



Reservoir Study For Production Optimization By Water Flooding In The Gullfaks Field

¹Berthelot Tamo Sop, ²Rolande Tsapla Fotsa, ³Dianorré Tokoue Ngatcha, ⁴Alex Stephane Kemnang Tsafack, ⁵Finalise Komofor Ngopuh,* and ⁶Serge Gervais Ngueuteu Mbouna

¹ Department of Petroleum and Gas Engineering, School of Geology and Mining Engineering, University of Ngaoundere, P.O. BOX 115, Meiganga, Cameroon

² Department of Mechanical Engineering, College of Technology, University of Buea, P.O. BOX 63 Buea, Cameroon

³ Department of Automotive and Mechatronics Engineering, National Higher Polytechnic School of Douala, University of Douala, P.O. Box 24, 2701, Douala, Cameroon

⁴ Research unit of Condensed matter of electronics and signal processing. Dept. of Physics, Faculty of Science, University of Dschang, P.O. Box 67, Dschang, Cameroon

⁵ Department of Physics, Faculty of Science, University of Bamenda, P.O. Box 39 Bamenda, Cameroon

⁶ Laboratory of Modelling and Simulation in Engineering, Biomimetics and Prototypes, Faculty of Science, University of Yaoundé I, P.O. 812, Yaoundé, Cameroon

Supplementary File

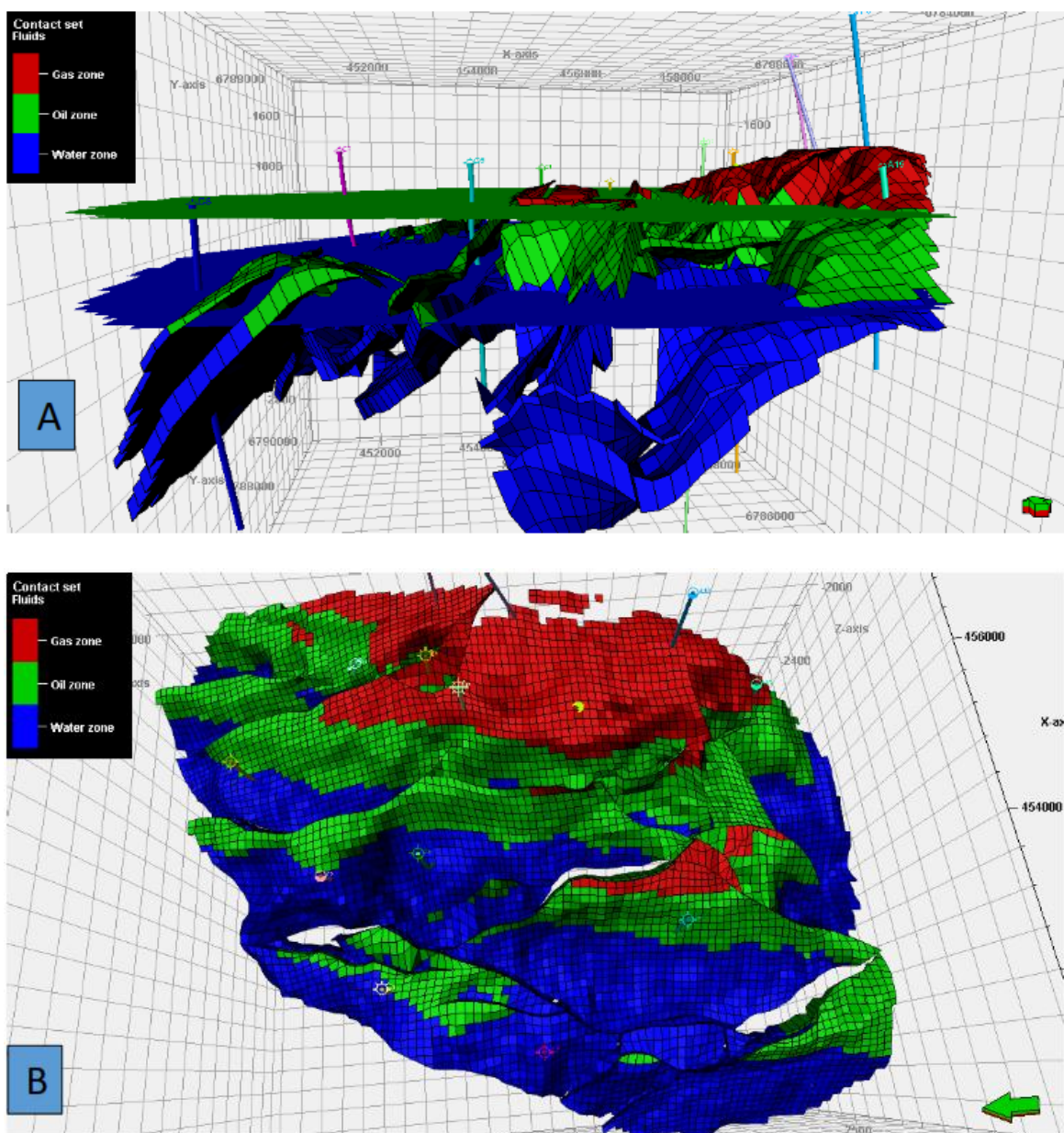


Figure S1: Contacts property along with contact set displayed in a 3D window view from south (A) and view from above (B).

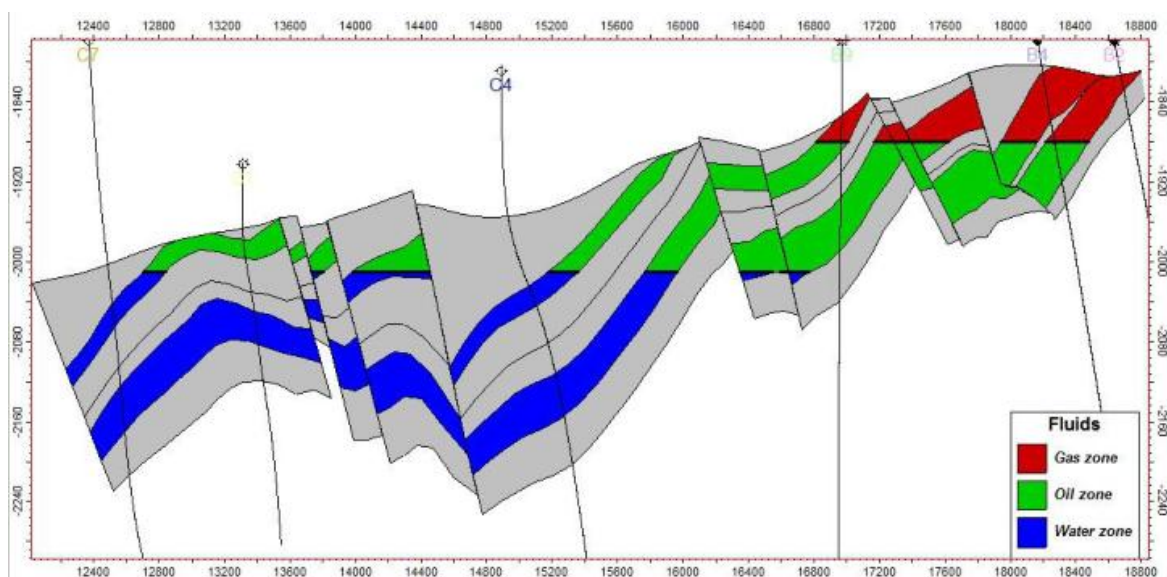


Figure S2: Cross-section of fluid contact section.

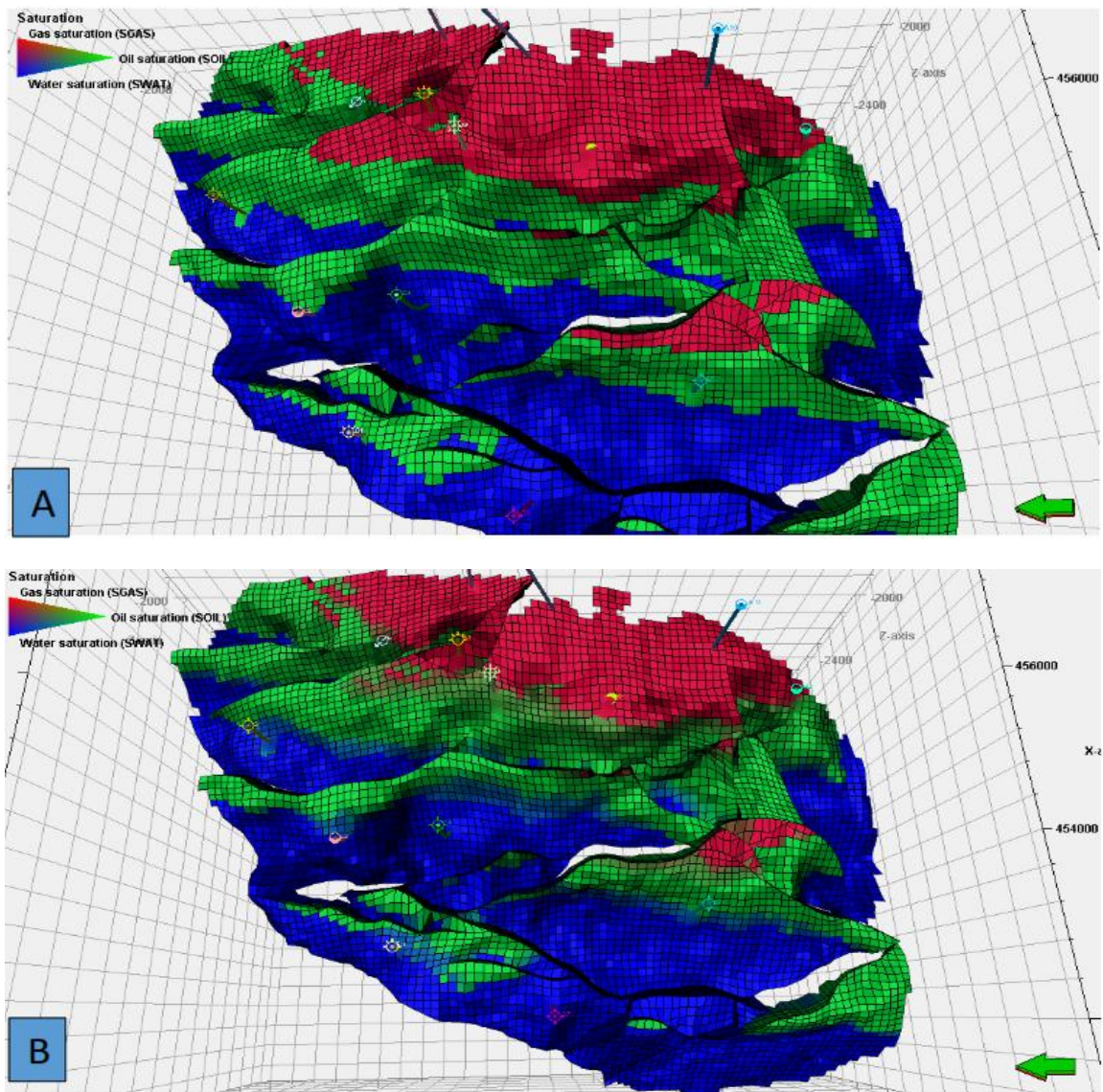


Figure S3: Saturation of the fluids in the reservoir (A) initially in 1980 and (B) after the production in 2000.

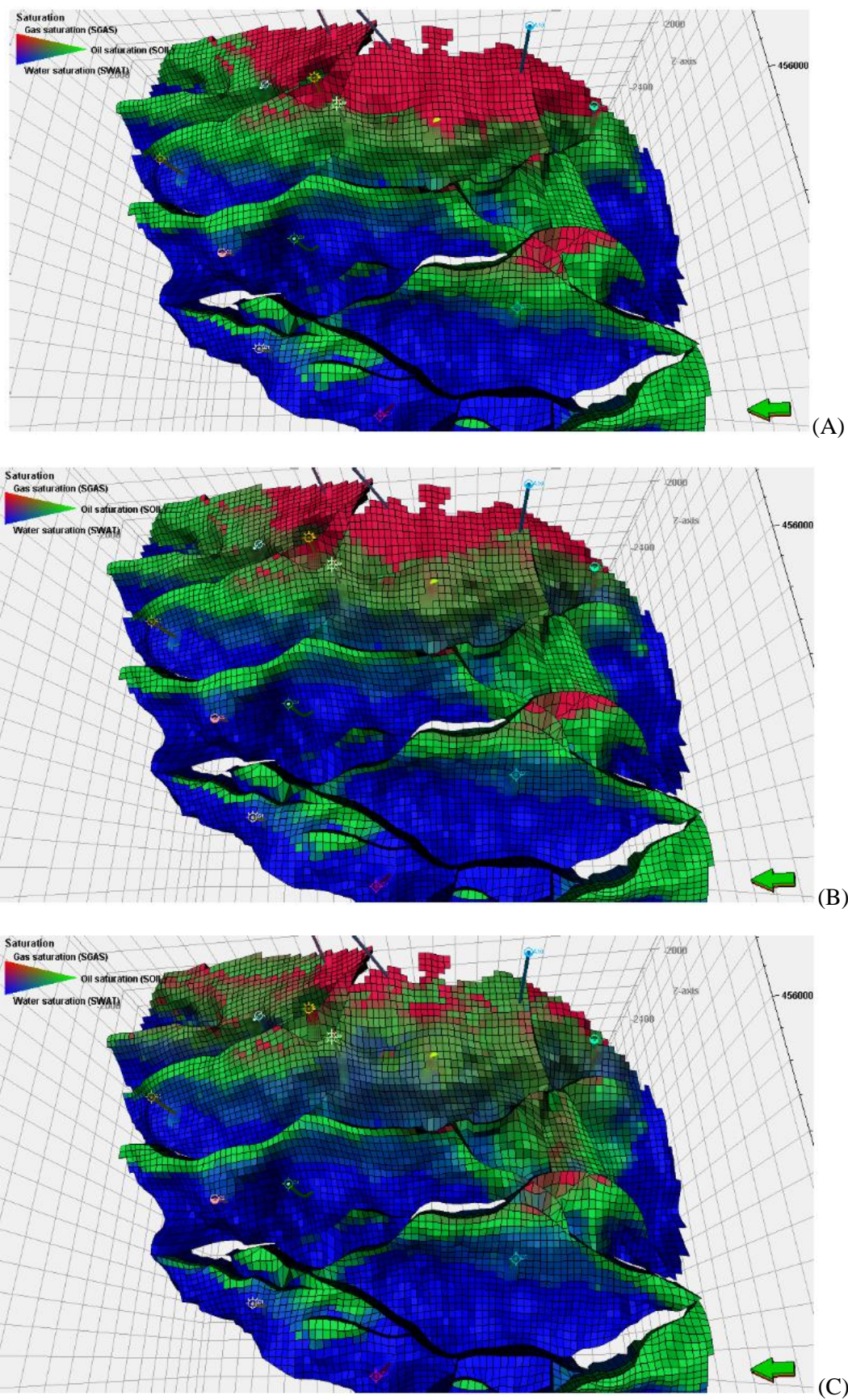
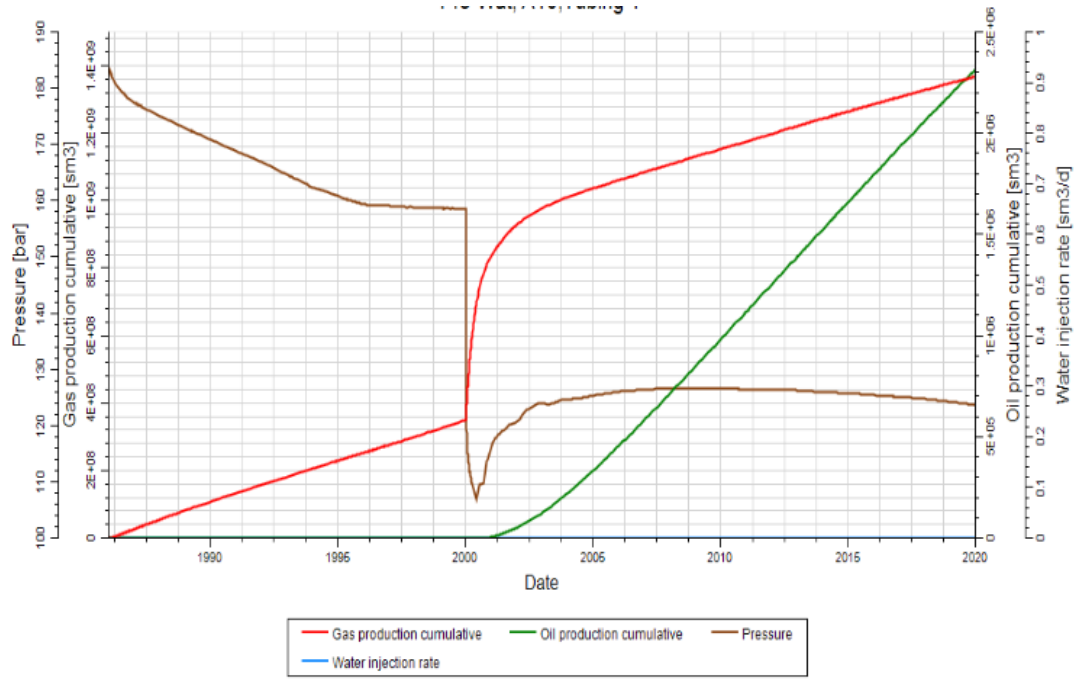
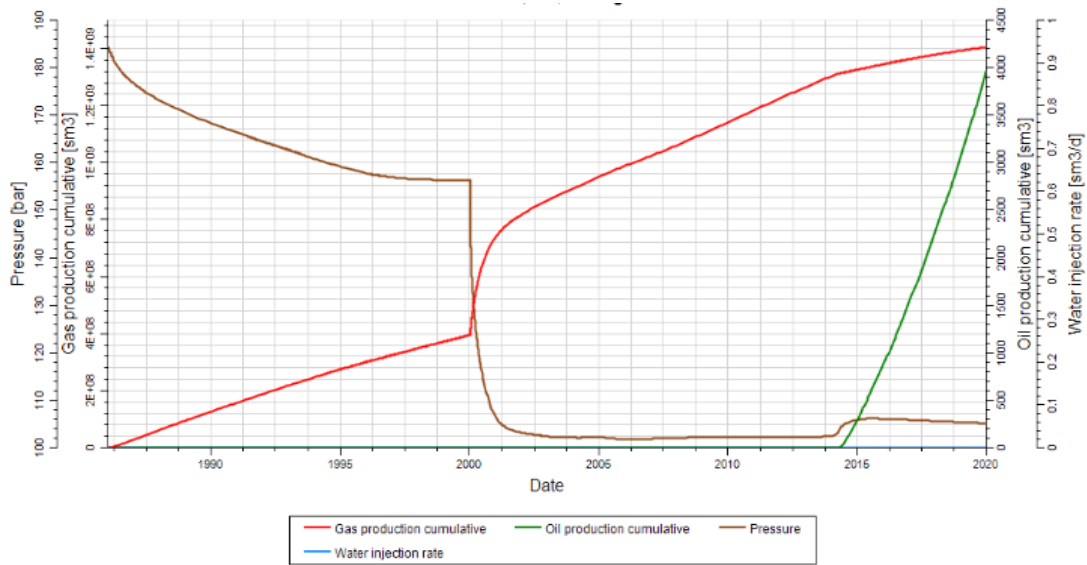


Figure S4: Fluid saturation model in the reservoir: (A) in 2000, (B) in 2010, and (C) in 2020.



(A)



(B)

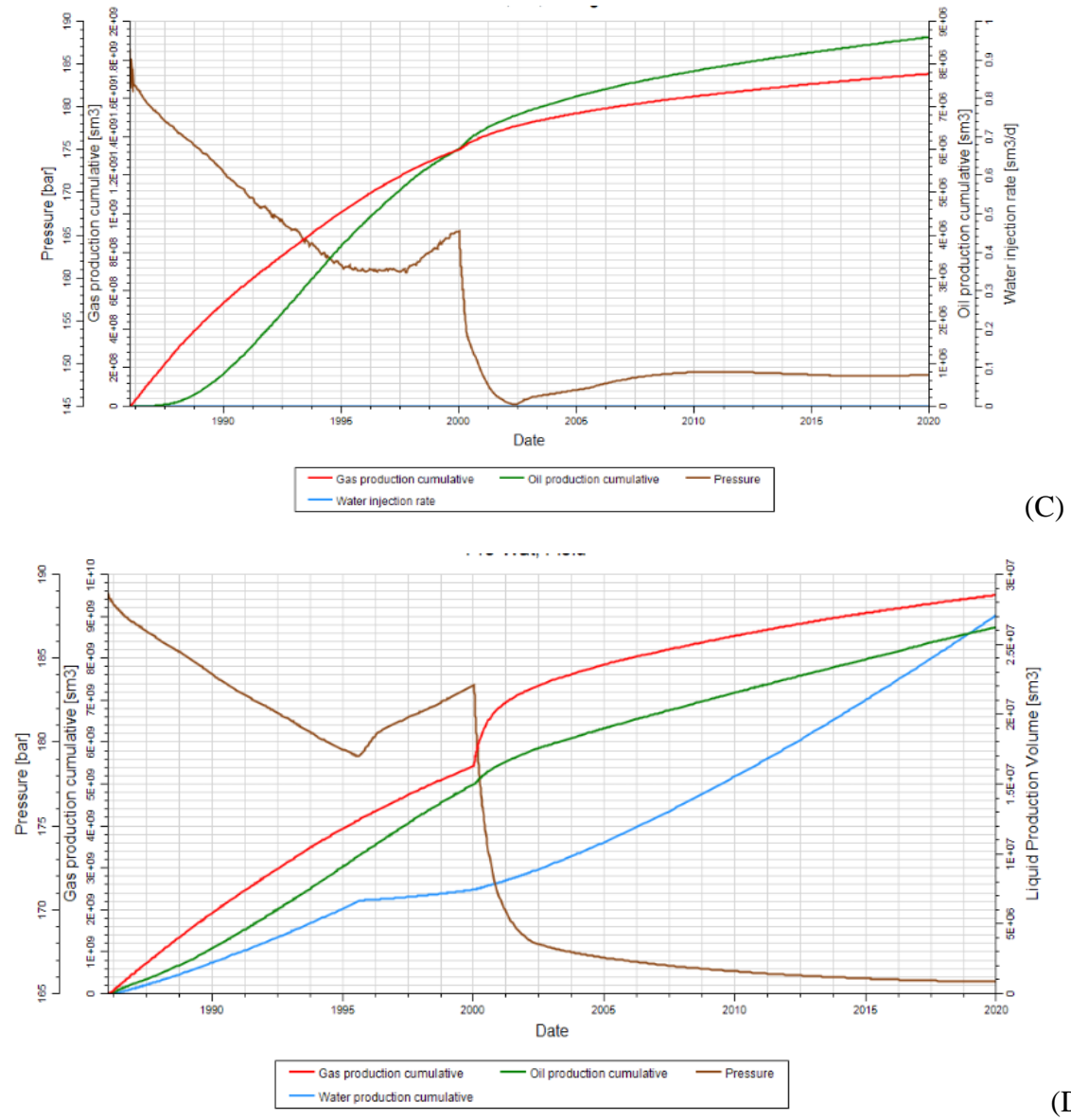


Figure S5: Cumulative production of: (A) well A10, (B) well B2, (C) well B9, and (D) the field until 2020.