WHO DO I CONTACT IN CASE OF A PROBLEM, QUERY OR CONCERN?

The Field Supervisor

The Field Supervisor is responsible for all field crew activity. He/she will often establish a crew office at a local motel from where operations are coordinated.

The Permit Agent
Larry Kitchen - 306 621 0251

The permit agent, who represents the Resource Company, for whom the work is being conducted, should be informed of any problems.

Any Crew Member

All crew members will have an "ERP" (emergency response plan) that will contain contact numbers for supervisors and management.

Geophysical Contractor

The Crew Supervisor can be contacted at the Geophysical Company's head office (normally in Calgary, Alberta).

Licensee

The Company Representative can be contacted at the Resource Company's head office.

Saskatchewan Petroleum and Natural Gas Division (PNG)

Oil and Gas seismic programs are regulated by PNG. All programs must be registered with and approved by PNG

PNG Support Desk 1-855-219-9373

Office of the Rural Municipality (R.M)

The seismic contractor must notify the R.M. Office in the program area prior to conducting any work.

For questions concerning the R.M.'s authority over seismic operations, contact PNG (listed above) or contact Saskatchewan Municipal Administration at the following number.

(306) 787 2680

It is the aim of the Geophysical industry to conduct safe seismic operations in a careful, diligent and responsible manner in accordance with all applicable laws, exploration regulations and Government approval conditions.

rpsgroup.com

THE FOLLOWING ARE DETAIL OF THE SEISMIC PROGRAM BEING CONDUCTED IN YOUR AREA.

This information pamphlet is provided to improve communication and understanding with the community.

Program Name
2026 FCL Regina 2D

Licensee
Federated Co-operatives Limited
Brad Moriarity
Telephone: 403 207-7388
Email: Brad.Moriarity@fcl.crs

Contractor
Federated Co-operatives Limited
Brad Moriarity
Telephone: 403 207-7388
Email: Brad.Moriarity@fcl.crs

Operation Type: 2D

Energy source: Vibroseis and Dynamite

Approximate Dates

Commencement: July 16, 2026

Completion: August 10, 2026

Permit Agent: Larry Kitchen - 306 621 0251

TETRA TECH
RPS ENERGY

SEISMIC INFORMATION PAMPHLET

(Saskatchewan)

Endorsed by

Canadian Association of Petroleum Producers

CAPP

Canadian Association of Geophysical Contractors

CAGC

and

Small Explorers & Producers Association of Canada

SEPAC

What is Seismic?

It is a method of determining sub-surface information by analyzing sound waves originating from an energy source.

What is an energy source?

For the purpose of seismic exploration an acoustic energy source is used to send sound waves into the earth. The energy source for this program will be vibroseis and dynamite infill if required.

How are the sound waves collected?

The reflected sound waves are detected by listening devices called geophones that are laid out along the seismic line. Geophones, or receivers, are pushed into the ground ~3-4" and are used to measure the ground motion. This program will utilize a wireless recording system that eliminates the need for kilometers of cable.

What is the difference between 2D & 3D?

2D seismic lines are single lines of regularly spaced geophone stations (e.g., every 20 metres). Energy source points are established along the line typically at every 3rd or 4th station. The same line contains recording cables and geophones as well as source points.

3D seismic programs are generally a uniform and evenly spaced grid of lines. Receiver lines containing the recording devices (geophones) usually, but not always, run in a direction perpendicular to the source lines. Although the spacing between lines can vary, 400 metres or ¼ mile is common. Energy source points typically occur every 40 or 50 metres along the source line.

Who will be on the program and when?

After the appropriate permission has been granted by landowners and Government agencies, the following operations will usually occur:

1. The seismic line will be established as indicated on a program map.

A surveyor or advance person will refer closely to and adhere to; all permit conditions and will supervise any bush cutting and locating of underground utilities (e.g., pipelines, telephone cable, etc.).

The surveyors will track-out and mark the line with lath or survey stakes and position signs and flagged arrows to show access routes.

2. Bush cutting and /or snowplowing will be done.

If there is any bush on the proposed seismic line, the surveyor or advance person will supervise the cutting, where allowed, using mulchers or chainsaws. Receiver lines usually require a continuous meandering path of least resistance for geophone layout. Source points can be "offset" to avoid cutting bush and soft or wet areas. When snowplowing is required, 4 wheel drive tractors are utilized.

3. Utilities will be located.

It is normally the responsibility of the utility owner to mark out the location of its pipeline or cable; however, sometimes a locating company will conduct this work. Survey stakes, lath or pin flags typically marked with yellow flagging or the utility company's logo, will be placed along the route of the buried utility.

4. GPS layout, surveying & mapping may be done.

The layout and surveying operation will be accomplished by GPS (Global Positioning System) pack operators, who position and record points by receiving signals from a network of satellites that enable them to resolve an accurate position and height. Some of these crews may also collect cultural information for mapping (e.g. fences, waterbodies, powerlines, etc.). On 3D programs several survey crews may be working in the area at the same time.

5. The recording equipment will be laid out.

Geophones (receivers) and recording devices (boxes) are normally carried aboard UTV's and/or trucks. In narrow bush cuts, over fences, across creeks and through wet or soft areas, cable will be hand carried by crew members. When all of the geophones are in position and the recording crew has QC'd the equipment the line is ready to be recorded. Note: On some jobs, helicopters are used to transport; geophones and recording devices in heli-bags to planned locations, from where the line crew manually position them.

6. The seismic line is recorded.

When the energy source is vibroseis, typically 2 vibrator units mounted on buggies (articulated vehicles similar scale to a tractor), will lower their pads and simultaneously vibrate the ground for a few seconds at each source point location. Often vibrators will vibrate over several locations on either side of each source point.

When the energy is dynamite, a charge is lowered at a particular depth and shot points are individually set off from a safe distance.

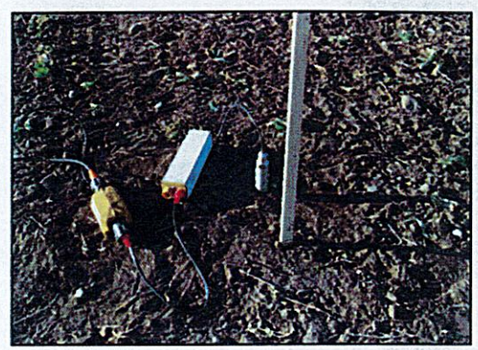
24 Hour Operations

Recording operations can sometimes occur at night to overcome weather disturbance problems such as wind, or to expedite the job. Landowner's will be contacted should night operations be required

7. Cleanup of the seismic program.

On completion of recording, the seismic lines will be completely cleared of all recording equipment, survey material and debris.

A final inspection is conducted in Spring to ensure all material and debris are removed.



Cable less recording system (OYO GSX)