An optimized plunger lift well is:

- A well where no liquid accumulates in the tubing more than would prevent minimum Shut In and maximum After Flow.
- Where you lift the entire slug from the tubing each cycle.
- It should have the lowest casing pressure possible.
- Maximum consistent production possible by unloading the well as thoroughly as possible.
- Maintain decline curve before loading.
- Whatever fluid and gas that comes in we take out.
- A well where when the plunger reaches bottom it immediately starts back up with a velocity that is not so slow that the plunger is inefficient and the after flow is maximized so that the liquid slug yields that target velocity.

Where should we end after flow or where should we shut in the well?

- We should shut in on number that starts at critical velocity and is incremented or decremented by comparing plunger velocity or time to a target.

Where should we open the well?

- We should open as soon as the plunger reaches bottom or if the well does not have enough energy we should use Faus and Gaul to indicate when minimum energy is reached to attain a plunger arrival.

Comments:

- Many vendors supply every option possible because the customers demand many different options.
- Vendors are not allowed adequate feedback to the operating companies.
- Operators do not have common approaches.

Conclusions at this time!

- A Plunger well should close based on a calculated Coleman multiplied by a multiplier that moves up and down based on the previous plunger speed.
- A plunger well should open as soon as the plunger reaches bottom or if it does not have enough energy because the well is depleted then it should open on a Faus and Gaul ratio.
- It is preferred to use a quick drop plunger if the well will support it which means minimal Shut in time.