

ERNCO

ENVIRONMENTAL



Red Deer, AB: 403-887-1490

Kindersley, SK: 306-463-0044

www.erncoenvironmental.com

Ernco's Commitment to our Clients

At Ernco we believe employing excellent people and operating excellent equipment will get you excellent results. We pride ourselves on being very efficient, knowledgeable, and safe. Our intense focus on training and assessing the competency of our employees allows us to provide you with the highest quality of service possible. This same effort is applied to the maintenance programs we have developed ensuring all our equipment is ready to perform at the highest levels while minimizing downtime. Having a very diverse fleet of equipment capable of meeting your needs is very important to us. We want you to know that you can call us at any time for any reason and feel confident that we will be able to get the job done for you.



Josh Ernst

General Manager

Ernco Environmental Drilling & Coring Inc.



Make/Model: Geoprobe 8140LS

Drilling Capabilities: Sonic, Diamond/Air Coring, Air/Mud Rotary, SPT's, Packer Tests

Sample Size: 50.8mm (2"), 76.2mm (3"), 101.6mm (4"), 152.4mm (6"), 203.2mm (8"), 254mm (10")

Average Depth: +/- 36.5m (120')

Strengths: -Speed and depth of drilling while still being able to collect a sample.

-Install wells in difficult ground conditions.

-Track mounted.

-Pipe handler for "hands free" pipe connections.

-Weighted wireline system for deeper depths and increased efficiency.

Number of Rigs in the Ernco Fleet: 2



Make/Model: Geoprobe 8040DT

Drilling Methods: Direct Push, Solid Stem Augers, Hollow Stem Augers, Air/Mud Rotary, Diamond/Air Coring, Odex, SPT's, EC Probe, Imaging Equipment, Injection Equipment, Packer Tests

Sample Size: 44.45mm (1.75"), 50.8mm (2"), 76.2mm (3"), 114.3mm (4.5"), 152.4mm (6")

Average Depth: +/- 24m (80')

Strengths: -The "Swiss Army Knife" of drilling rigs.

- The widest range of drilling method capability of any rig on the market.**
- The ability to switch between different drilling methods in a very short time.**
- Track mounted rig.**
- The most powerful direct push hammer on the market.**
- Handles larger size tooling for better quality well installations.**

Number of Rigs in the Ernco Fleet: 5



Make/Model: Geoprobe 7822DT, 7730DT, 6620DT

Drilling Methods: Direct Push, Solid Stem Auger, Hollow Stem Auger, SPT's, EC Probe, Imaging Equipment, Injection Equipment

Sample Size: 44.45mm (1.75"), 50.8mm (2"), 76.2mm (3"), 152.4mm (6")

Average Depth: +/- 12m (40')

Strengths: -Very efficient BH sampling.

-Ability to quickly change from direct push to augers.

-Compact tracked rig.

Number of Rigs in the Ernco Fleet: 4



Make/Model: GMC 5500 DB LS 6000

Drilling Methods: Solid Stem Augers, Hollow Stem Augers, SPT's

Sample Size: 152.4mm (6"), 203.2mm (8"), 304.8mm (12")

Average Depth: +/- 12m (40')

Strengths: -Minimal set up time.

-4x4 Equipped.

-Great for multiple sites in one day.

Number of Rigs in the Ernco Fleet: 1



Make/Model: Geoprobe 540MT

Drilling Methods: Direct Push, Solid Stem Augers

Sample Size: 44.45mm (1.75"), 101.6mm (4")

Average Depth: +/- 6m (20')

Strengths: -Heli portable.

- Will fit through a 914.4mm (36") doorway for indoor drilling needs.**

- Only needs 3m (10') overhead clearance.**

- Can run up to 30m (100') of hydraulic hose to eliminate carbon monoxide fumes indoors.**

Number of Rigs in the Ernco Fleet: 1

Make/Model: Heli 1800

Drilling Methods: Solid Stem Augers

Sample Size: 101.6mm (4")

Average Depth: +/- 6m (20')

Strengths: -Heli portable.

- Approximate weight is 816 kgs (1800 lbs)**

- Runs 1.5m (5') augers.**

Number of Rigs in the Ernco Fleet: 1



We are happy to announce our arrangement with Heli Source Ltd. With our continued efforts towards becoming a true “one stop shop” our clients can now make one call for both drilling equipment and the appropriate helicopter.

Heli Source Ltd. is a helicopter charter company operating under Transport Canada 702 (Aerial Work) and 703 (Aerial Taxi) authorities. Heli Source Ltd. was incorporated in 2011.

Locations:

- Red Deer, Alberta (Head office)**
- Whitecourt, Alberta**
- Grande Prairie, Alberta**
- Steen River, Alberta**
- Regina, Saskatchewan**
- Fort St. John, British Columbia**
- Rapid City, South Dakota**

As well as additional transient operations across Canada and the continental United States.

Depending on the job scope and distance from the staging area, most sites can be completed with 2-3 lifts (not including personnel).

Bell 206

- Seating Capacity: 4+Pilot
- Cruising Speed: 193km/h (120mph)
- External Lift: 408kgs (900lbs)
- Endurance: 3 hours



A-Star

- Seating Capacity: 5+Pilot
- Cruising Speed: 209km/h (130mph)
- External Lift: 907kgs (2000lbs)
- Endurance: 3 hours



H500/MD369

- Seating Capacity: 3+Pilot
- Cruising Speed: 209km/h (130mph)
- External Lift: 499kgs (1100lbs)
- Endurance: 1.7 hours
(2.5 hours with auxiliary tank)





BK117B2/D2 (Twin Engine Cat A Performance)

- Seating Capacity: 9**
- Cruising Speed: 241km/h (150mph)**
- External Lift: 1134kgs (2500lbs)**
- Endurance: 2 hours**



Cesna 172 – Fixed Wing

- Seating Capacity: 3+Pilot**
- Cruising Speed: 193km/h (120mph)**
- Endurance: 5 hours**



Make/Model: Hagglund Extreme Remote Access Rig

Drilling Methods: Direct Push, Solid Stem Augers, Hollow Stem Augers, Diamond Coring, SPT's, Packer Tests

Sample Size: 50.8mm (2"), 152.4mm (6")

Average Depth: +/- 9m (30')

Strengths: -Capable of travelling over virtually all ground conditions.

- The ability to transport up to 4 people to site.**
- The rear portion can be converted to a carrier for remote water sampling jobs, weed spraying, or crew transport needs.**
- A much more cost-effective method than renting a helicopter.**
- Can potentially eliminate the need for ice roads.**

Number of Rigs in the Ernco Fleet: 1



Make/Model: Hydro/Air Vac

Methods: Hydrovac, Air Vac

Hose Sizes: 50.8mm (2"), 76.2mm (3"), 101.6mm (4"), 152.4mm (6"), 203.2mm (8")

Strengths: -We have large, medium, and small capacity units.

-Equipped with a hotsy for winter work.

-Can also be used as an "Air-Knife" when accompanied by one of our air compressors.

This will potentially eliminate the disposal fees associated with hydrovac sludge.

-Equipped with bonding mat for exposing power utilities.

Number of Units in the Ernco Fleet: 3



Test Pitting, Excavations, Site Maintenance, and Trucking

Our operators have the same safe and efficient mindset as our drilling crews.



Nodwell TF60

Strengths: -Carries 4000 litres of heated water.

-Is equipped with a 17,500lb winch.

-Can carry 3m (10') tooling or well supplies.

-Can be outfitted with our Hydro-Spade unit for extreme remote hydrovac needs.

Number of Rigs in the Ernco Fleet: 1



Make/Model: Pionjar, Wink Vibracore, AMS Rotary

Drilling Methods: Direct Push, Solid Stem Auger

Sample Size: 50.8mm (2")

Average Depth: +/- 2.4m (8')

Strengths: -Able to achieve quality samples from tight or difficult to access locations.

-Small and very portable.

-Great for sediment sampling.

Number of Rigs in the Ernco Fleet: 5



Make/Model: Kubota SVL 75, Kubota SVL 95-2s

Strengths: -Snow clearing

-Brush clearing

-Rig mat placement/removal

-Site maintenance

-Backfilling

Number of Units in the Ernco Fleet: 3



The Answer to Installing Ground Water Monitoring Wells in Difficult Conditions

The standard sand pre-pack is a 2"x5' SCH 40 0.010 screen that is surrounded by 20/40 sand which is then held in place by a stainless-steel mesh which provides added filtering. These 1.5m (5') long pre-packs can be screwed together for any desired screen interval.

The standard bentonite sleeve is 2"x2' SCH 40 PVC that is surrounded by granular bentonite and held in place by a thin layer of paper. The paper will allow the well to be placed before the water can hydrate the bentonite and create the seal. The bentonite pre-packs can also be screwed together for any desired interval.

In extreme "flowing sand" conditions we have designed an expendable drive point anchor that works with our DT 45 Direct Push system. This allows the entire well to be screwed to the expendable drive point and anchored in place before pulling out the drill casing, ensuring a quality sand pack and bentonite seal without having to pour any materials from the surface.

In our experience with difficult ground conditions if a well can be installed correctly the first time the extra cost of the well materials is considerably cheaper than re-drilling a borehole.

The cost to drill a 40' monitoring well using a Geoprobe 8040DT and then having to re-drill the well due to sloughing conditions will take approximately 5 hours and cost \$2400. This time/price is assuming you will be successful on the second attempt (which is no guarantee). The cost when using the pre-pack system and knowing you get a good quality install the first time will take approximately 3 hours and cost \$1900.



Fencing

Styles: - Heavy Duty Concrete Blocks

- Temporary Panel Fencing 1.8m (6') x 3m (10')

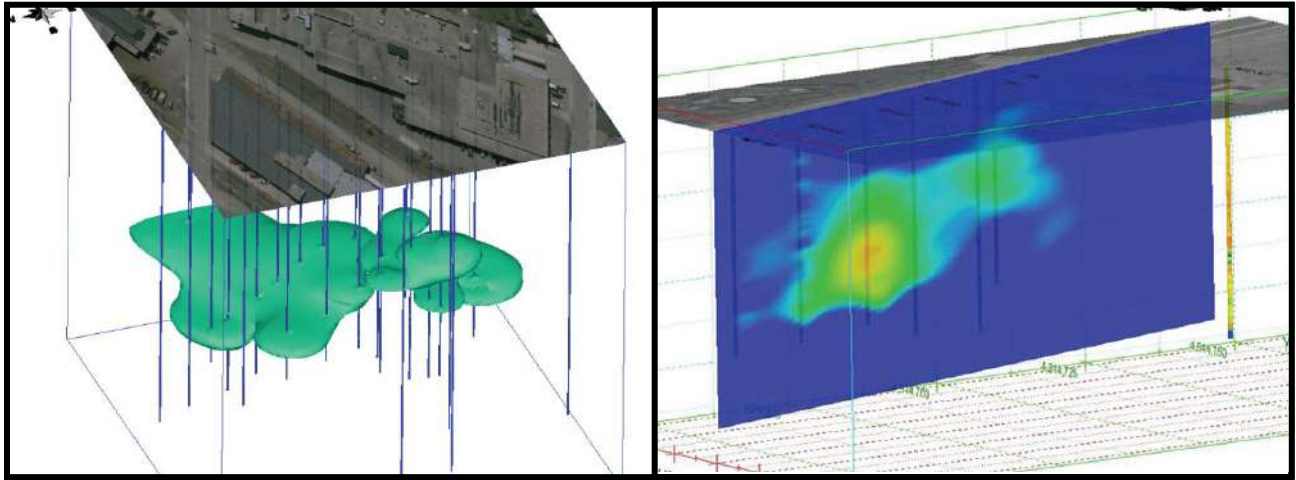
- Cattle Guards

All materials are for rent or for sale and can be delivered and set up by Ernco staff.



Tree Clearing/Slashing

Our crews have all taken the Chainsaw Safety Course Level 3.



MIP, LL MIP, LIF, HPT, CPT, Injections

Ernco has great working relationships with several different imaging and injection companies. If you would like more information on any of these technologies, please let us know. We will be happy to get you in touch with the right people for your project needs.



Packer Testing

All of our Sonic rigs, Geoprobe 8040's and our Hagglund are capable of performing single, double or triple packer tests.

ERNCO

ENVIRONMENTAL



Main Office: 8027 Edgar Industrial Drive

Red Deer, Alberta, T4P 3R2

Red Deer AB. Phone: 403-887-1490

Kindersley SK. Phone: 306-463-0044

Fax: 403-887-1480

www.erncoenvironmental.com

Compliant with:



Follow us on:



Josh Ernst

General Manager

Cell: 403-391-2159

Email: josh.e@erncodrill.com

Jordan Ernst

Sales Manager

Cell: 403-352-6896

Email: jordan.e@erncodrill.com

Jordan Walkey

Estimator/Coordinator

Cell: 587-877-2243

Email: jordan.w@erncodrill.com

Jessie Ventnor

Field Supervisor

Cell: 587-877-8215

Email: jessie.v@erncodrill.com

Amanda Ernst

Office Manager

Cell: 403-318-2160

Email: amanda.e@erncodrill.com

Carol Hagel

Accounting Manager

Phone: 403-887-1490

Email: carol.h@erncodrill.com

Jeremy Ernst

Shop Foreman

Cell: 403-350-4936

Email: jeremy.e@erncodrill.com

Mike Martel

NCSO-Health & Safety Manager

Cell: 403-505-6748

Email: healthandsafety@erncodrill.com

EMPIRE LINE LOCATING

*a division of **Ernco** Environmental*



Calgary - Red Deer - Edmonton

403-596-5902

www.empirelinelocating.com

EXPERIENCED. EFFICIENT. EMPIRE.

Experienced and efficient, Empire Line Locating specializes in providing exceptional pipeline and utility locating and Alberta one-call contract management. Headquartered in Red Deer but billing from all three major Alberta cities, Empire is a family-owned company that helps companies with pipeline construction, oil well decommissioning, environmental reclamation projects, lease and plant site construction and more. Our experienced field technicians have earned us a reputation for outstanding quality of work, and we pride ourselves in maintaining excellent client relationships, both old and new through effective time, cost, and quality management. Whether you're needing an entire gas plant located or just a single utility locate for a sign installation, you can be sure that Empire will take care of your locating needs.



Josh Ernst

General Manager

Empire Line Locating



One Call Management

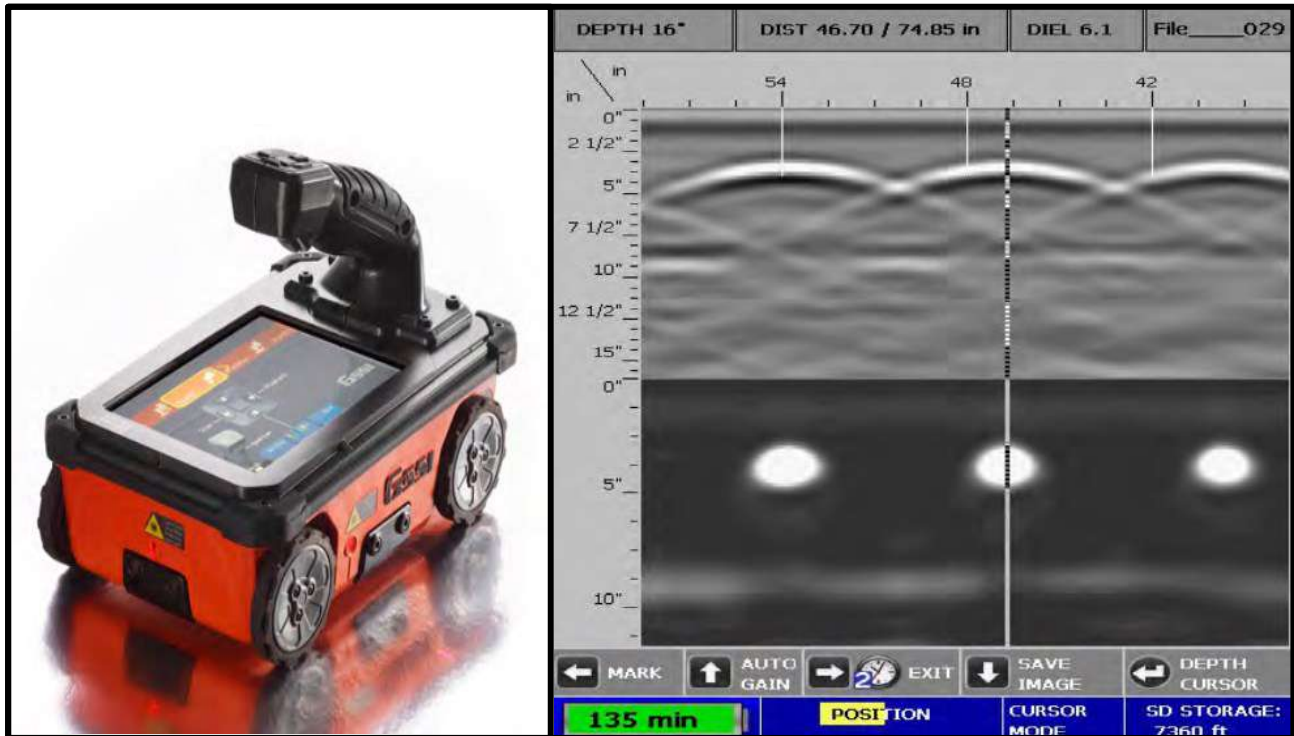
Managing Alberta One-Calls can be a tremendous challenge for any company that owns underground facilities, but it is one we specialize in. Empire's one-call screening and locating expertise means you can rest easy knowing all your one-calls are being professionally and safely screened and located by a team of dedicated professionals, all at extremely competitive rates and within the 48-hour window. Let us show you how experienced, efficient line locating by Empire can help manage your one-call contracts.



FULL-SERVICE PIPELINE AND UTILITY LOCATING, AREA SCANNING, EMERGENCY, AND ONE CALL CONTRACT LINE LOCATING FOR ALBERTA AND WESTERN CANADA

Preventing damage to underground facilities during any ground disturbance starts with expert line locating services. Our certified field technicians use the latest technology and techniques, allowing Empire to offer a full range of line locating services for heavy industry, commercial, and residential customers across the province and western Canada.

- **Alberta one-call screening and response,**
- **Existing plant, battery, satellite, well site, and riser sites,**
- **New lease, pipeline right of way, plant site, and wellsite construction, integrity programs, and pipeline tie-ins,**
- **Environmental reclamation and remediation sites, lease or pipeline abandonment,**
- **Sign, culvert, bridge, power pole, light post and fence installation, ditching programs,**
- **Seismic programs,**
- **Access road, highway, commercial, or residential construction, and**
- **Emergency spill response**



Concrete Scanning

The Mini XT Advantage

The Structure Scan Mini XT is ideal for locating the position and depth of metallic and non-metallic objects in concrete structures, including rebar, conduit, post-tension cables, voids and service utilities. In addition, the Mini XT can help identify structural elements including pan deck, concrete cover, and slab thickness.



Make/Model: Hydro/Air Vac

Methods: Hydrovac, Air Vac

Hose Sizes: 50.8mm (2"), 76.2mm (3"), 101.6mm (4"), 152.4mm (6"), 203.2mm (8")

Strengths: -We have large, medium and small capacity units.

-Equipped with a hotsy for winter work.

-Can also be used as an "Air-Knife" when accompanied by one of our air compressors.

This will potentially eliminate the disposal fees associated with hydrovac sludge.

-Equipped with bonding mat for exposing power utilities.

Amount of Units in the Ernco/Empire Fleet: 3



EM Surveys

Geonics EM31-MK2

This unit will map geologic variations, groundwater contaminants, or any subsurface feature associated with changes in ground conductivity. Surveys can be performed in most conditions including sand, gravel, and even asphalt. Effective depth of exploration is approximately 6 meters making it ideal for environmental and geotechnical site characterization.

EMPIRE LINE LOCATING

a division of **Ernco** Environmental



Main Office: 8027 Edgar Industrial Drive

Red Deer, Alberta, T4P 3R2

Red Deer AB. Phone: 403-596-5902

Kindersley SK. Phone: 306-463-0044

Fax: 403-887-1480

www.empirelinelocating.com

Compliant with:



Follow us on:



Josh Ernst

General Manager

Cell: 403-391-2159

Email: josh.e@erncodrill.com

Jordan Ernst

Sales Manager

Cell: 403-352-6896

Email: jordan.e@erncodrill.com

Michalynn Brunelle

Accounts Receivable

Phone: 403-887-1490

Email: mich.b@erncodrill.com

Brett Nixey

Estimator/Operations Manager

Cell: 403-596-5902

Email: dispatch.empire@outlook.com

Amanda Ernst

Office Manager

Cell: 403-318-2160

Email: amanda.e@erncodrill.com

Carol Hagel

Accounting Manager

Phone: 403-887-1490

Email: carol.h@erncodrill.com

Jeremy Ernst

Shop Foreman

Cell: 403-350-4936

Email: jeremy.e@erncodrill.com

Mike Martel

NCSO-Health & Safety Manager

Cell: 403-505-0398

Email: healthandsafety@erncodrill.com



ERNCO ENVIRONMENTAL HELI SOURCE LTD



Heli-Portable Drills

Heli Source and Ernco Environmental have teamed up to create the most diverse selection of Helicopter and Drilling fleets in the industry.

Ernco has designed a new Heli-portable drill to utilize Heli Source fleet to create cost solutions for our clients. Our goal is to provide our clients with the best service possible, while maintaining our high standards of safety and quality of work. Our unique combinations of helicopters and drill rigs allows us to meet our clients needs, no matter how large or small the project.

Ernco Environmental
8027 Edgar Industrial Dr
Red Deer, AB

Phone: 403-352-6896
Email: Jordan.e@erncodrill.com

Heli Source Ltd
PO Box 817
Red Deer, AB

Phone: 403-542-4363
Email: Jordan.freake@helisourceltd.com





ERNCO DRILL FLEET



Make/Model: Geoprobe 540MT

Drilling Methods: Direct Push, Solid Stem Augers

Sample Size: 44.45mm (1.75"), 101.6mm (4")

Weight: Rig 590 kgs (1300 lbs.) UTV/Powerpack 794 kgs (1750 lbs.)

Aircraft Required: AStar (AS350B2/B3)



Make/Model: Heli 1800

Drilling Methods: Solid Stem Augers

Sample Size: 101.6mm (4")

Weight: 816 kgs (1800 lbs.)

Runs 1.5m (5') augers

Aircraft Required: AStar (AS350B2/B3)





ERNCO DRILL FLEET



Make/Model: Heli 1000

Drilling Methods: Solid Stem Augers

Sample Size: 101.6mm (4")

Weight: 454 kgs (1000 lbs.)

Runs 1.5m (5') augers

Aircraft Required: MD500 with 2 separate lifts or AStar AS350B2/B3 with a single lift



Can be flown in 2 separate lifts by a MD500
or 1 lift with an AStar AS350B2/B3



**Mobile drill that can move around a site without
UTV or Helicopter support.**



HELI SOURCE FLEET

BELL 206

AStar B2/B3

MD 500

BK117 (Twin Engine)



MD 500

- Seating Capacity: 3+Pilot
- Cruising Speed: 209km/h (130mph)
- External Lift: 499kgs (1100lbs)
- Endurance: 2.0 hours
(2.5 hours with auxiliary tank)



A-Star (AS350B2/B3)

- Seating Capacity: 5+Pilot
- Cruising Speed: 209km/h (130mph)
- External Lift: B2-1800lbs/B3-2500lbs
- Endurance: 3 hours

Heli Source Bases

- Red Deer
- Fort McMurray
- Whitecourt
- Grande Prairie
- Hinton
- High Level
- Fort St John
- Fort Nelson
- Chetwynd



SUMMARY



Advantages to Using Ernco and Heli Source

- Drills built for Heli Source specific helicopters which will result in big cost savings
- Crew familiarity with consistent communication from both operations teams
- Working together to be as efficient as possible for our clients
- MD500 can save the client thousands of dollars on the right project
- Heli 1000 drill is the first of its kind, being light enough for the MD500 and mobile on its own tracks!

Call or email us today to get a cost estimate on your project!

Ernco Environmental

Jordan.e@erncodrill.com

403-352-6896

Heli Source Ltd

Jordan.freake@helisourceltd.com

403-542-4363