

# Rapid photochemical Production of A Ozone at High Concentrations in a Rural Site During Winter

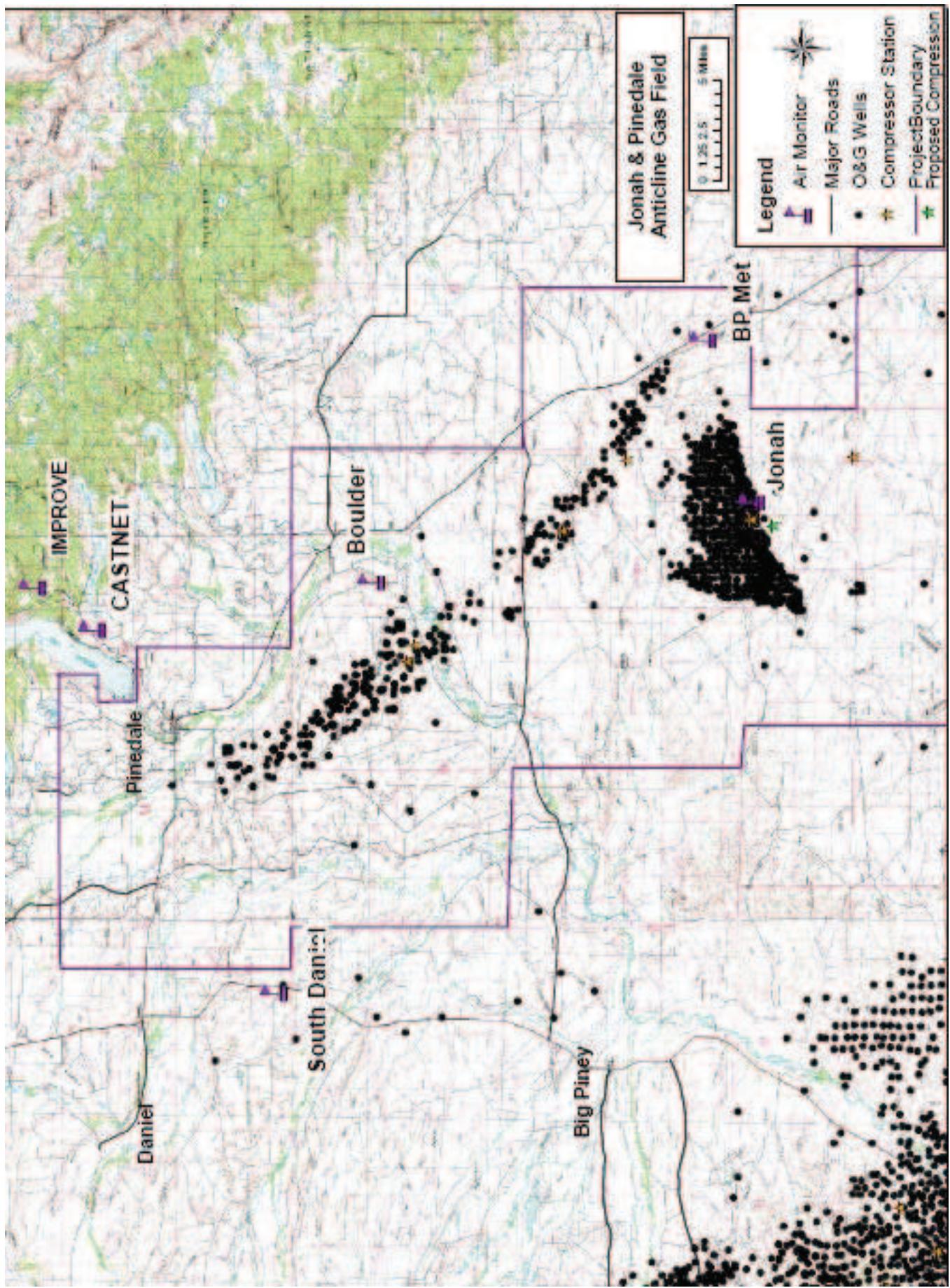
Russ Schnell, Sam Oltmans, and Ryan Neely<sup>1</sup>, Maggie Endres<sup>2</sup>, John Molenar<sup>3</sup> and Allen White<sup>1</sup>

<sup>1</sup>NOAA, Earth System Research Laboratory, Boulder, CO 80305

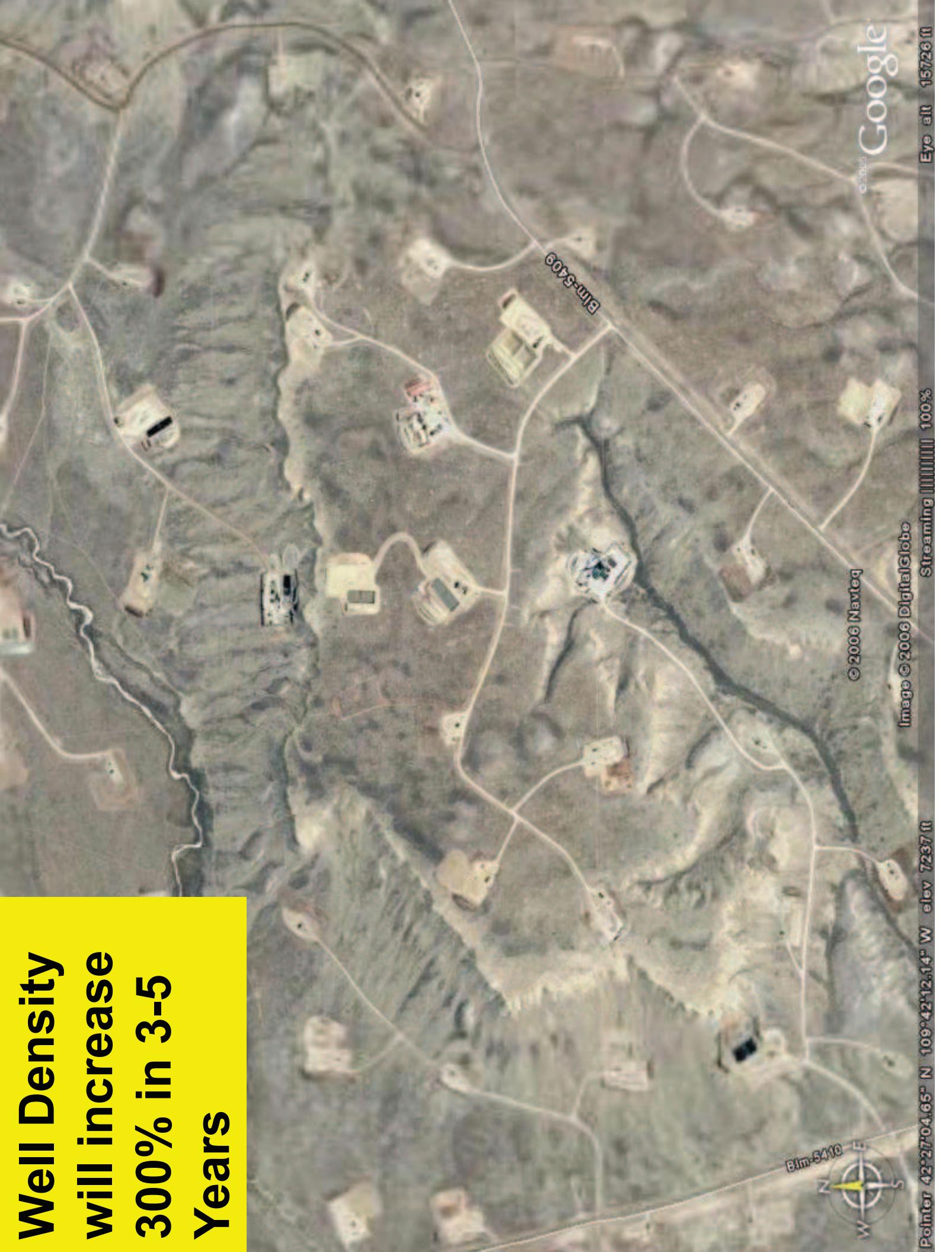
<sup>2</sup>Wyoming Department of Air Quality, Cheyenne, WY

<sup>3</sup>Air Resource Specialists, Fort Collins. CO

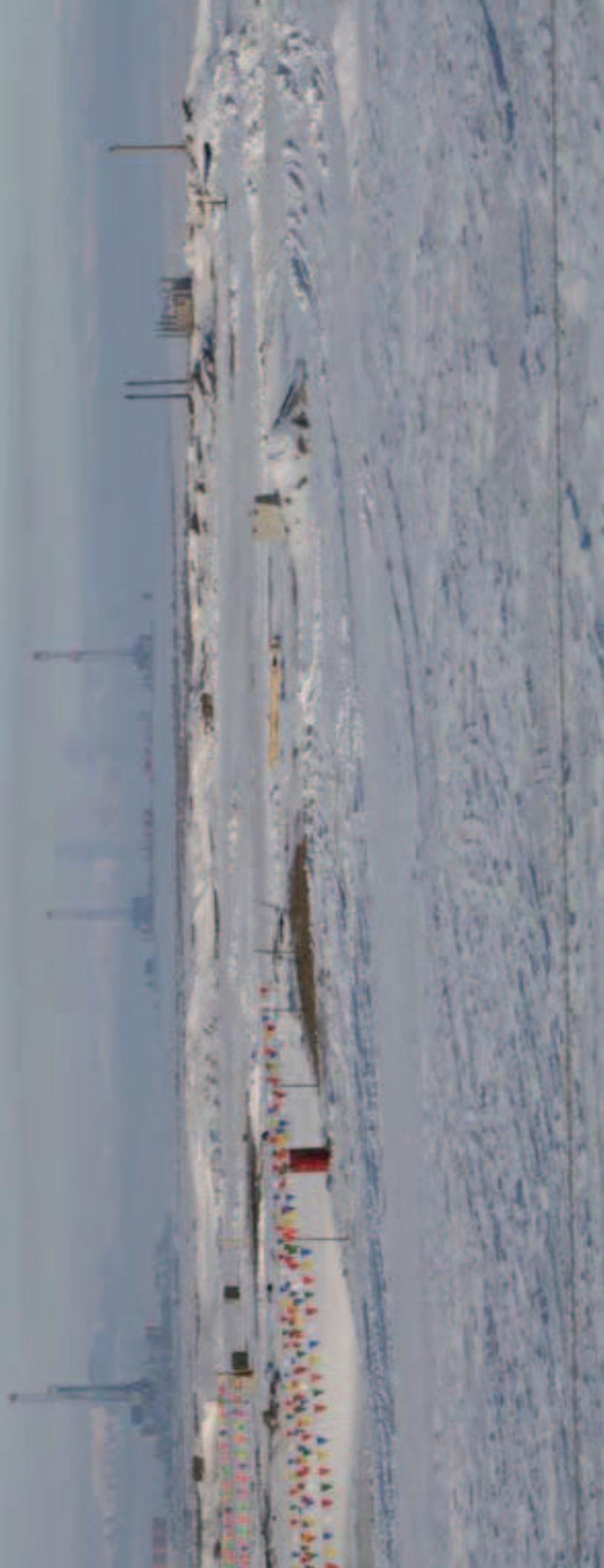
# Pinedale Anticline, Jonah, Wyoming



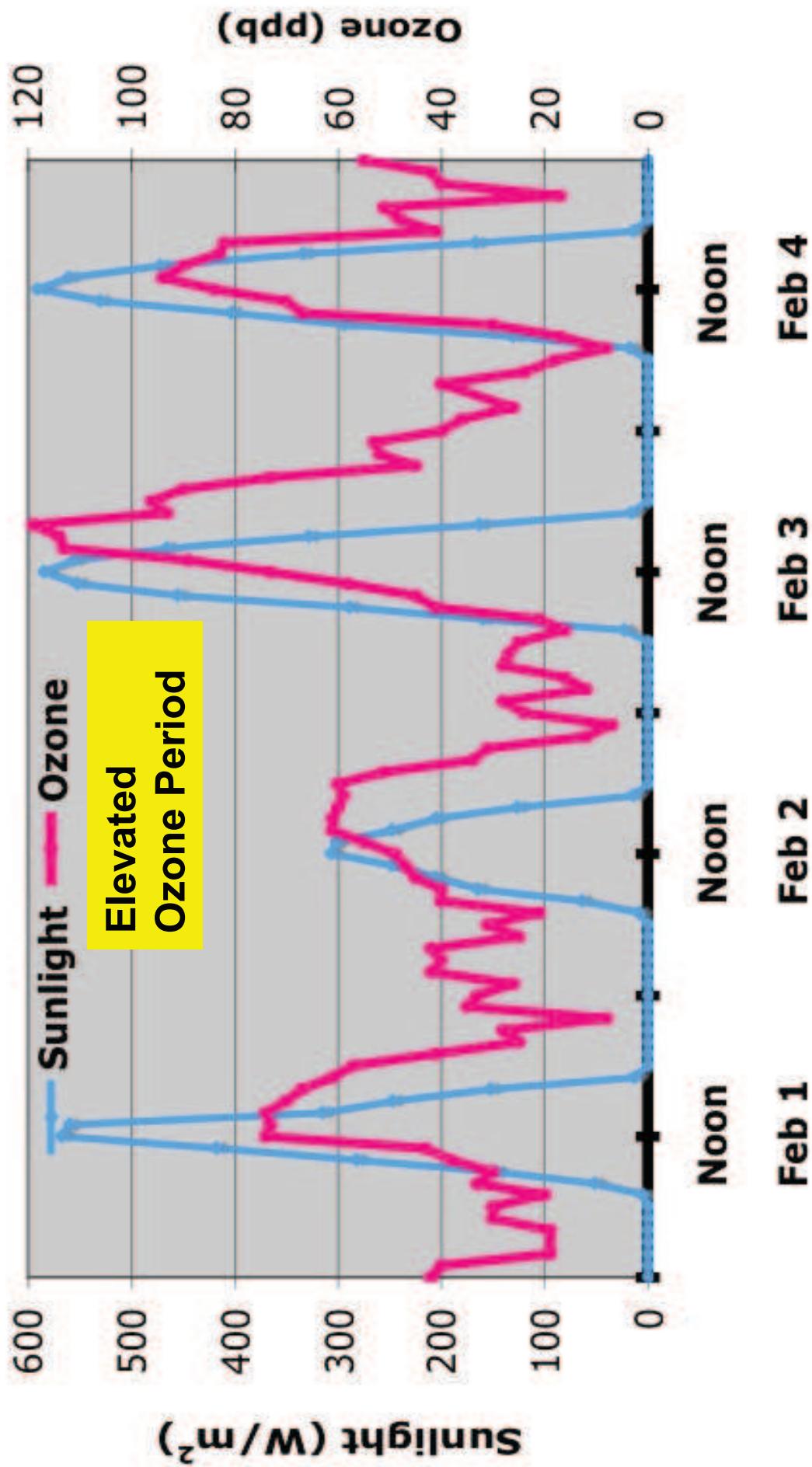
**Well Density  
will increase  
300% in 3-5  
Years**



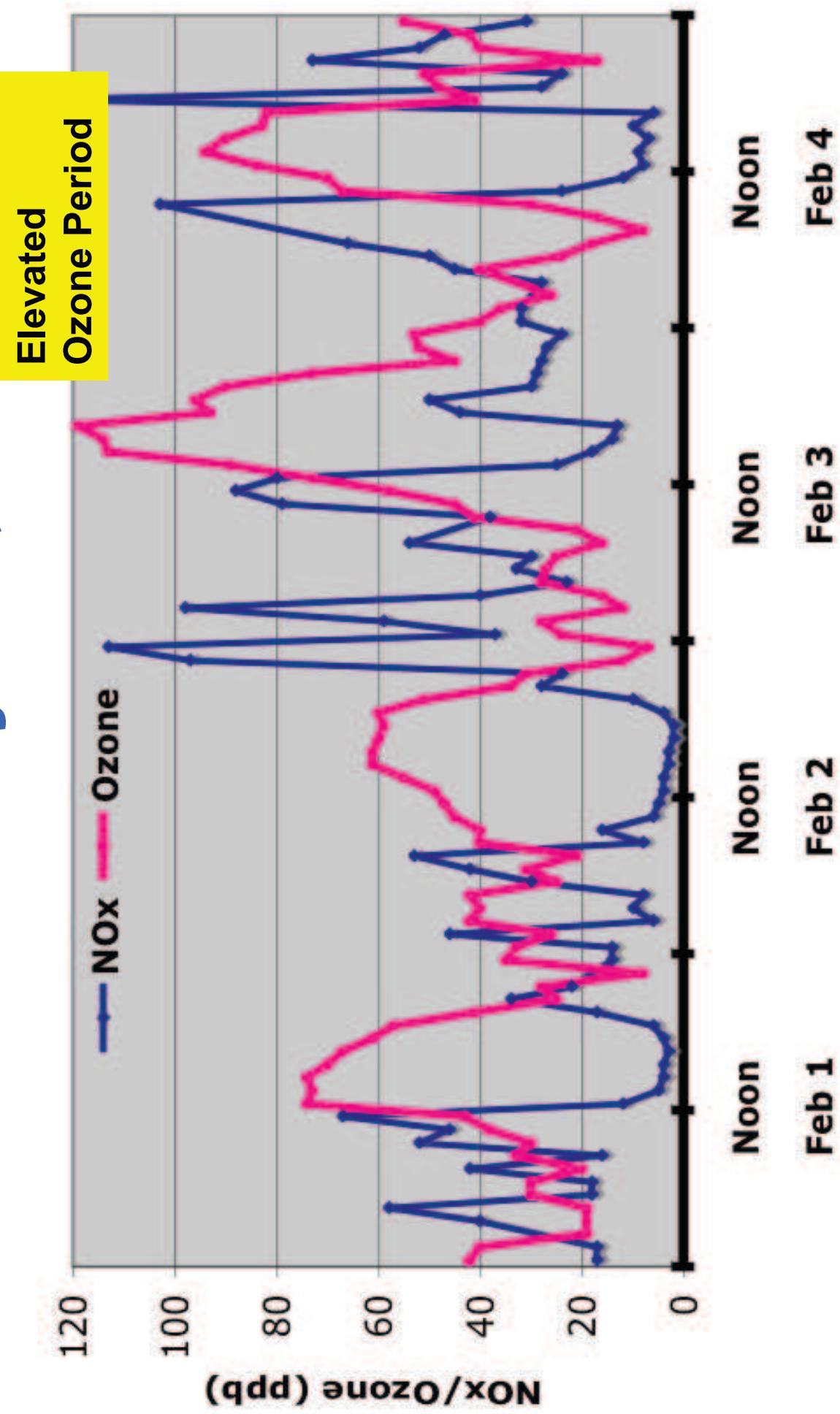
**January 2, 2008, During  
Ozone Formation Period**



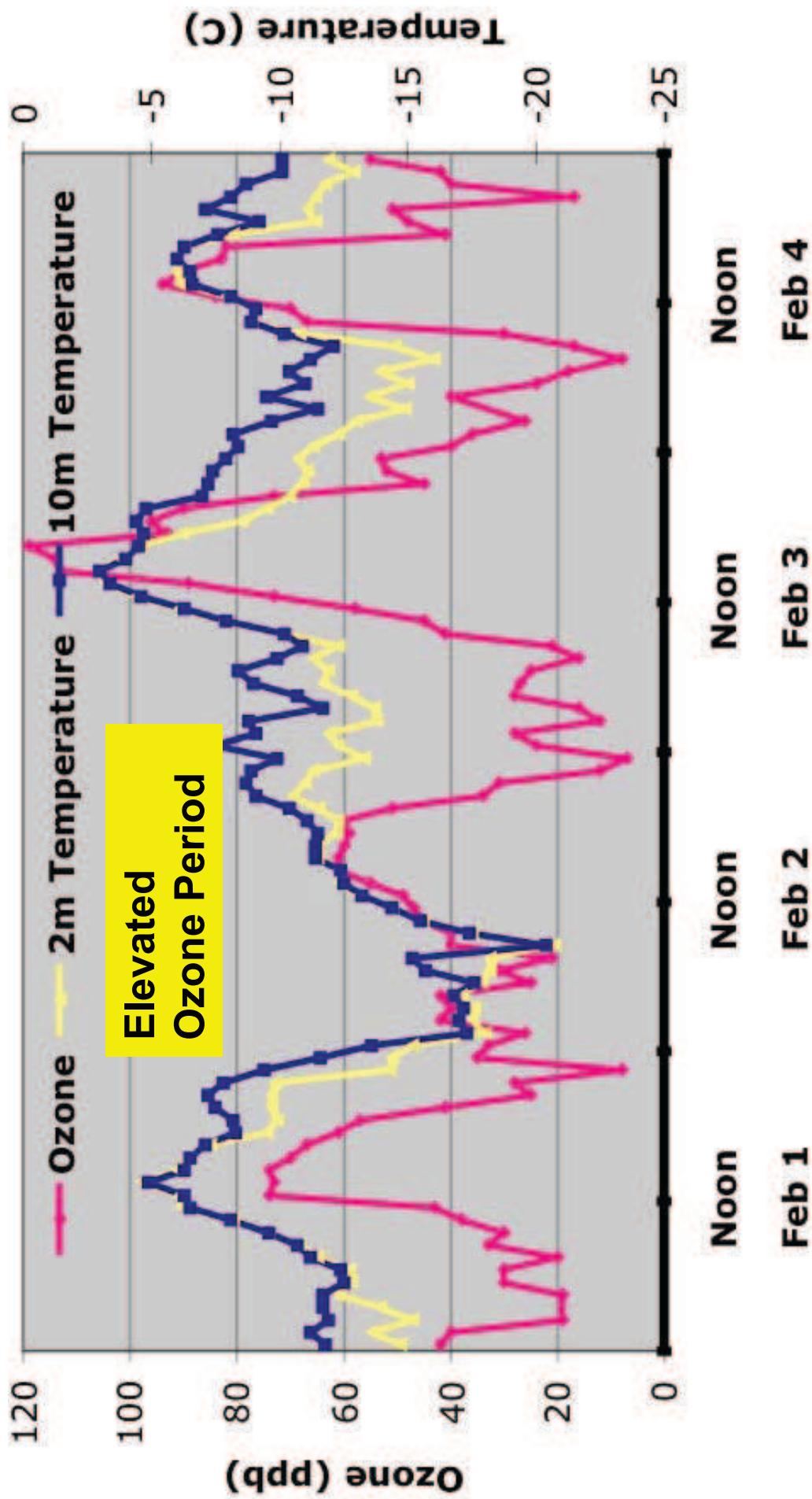
# Solar Radiation and Ozone, Jonah, February 1-4, 2005



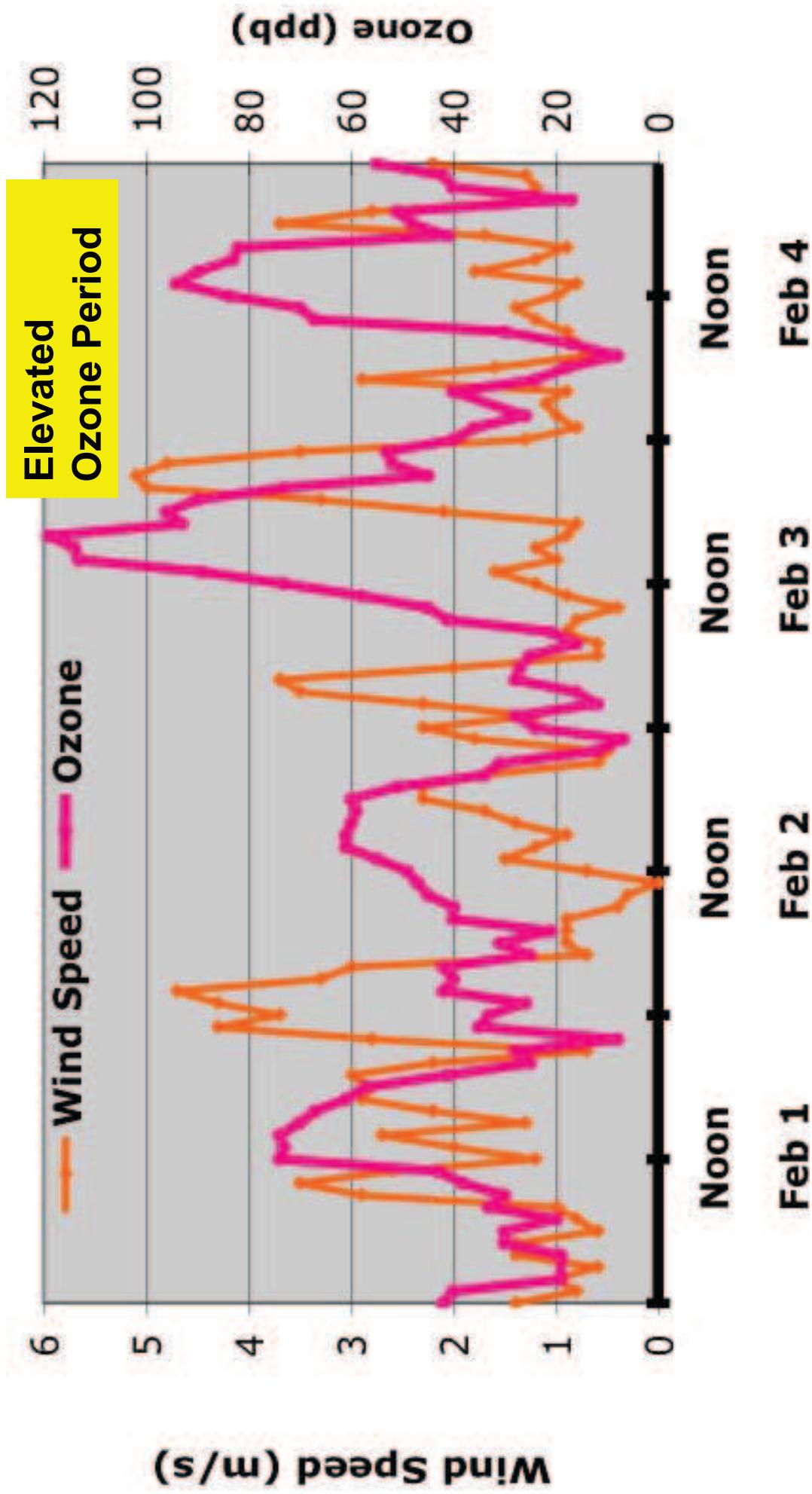
# Ozone and NO<sub>x</sub>, Jonah, February 1-4, 2005



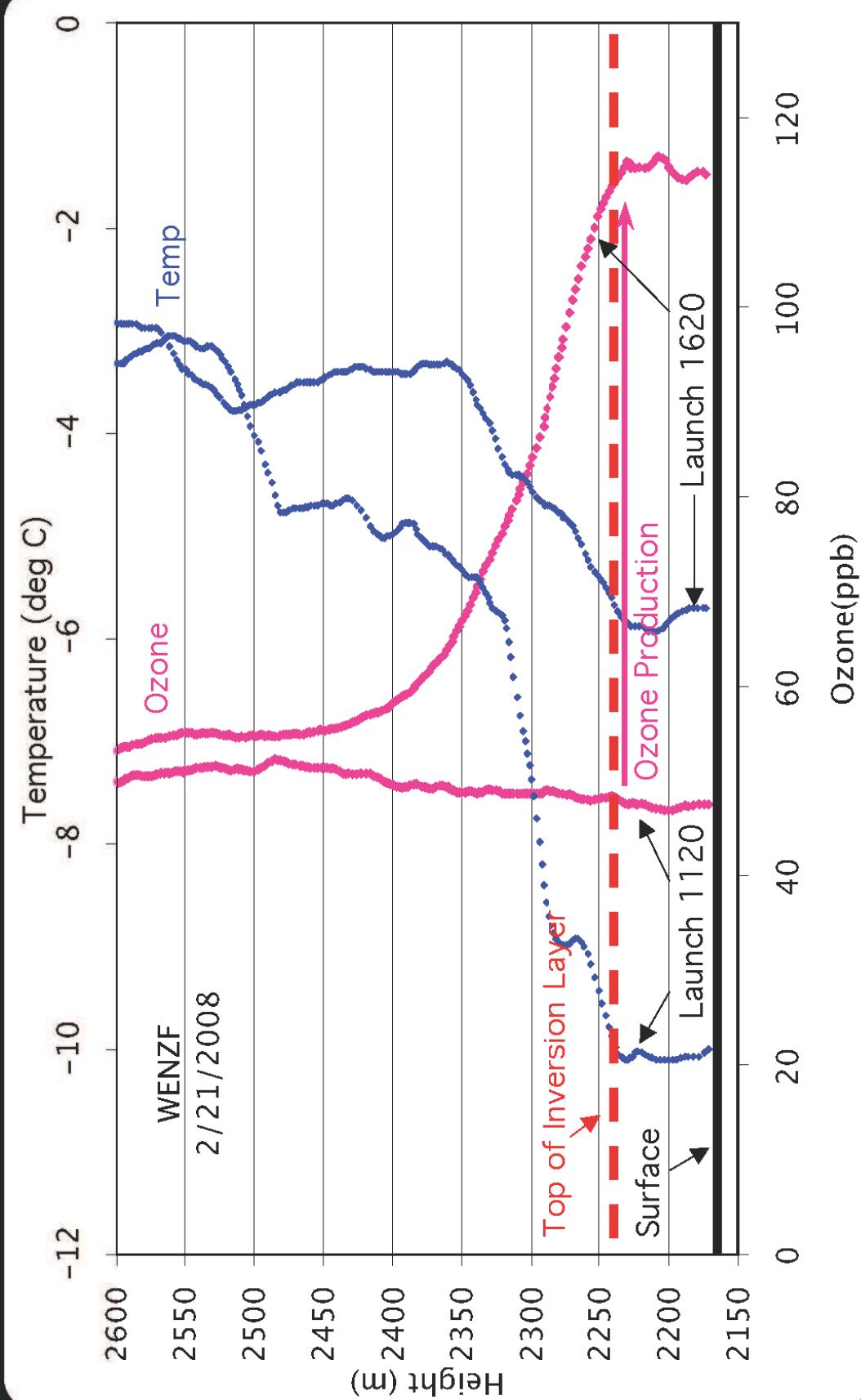
# Ozone and Temperature, Jonah, February 1-4, 2005



# Ozone and Wind Speeds, Jonah, WY, Feb 1-4, 2005

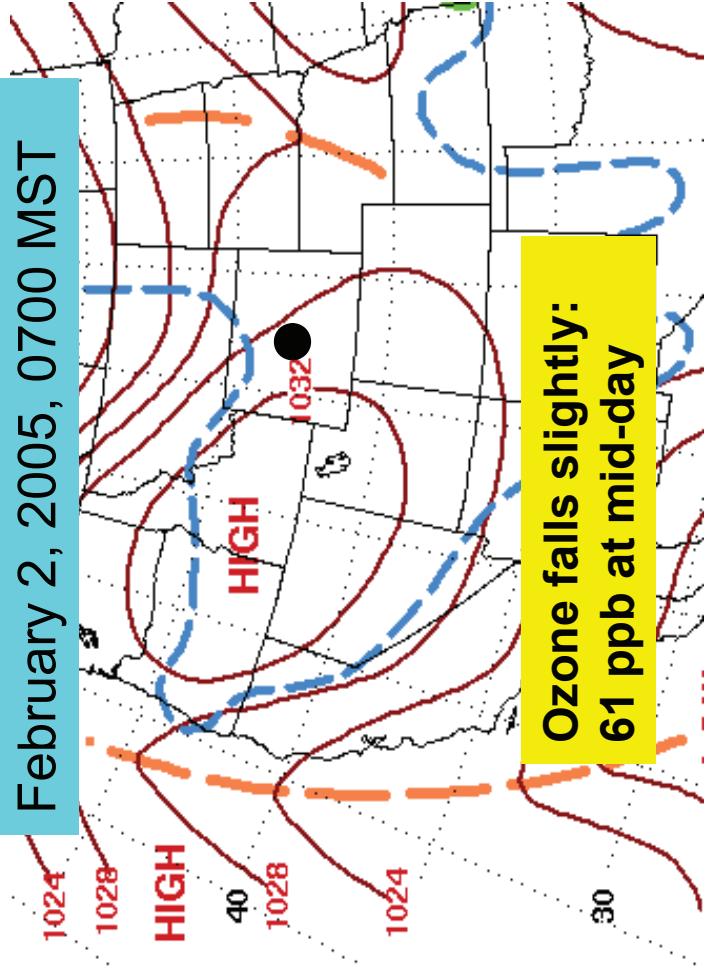


# Ozonesondes

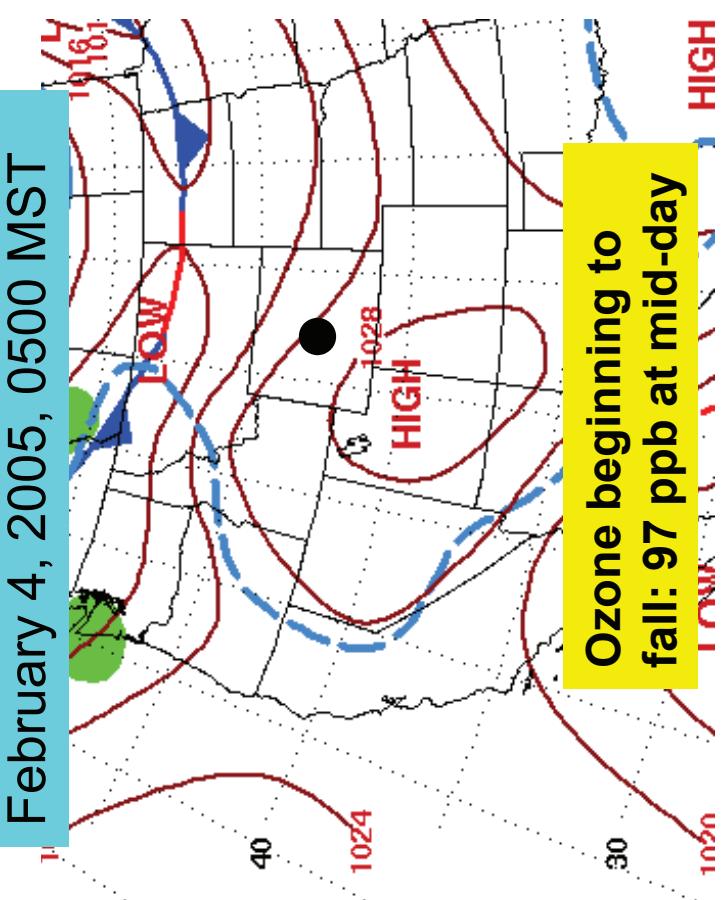


February 1, 2005, 0700 MST

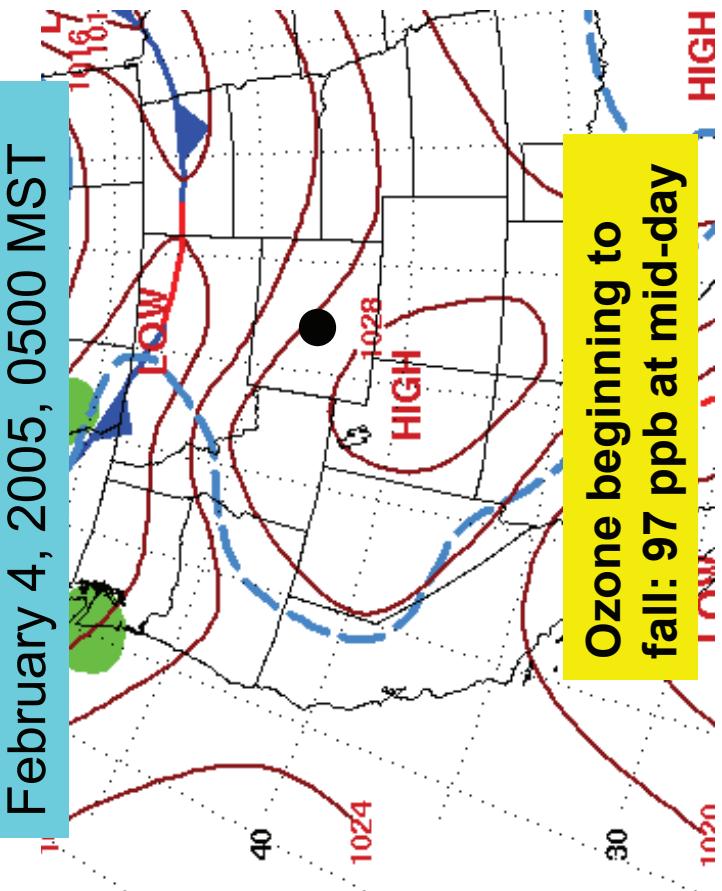
February 2, 2005, 0700 MST



February 3, 2005, 0700 MST



February 4, 2005, 0500 MST



# Economics Of The Jonah Gas Field

- The 30,000 acre Jonah gas field, 30 miles south of Pinedale, Wyoming, is estimated to hold 10 trillion cubic feet of natural gas.
- The field presently produces enough gas to serve 3,000,000 U.S. homes per year.
- In 2007, the Jonah Field produced natural gas revenues in excess of \$8 billion.
- The value of the gas to be extracted from the field over 40 years is calculated to be in excess of \$60 billion (2005 prices).

**Thank You for  
Hanging In Until  
the END!**

