

What is the contribution of oil from the 7-year strip mining operation at PR Springs to the daily oil consumption of the United States?

Daily consumption of oil per day in USA is 19.5 million barrels. A barrel of oil holds 42 gallons. Total consumption per day is 819,000,000 gallons.

PR Springs' daily production is 2,000 barrels or 84,000 gallons. The life of the project is 7 years (350 days per year). Annual production is 29,400,000 gallons. Seven-year production is 205,800,000 gallons.

819,000,000 (daily USA consumption) divided by 205,800,000 (PR Springs total contribution) = 4 (or 1/4 of the total).

4 into 24 (hours) = 6 hours

Two of those six hours will be consumed by operations at PR Springs, therefore the adjusted contribution to the domestic oil supply is a mere 4 hours.

What is the water consumption for the 7-year strip mining operation at PR Springs?

Assuming 2 barrels of water are used to make 1 barrel of oil, which does not include water necessary for fugitive dust control.

Total daily consumption of water is 4,000 barrels or 168,000 gallons, which is almost 1/2 of an acre-foot of water.

An acre-foot is 325,851 gallons

1,176,000 gallons per week

58,800,000 gallons per year (50 weeks (minus holidays))

411,600,000 gallons for 7 years

1,263 acre-feet total water consumption for the opening project of 62-acres (North Pit)

20.4 acre-feet of water for each acre of surface mining.

Earth Energy Resources has 5,930 acres leased for strip mining operations.

120,972 acre-feet is total estimated water consumption for the 5,930 acres of strip mining operations.

It is highly unlikely that there is 121,000 acre-feet of ground-water available under the PR Springs area. It likely means the seeps in the area will run dry and impact plant and animal communities.

Additional information:

The Governor's Energy Task Force announced in Salt Lake City (2010) that Utah's proven reserves include 286 million barrels of petroleum and 6.7 trillion cubic feet of natural gas. The United States uses 20 million barrels of oil per day, which means Utah's oil supply can run the nation's economic engine for about 2 weeks. The consumption of natural gas in the USA is 22 trillion cubic feet per year, which means Utah's gas reserve will last the nation about 3.5 months.