No. 1013, approved July 28, 1942.

It is pointed out that rental on the lease has been paid to July 27, 1946 and no reply has been received from Mr. Murray to our requests to place the lease in good standing on our records.

Under the circumstances I would be pleased to received such particulars that you are in a position to furnish as to the operations being carried out by the lessee on the property, together with any information which would be of assistance to the Department in this connection.

Yours truly,

  
Superintendent of Lands.

WJH:MM

# CANADIAN PACIFIC TELEGRAPHS

T.D. 2K

IF SERVICE DESIRED	
Day Message	<input checked="" type="checkbox"/>
Day Letter	<input type="checkbox"/>
Night Message	<input type="checkbox"/>
Night Letter	<input type="checkbox"/>

Please mark an X opposite the class of service desired; OTHERWISE THE MESSAGE WILL BE TRANSMITTED AS A FULL-RATE TELEGRAM

MONEY TRANSFERRED BY  
TELEGRAPH TO PRINCIPAL  
POINTS IN CANADA AND  
THE UNITED STATES



CABLE CONNECTIONS TO  
ALL PARTS OF THE  
WORLD  
RADIOGRAMS TO SHIPS

NO.	CASH OR CHEQ.
TIME FILED	
CHECK	

W. D. NEIL, General Manager of Communications, Montreal

Send the following message, subject to the conditions on the back thereof, which are hereby agreed to.

Victoria, B.C., February 21, 1946.

George Murray,  
Manager,  
Merritt Coal Mines Ltd.,  
Merritt, B.C.

Urgently required that you forward at once completed Annual Returns as per Coal Mines Regulation Act and Dominion Bureau of Statistics for Merritt Coal Mines Limited for year nineteen forty five

JAMES DICKSON  
Chief Inspector of Mines

Chge. Vote 128, Office Supplies,  
Mines, Inspection Branch.

February 7th, 1946.

G. Murray, Esq.,  
Manager,  
Merritt Coal Mines Ltd.,  
Merritt, B.C.

Dear Sir:-

SECOND NOTICE

Please forward the Annual Returns, as per the "Coal-Mines Regulation Act", covering the operation of the Merritt Coal Mines Ltd., for the year ended December 31st, 1945, and the Report of Mining Operations as per the "Dominion Bureau of Statistics Act" for the same period, one copy of the latter to be forwarded to Ottawa and one copy to this office.

Yours very truly,

Chief Inspector of Mines.

February 21st, 1946.

F. M. Dockrill, Esq.,  
Manager,  
Bulkley Valley Collieries, Ltd.,  
Telkwa, B.C.

Dear Mr. Dockrill:-

We have not yet received your Annual Return as per the "Coal-Mines Regulation Act" for your Bulkley Valley Collieries Ltd., for the year ended December 31st, 1945.

As you may have mislaid or overlooked the forms previously mailed to you, I am enclosing herewith another set.

I regret that in my letter of February 7th in this connection, the name "Merritt Coal Mines, Ltd." was incorrectly given, which should have read Bulkley Valley Collieries.

Please complete and forward by return mail.

Yours very truly,

Chief Inspector of Mines.

Encl.



THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF MINES  
VICTORIA

February 7th, 1946.

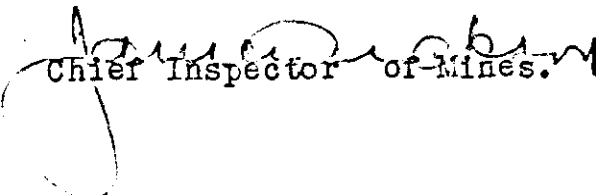
F. M. Dockrill, Esq.,  
Manager,  
Bulkley Valley Coal Mines,  
Telkwa, B.C.

Dear Sir:-

SECOND NOTICE

Please forward the Annual Returns, as per the "Coal-Mines Regulation Act", covering the operation of the Merritt Coal Mines Ltd., for the year ended December 31st, 1945, and the Report of Mining Operations as per the "Dominion Bureau of Statistics Act" for the same period, one copy of the latter to be forwarded to Ottawa and one copy to this office.

Yours very truly,

  
Chief Inspector of Mines.

February 7th, 1946.

F. M. Dockrill, Esq.,  
Manager,  
Bulkley Valley Coal Mines,  
Telkwa, B.C.

Dear Sir:-

SECOND NOTICE

Please forward the Annual Returns, as per the "Coal-Mines Regulation Act", covering the operation of the Merritt Coal Mines Ltd., for the year ended December 31st, 1945, and the Report of Mining Operations as per the "Dominion Bureau of Statistics Act" for the same period, one copy of the latter to be forwarded to Ottawa and one copy to this office.

Yours very truly,

Chief Inspector of Mines.



*no reply, file  
nov/45!  
"Let it go in the meantime"  
Mrs. Fisher*

September 13, 1945.

*28*

George Murray, Esq.,  
Manager,  
Merritt Coal Mines Ltd.,  
P. O. Box 305,  
Merritt, B. C.

Dear Sir:

I am in receipt of your letter of September 10th notifying this office that the Merritt Coal Mines Ltd. has abandoned mining operations in the area and vicinity of Nos. 3 and 4 mines and submitting a blue print showing the workings of the above mines and other operations in the immediate vicinity; this for filing in accordance with the requirements of the "Coal-mines Regulation Act".

However, the plan of abandoned mines for filing purposes is required on standard tracing cloth and request that you forward the original tracing or a copy of same on cloth.

Yours very truly,

Chief Inspector of Mines.

September 12, 1945.

George Murray, Esq.,  
President & Manager,  
Merritt Coal Mines Ltd.,  
Box 305,  
Merritt, B. C.

Dear Mr. Murray:

I have your letter of September 10th,  
and appreciate your forwarding to this office a plan  
of the operations of your property which have been  
abandoned.

Very kindest regards,

Yours sincerely,

Minister.

17-524

# MERRITT COAL MINES LIMITED

P. MALONE, Vice-President.

J. SISCO, Director.

G. MURRAY, C.M.E., President and Manager.



P.O. Box 305

MERRITT, B.C.

10th. Sept. 1945

RECEIVED

SEP 10 1945

The Minister of Mines  
Victoria B.C.

MINISTER OF MINES

Dear Sir.

In compliance with the provisions of the Coal Mines Regulation Act; I am forwarding under separate cover; A plan of the area of our property in which operations have been abandoned .

Yours truly

Merritt Coal Mines Ltd.

per--- *G. Murray*

PRODUCTION MERRITT COAL MINES  
August, 1943 to June, 1945.

	<u>Long Tons.</u>	
1943	2,275	August to December, inclusive
1944	8,529	Full year
1945	<u>5,112</u>	January to June, inclusive
Total	15,916	

Princeton, B.C.

July 12th, 1945.

Geo. Murray, Esc.,  
Manager,  
Merritt Coal Mines Ltd.,  
Merritt, B.C.

Dear Sirs:

I am in receipt of a letter, dated July 3rd, 1945, from your Mr. A. Morris, giving the output of coal and number of days worked for the month of June; also advising that, quote, "This mine was shut down tight on June 21st. and all materials removed."

I would at this time draw your attention to Section 77A, "Coal Mines Regulation Act Amendment Act, 1937." This section provides that, (1) Where it is proposed to abandon a mine, or part of a mine, the owner, agent, or manager shall give notice in writing of the proposed abandonment to the Inspector of Mines while the workings of the mine or part of the mine are still accessible, and shall see that all the workings of the mine or the part of the mine to be abandoned are surveyed and shown on the mine-plan before the abandonment occurs.

Also note that Section 78 (1), Coal Mines Regulation Act, E.S. 1927, directs that, "Where any mine is temporarily or permanently abandoned, the owner of the mine at the time of abandonment shall, within three months after the abandonment, send to the Minister an accurate plan, on a scale of not less than one hundred feet to one inch, or on such other scale as the plan used in the mine at the time of the abandonment is constructed, showing the boundaries of the workings of the mine up to the time of the abandonment, with a view of its being preserved under the care of the Minister;...."

Confirming our conversation in Merritt, on the evening of July 10th, 1945, also confirming my Inspection Report of the same date; all surface entrances to any abandoned underground workings at the Merritt Coal Mines Ltd. Diamond Vale Colliery require to be securely fenced, without delay.

Your attention to the above matters, and an early acknowledgement of this letter, is requested.

Yours very truly,

*Edward R. Hughes*  
Inspector of Mines.

c.c. James Dickson.



THE GOVERNMENT OF  
THE PROVINCE OF BRITISH COLUMBIA  
DEPARTMENT OF MINES  
Princeton, B.C.

Chief Inspector of Mines  
JUL 3 1945  
Referred to \_\_\_\_\_  
June 29th, 1945.

2230

James Dickson, Esq.,  
Chief Inspector of Mines,  
Parliament Buildings,  
Victoria, B.C.

Dear Sir:

I am in receipt of your letter of June 23rd, 1945, returning the report on the Diamond Vale Collieries Ltd., dated October 20th, 1909, by B.P. Little. Also received a copy of this report for the files of this office, for which I thank you.

Yours very truly,

*Edward R. Hughes*  
Inspector of Mines.

June 23, 1945.

2081-45

E. R. Hughes, Esq.,  
Inspector of Mines,  
Princeton, B. C.

Dear Sir:

With reference to my letter of June 13th, I am returning the report on the Diamond Vale Collieries Ltd., dated October 20th, 1909, by B. P. Little, which you so kindly forwarded, and am enclosing a copy of the report for your files.

Yours very truly,

Chief Inspector of Mines.