

COPPER TIP ENERGY SERVICES



Well Services

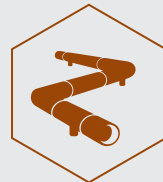
Copper Tip Energy Services provides a wide range of down-hole services with coiled tubing, fluid pumping, nitrogen pumping, and acidizing treatments.

Copper Tip's greatest strength is our skill and expertise of our team. Each well services project is subject to a thorough analysis by our team of highly skilled and experienced engineers. This includes force analysis and hydraulic modelling for each coiled tubing job, as well as programs for acidizing applications.

Each piece of equipment is built with real-time data tracking for the client to monitor the well response to treatment and make immediate changes to optimize performance.

Applications

- Coiled Tubing for Fracturing Operations
- Acidizing and Production Enhancement
- Well Displacements and Injection Testing
- Snubbing Support
- Differentially Stuck Drill Pipe
- Wireline Tool Pump Down
- Well Treatment: Annular Fluid Level Depression
- Coiled Tubing Milling Operations
- Coiled Tubing Cleanouts
- Coalbed Methane Fracturing
- Confirmation Runs
- Coiled Tubing Fishing
- Coiled Tubing Pipeline Applications
- Diagnostic Fracture Injection Test (DFIT)
- Pump Down Support



Process and Pipeline Services

Copper Tip's specialized team of professionals are dedicated and highly experienced in process and pipeline applications. Whether it is a small project, or a complete plant turnaround, Copper Tip's Process and Pipeline group can put together a cost-effective solution for any project. Copper Tip has a dedicated engineering department located in Edmonton, AB that can provide detailed job procedures and estimates for process, pipeline, and industrial pre-commissioning and commissioning services.

We have the people and equipment necessary to execute any project in a manner that is safe, efficient, cost effective and timely.

Applications

Nitrogen Services:

- Nitrogen purging and displacement (LEL and oxygen freeing)
- Plant turnarounds
- Accelerated cool-downs
- Nitrogen drying and preservation
- Hot nitrogen services and catalyst regeneration
- Pneumatic testing
- Product displacements
- Pipeline pigging

Compressed air services:

- Air blows
- Drying pipelines and systems
- Pneumatic testing

VAPOUR PHASE CHEMICAL CLEANING



FLAMELESS NITROGEN PUMP



DIRECT FIRED NITROGEN PUMP



TWIN FLUID PUMPING



FRAC FLUID PUMPING



ACID BULK TRAILER



NITROGEN TRANSPORT



NITROGEN TUBE TRAILER



COILED TUBING



Equipment

FLAMELESS NITROGEN PUMP

A flameless heat source eliminates potential ignition source and harmful emissions. Our equipment has the ability to deliver flow rates from 2 – 80 Sm³/min (70 – 2800 SCF/min), with discharge temperatures ranging from -20 – 60°C (-4 – 140°F) and pressure capable up to 70 MPa (10,000 psi).

DIRECT FIRED NITROGEN PUMP

A direct fired heat exchanger combines the benefits of a wide range of nitrogen flow rates (30 – 350 Sm³/min) (1050 – 12300 SCF/min), temperatures (-20 to 350°C) (-4 – 660°F), and pressure (Max 70 MPa) (Max 10,000 psi). Our high rate nitrogen pumps offer excellent solutions for service lines including but not limited to frac support, accelerated cool-downs, high pressure/large diameter pipeline displacements, in-line inspection tool runs, and hot nitrogen services.

FRAC / TWIN / SINGLE FLUID PUMPS

Copper Tip owns a wide range of fluid pumps to be able to accommodate various work scopes. This fleet of fluid pumps range from Singles to Frac Pumps that are equipped with 2500 hp continuous duty pumps. Copper Tip's fluid units are also equipped with mobile data technologies acquisition systems which are used to record fluid and nitrogen flow rates, pressures, and cumulative volumes.

NITROGEN TRANSPORT

Copper Tip Energy provides a fleet of nitrogen transports to deliver continuous nitrogen supply to support all of our service applications. This includes on-site storage with nitrogen capacities of up to 75,000 Sm³ (2.6 million SCF) for any project requiring large amounts of nitrogen.

NITROGEN TUBE TRAILER

Tube Trailers can provide a cost effective solution for a customer requiring nitrogen supply over a short or extended period, and these units can be manned or unmanned. Depending on the project, tube trailers can be advantageous and a versatile solution for a wide range of applications such as SAGD enhanced oil recovery, wireline operations, facility maintenance, pressure testing, pipeline purging, testing well head isolation plugs, accumulator charging, etc.

COILED TUBING

Coiled Tubing uses a continuous length of steel pipe spooled onto a large diameter reel to quickly convey tools and circulate liquids and gases into and out of a pressurized well. Copper tip energy is capable of supporting well bore's with 3 - 4 mile horizontal sections, and have units capable of holding 30,000 feet of 2 3/8 custom tapered strings. Copper Tip's units are equipped with real-time data acquisition and modelling software, ensuring you get the results you need for efficient and reliable resource recovery.





Experience That You Can Count On

Contact us for all your Nitrogen, Fluid Pumping
and Coiled Tubing Needs

Service Locations

- | | |
|--------------------------------|-----------------------------------|
| Canada | USA |
| Nisku, AB | Williston, ND |
| Grande Prairie, AB | Casper, WY |
| Bonnyville, AB | Farmington, NM |
| Estevan, SK | Houston, TX |
| | Midlan, TX |
| | Corpus Christi, TX |
| | Sulphur, LA |
| Canada - 1.855.463.1414 | USA North - 1.855.932.7362 |
| | USA South - 1.866.392.1415 |

coppertipenergy.com



A Guide To
Copper Tip Energy Services