# American Military Geology in World War I 1917-1918



# OUTLINE

#### Background

- Americans in Theater
- On the American Front
- Questions
- Conclusion



### BACKGROUND

- No early involvement by allies
- Germans use geologists
- Mid 1915 allies think about geology
  - water supplies
  - mine/countermine operations
  - hydro mapping



#### Americans in Theater (1 of 3)

- Mine warfare mostly over
- American Expeditionary Force
  - Assigned 10 geologists
  - 27th Engr Spec Mining Regiment
  - 26th Engr (water supply)

#### Americans in Theater (2 of 3)

#### LTC Alfred H Brooks

- USGS worker
- Organized geological effort
- Office of Chief Engineers, Trans
- Engineering Intelligence

#### Staff Impacts

- Topo maps, 5mm maps in 5 months
- First US use of aerial photo maps
- Annex for Meuse-Argonne Offensice



#### Americans in Theater (3 of 3)

#### 27th Engr Spec Mining Regt

- 6 x 250 man companies
- Western "hard rock" miners preferred
- Horizontal construction, bridging, quarrying

#### 26th Engineers

- 1500 troops in 7 companies
- Oil Drillers
- Artesian well (4mil gpd) at Bordeaux



#### On the American Front (1 of 2)

#### National Research Council

- R.A.F. Penrose "What a geologist can do in the War"
- 43% of Army Training Corps schools had no geology courses
- Only 12% beyond introductory
- Incorporated as an elective



#### On the American Front (2 of 2)

#### U.S Geological Survey

- Locating and developing evergy
- Oil in Oklahoma
- Natural gas in W. Virginia
- Worked with U.S. Bureau of Mines
- War Industries Board
- War Finance Committee



# CONCLUSION

### "I did not realize that geology had anything to do with military mining."

## BGEN R.N. Harvey Inspector of Mines (English) 19 May 1919

