DESCRIPTION

- Small explosion/fire at extraction well operated by 3rd-party contractor
- Prior to explosion/fire:
  - PLC upgraded
  - Well cleaned and casing ventilation modified
  - Pump replaced
- Due to PLC issue, well was run in manual mode for ~4 weeks
- Explosion threw door 88 feet and fire destroyed well house

CAUSE OF EVENT

- Flammable atmosphere from naturally occurring flammable gases in well
- Corroded well casing released flammable gases into well house
- Insufficient ventilation of well house allowed accumulation of flammable gases in well house
- Lack of control of ignition sources in well

LESSONS LEARNED/GOOD PRACTICE

- Well casing replaced
- Well house redesigned for potential flammable gases from well
- Well house ventilation system added to site Asset Integrity program