



CASE STUDY

IPT Engineers Designed, Procured and Installed Production Equipment for a Four Oil Well Pad in Morgan County, Colorado

IPT reviewed offset wells in Morgan County, Colorado for a new four well oil production project and concluded gas lift would be the primary artificial lift mechanism.

IPT designed, procured, and installed production storage/metering, gas lift compression equipment and designed and installed high line electrical equipment for the project. The client requested that the production equipment installation be completed once the four wells were drilled and completed.

THE CHALLENGE

IPT was contracted to design and install a production storage facility within a client specified timetable with installation of equipment during the winter months.

THE APPROACH

IPT engineers reviewed estimated oil production from offset wells and concluded gas lift would be the primary artificial lift mechanism for the new four well pad. Engineers also reviewed oil production from offset wells and designed suitable production facilities for storing, metering and offloading oil to truck tankers.



THE SOLUTION

IPT sourced four used two staged high-pressure separators, four refurbished stock tanks, new heater treater and external combustion device (ECD), two new vapor recovery units (VRUs) and one gas lift compressor. **Refurbishing used equipment to current industry standards, where necessary, saved costs and reduced the critical path timeline to complete project.**

The installation of equipment was performed as a SIMOPs operation during drilling and completion operations, and a safety compliance procedure bridging document was completed and enforced during operations to ensure safety procedures were followed by both the drilling/completion contractors and production equipment installation team. Underground flowlines were installed between drilling and completion operations. Sound and wind walls were constructed around the compression equipment to reduce sound transfer and shield equipment from winter weather.

Once production operations commenced, more water was being produced than offset wells had estimated. **IPT conducted a series of tests, reviewed cost economics and recommended a second gas lift compressor be installed.** IPT sourced and installed a second compressor and well performance improved with increased gas, oil and water from all four wells.

THE RESULT

The client's timetable and cost estimate were fulfilled six days before completions operations were completed, which resulted in production operations commencing at the end of well completion operations.



ABOUT IPT WELL SOLUTIONS

IPT Well Solutions is an independent engineering consulting and wellsite supervision firm in business for 30 years. We serve clients in oil and gas, municipal and industrial wastewater, and carbon capture & storage.