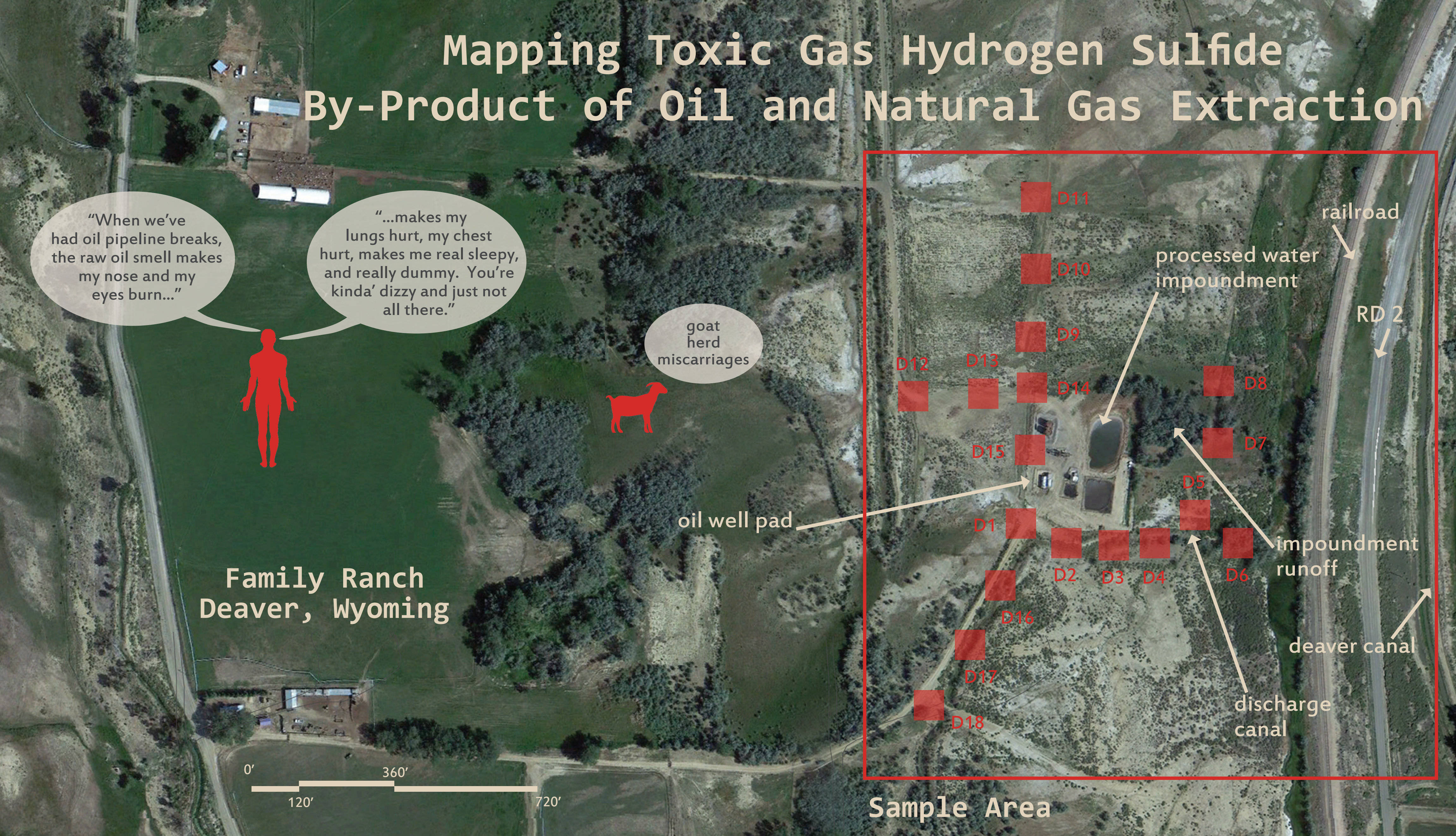


Mapping Toxic Gas Hydrogen Sulfide By-Product of Oil and Natural Gas Extraction



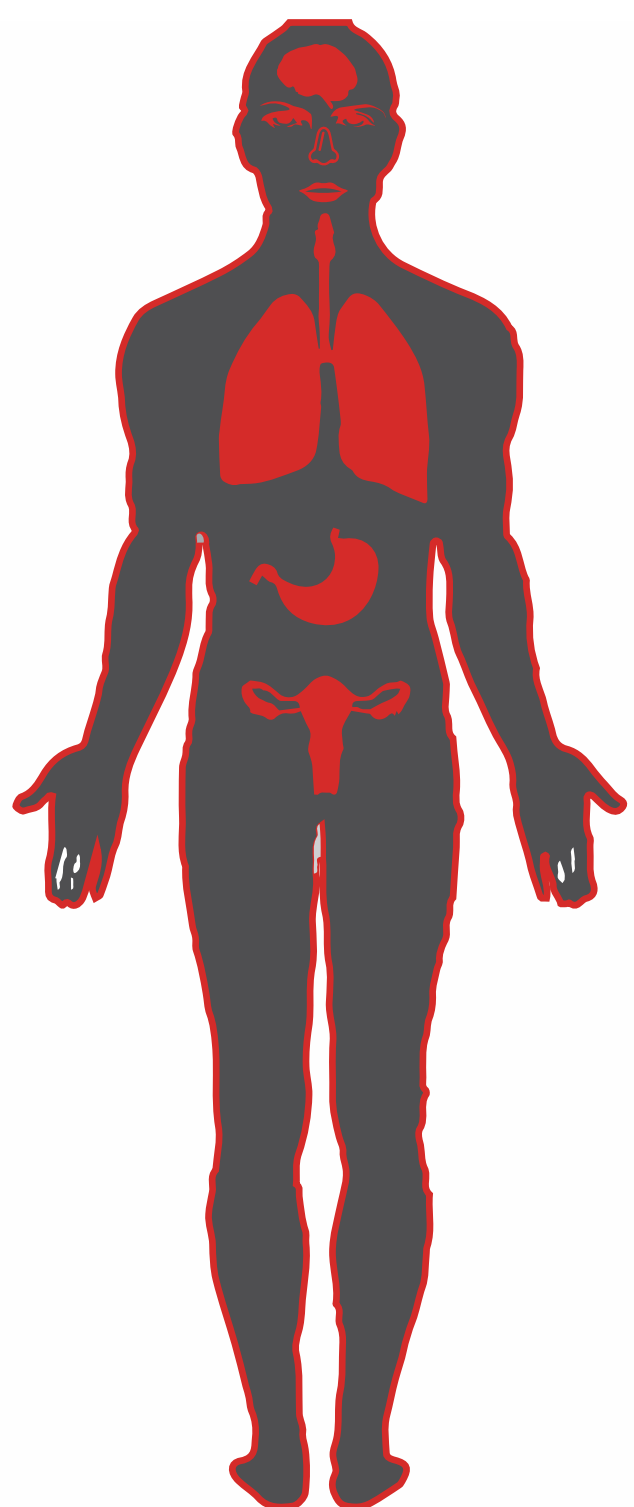
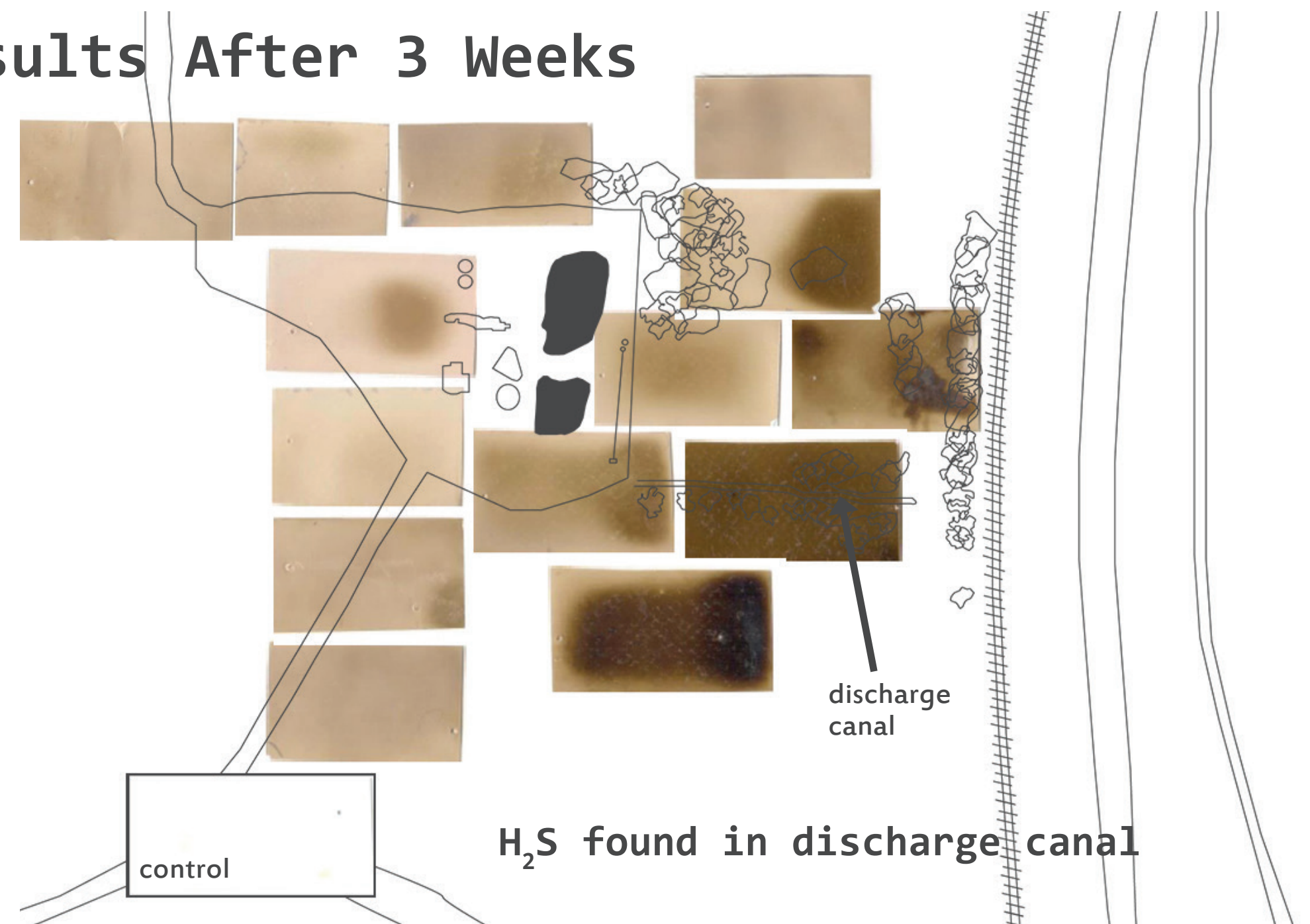
What is H₂S?

Hydrogen sulfide is an impurity that must be removed from oil or natural gas through desulfurization in oil refineries and natural gas “sweetening” plants. Natural gas containing hydrogen sulfide is commonly referred to as “sour gas” (Skrtic, 2006)

Results After 1 Week

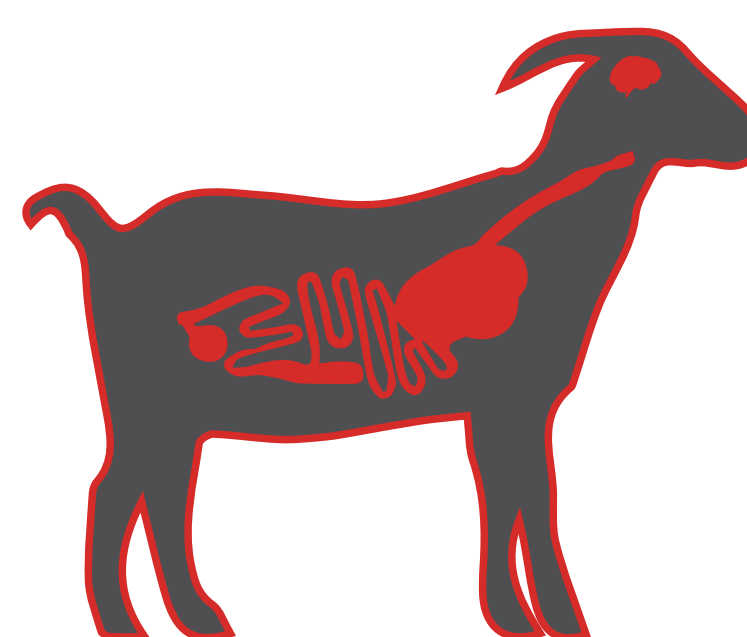


Results After 3 Weeks



- Neurological**
headaches, dizziness, drowsiness, depression, memory problems, seizures, death
- Eyes**
conjunctivitis, pain
- Nose**
irritation, nose bleeds, loss of sense of smell
- Throat**
irritation, ulcers, coughing, cessation of respiration
- Respiratory**
irritation, coughing, cessation of respiration
- Circulatory system**
slow pulse rate
- Stomach**
loss of appetite, neausea, vomiting
- Reproduction**
increases in spontaneous abortions
- Skin**
irritation and rashes
- Immune system**
glandular swelling
- Limbs and body**
pain, leg swelling

Adverse Health Effects of H₂S Exposure in Humans and Animals



- Neurological**
abnormal gait, convulsions
- Respiratory**
irritation, labored breathing
- Intestinal**
weight loss, neausea, vomiting
- Reproduction**
toxicant, increase in spontaneous abortions
- Skin and Hair**
irritation, hair loss

Sources |

EPA Toxicological Review of Hydrogen Sulfide, June 2003
Breathe at Your Own Risk. Powder River Basin Resource Council, June 2014
Skrtic, L. (2006). Hydrogen Sulfide, Oil and Gas, and People’s Health. Energy

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Partner Organizations |

Powder River Basin Resource Council
Clark Resource Council
Pavillion Area Concerned Citizens

