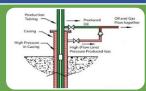
# **Vent Gas**





#### What is it?

- AKA Solution Gas, Associated Gas, Casing Gas and Excess Gas
- •It is natural gas that exists in oil formations
- •The primary component is methane but trace amounts of other gases and liquids may be present



### Why do we need to deal with it?

- For oil to flow into a well the pressure must be less than that of the oil formation
- •As oil is pulled into the well Associated gas comes out of solution into the casing
- •Historically, excess gas was typically vented to atmosphere. This practice is harmful to the environment. It is estimated that vented methane has a Greenhouse Effect over 25X that of CO<sub>2</sub>.
- •While venting still exists, use of flares/combustors to burn off excess gas is becoming more prevalent in our region. Although combustion is better than venting, it is still a waste of a usable resource.
- A typical oil well not conserving the gas may vent or flare enough gas to heat 100 homes (or more!)



#### What are the rules

- •The Alberta Energy Regulator (AER) Directive 60 governs venting and flaring
- •Limits are specific to the type of facilty and are subject to certain exemptions
- As a general rule the following limits apply to oil wells:
- •Vented Gas 15,000 m3/month/site
- •Flared Gas 900 m3/day/site\*
- \*For flared gas this limit requires produers to evaluate conservation of the gas based on defined criteria. The results of this evaluation often allow flaring/combusting in excess of the limit



## What can the County do about vent gas?

- •The County works with producers to use our gas distribution system to gather and utilize excess gas
- Currently 2 of the 3 million GJ's of gas moved through our system annually are local excess gas
- A majority of that gas is moved between wells producing/requiring gas and a small portion is combusted
- Up to 300,000 GJ/year is currently purchased and utilized to supply our residential, agricultural and commercial customers
- •The County Gas Utility's gathering efforts help to improve the environment and provide economic benefits to our County through increased local oil and gas production



# What are the challenges?

- Gas quality, pressure, infrastructure, and seasonal consumption are all challenges that the County and Producers face in utilizing excess gas
- •To utilize excess gas on our residential systems gas needs to be of sufficient quality and pressure
- •To be an effective method of conservation for the Producers it needs to be economical and consistent throughout the year



# What can the I do about vent gas?

- As a landowner or resident, you can ask Producers about current or planned conservation of excess gas at wells on your property/in your area, and whether they have contacted the County for options
- •If you believe that a prodcuer is not compliant with Directive 60, we encourage you to first contact the Producer.
- Additionally you can contact the Alberta Energy Regulator (403) 297-8311 | inquiries@aer.ca; Or
- •The County Gas Utility (780) 846-2222 | gasut@county24.com