

# Abandonments

## Challenges

Creating process efficiencies without impacting safety and quality, to reduce overall project costs

## Solution

Contract the project to a company that has:

- The expertise in programing and project management
- The system to effectively manage the processes
- The equipment and personnel to successfully perform the work

## Result

- 35% reduction in costs to the client's budgeted estimates
- Minimal management time for the client
- Project completed within the client's required deadline

## 3 Well Abandonment Project as Prime Contractor

Capstone Abandonments completed a 3-well project with a fixed lump-sum cost for a client in Q1 2018. Capstone operated as a Prime Contractor for the project, managing all field operations and services. Capstone completed the project within the client's required timeline with no safety or environmental concerns. Execution challenges did not impact the client's cost.



## Project Information

### Client had an AER abandonment deadline

- Spring breakup approaching
- Partner approvals required

### Well data available was challenging

- Wells were drilled >25 years ago and shut-in for an extended duration
- Limited information on downhole tools
- ~1200m oil wells with single, and dual-zone completions

## Execution Challenges

### Weather

- Spring breakup approaching added risk of site access and road bans

### Downhole equipment and well unknowns

#### Retrievable packer

- ~25-year-old packer unset but would not pull out of the hole
- Required to drop at PBTD

#### Undocumented standing valve in the tubing

- Required additional time and services to pull tubing string out of hole

### Equipment problems

#### Rig radiator hose failure

- Fluid contained in standard spill trays with no site contamination
- 2.5 hours of NPT to repair unit

**Capstone Abandonments completed the project as prime contractor - on schedule, on cost, and without EHS incidents. Capstone reduces client requirements and provides cost certainty.**

## Estimate vs Actual

### Time

- Estimate: 59 hours
- Actual: 61 hours

### Client Cost

- Less than 4 hours employee project management time needed
- 65% of budgeted cost
- Invoiced amount exactly as quoted prior to project

## Client Wins

### Time

- Capstone completed project within client required deadline
- From initial consultation to project complete inside of 1 month

### Minimal Management by Client

#### Capstone operated as a Prime Contractor

- Single client permit required
- No client site supervision
- Client not required to manage third-party services
- Reduced ticket and invoice processing
- Capstone provided end of well reports

### Cost Saving - Fixed Price

- 35% below internal estimate
- Invoiced amount did not change with encountered Execution Challenges
- \$6,200 per well of execution risk removed

