

Cheiron Resources Ltd develops and manufactures high quality, easy to use, cost effective field tests for the "instant" detection of petroleum hydrocarbons and chlorinated solvents in soil.



The **OilScreenSoil™** tests are field presence/absence indicators of non-volatile petroleum hydrocarbons and chlorinated solvents.

The kits:

- Produce "instant" results (within two minutes)
- Detect oils as low as 500 ppm of TPH (total petroleum hydrocarbon) in soil
- Screen for DNAPLs (dense non-aqueous phase layer), and LNAPLs (light non-aqueous phase layer)
- Can be used with salt-water, or on frozen soils with the addition of hot water
- Do not require specialized training, or additional instrumentation
- Are non-hazardous to human health and the environment

NOTE: Esters (detergents) are the only "known" substances to interfere with the dye's ability to stain petroleum hydrocarbon products. This may be applicable when screening for Ester based (i.e. synthetic) motor oils.

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Cheiron Resources Ltd provides the information contained in this pamphlet in good faith, but makes no representation as to its comprehensiveness or accuracy. The information provided is intended only as a guide to the appropriate handling and use of the **OilScreenSoil™** kits by a professional person who is qualified to use the materials being tested. Individuals reviewing this information must exercise their independent judgment in determining its appropriateness for a particular purpose or application.



Cost effective "instant" and disposable tests for field screening of petroleum hydrocarbons and chlorinated solvents in soil



*Success Through A
Commitment To Excellence*



OilScreenSoil (SUDAN IV)[™] is shown above

OilScreenSoil[™] kits were developed as fast, reliable, easy to use and inexpensive field monitoring tools.

OilScreenSoil[™] kits are "non-precision" qualitative tests that screen for petroleum hydrocarbons (aliphatic and aromatic) and chlorinated solvents (TCE, TCA & PCE) in soil, sand, or gravel.

OilScreenSoil[™] kits are **NOT** suitable for detection of gases (compounds with 4 carbons or less), or for use with heavy crude oils (Bunker C), or solid bituminous materials like asphalt or waxes.

The following is intended as a general overview of the possible applications for the **OilScreenSoil[™]** kits. Please contact the manufacturer for more detailed information.

Petroleum products are complex mixtures of multiple hydrocarbon compounds and their composition varies depending upon the source of the crude oil and refining practices used. However:

OilScreenSoil[™] test kits are typically used with a wide range of petroleum hydrocarbon products including:

- ✚ Automotive Gasolines (C5-C12)
- ✚ Jet Fuels (C5-C16)
- ✚ Fuel Oils #1 & 2 (C9-C20)
- ✚ Mineral Oils (C15-C29)
- ✚ Petroleum-based Chlorinated Solvents (C7-C12) including: TCE, TCA and PCE (e.g. Dry Cleaning Solvent)

OilScreenSoil[™] kits can be used to:

- ✚ Quickly and easily determine spill boundaries and depths and to identify spill directions in soil
- ✚ Detect chlorinated hydrocarbon compounds (Dense Non Aqueous Phase Layer -DNAPL) in drill/core samples
- ✚ Detect direction and depths of spills from leaking underground (LUSTs) and aboveground storage tanks
- ✚ Test excavation floor and walls for petroleum hydrocarbons

**QUICK AND EASY TO USE – SIMPLY:
Add soil, add water - shake!**

OilScreenSoil[™] tests release specially formulated dyes that stain petroleum hydrocarbons.

The presence of an "expandable polystyrene (EPS) bead" allows users to rapidly identify the presence of free petroleum products as **low as 500ppm TPH.**

Use **OilScreenSoil[™]** Kits for:

- ✓ Instant delineation of spill depth and direction during response initiatives
- ✓ Cost effective, immediate qualitative field screening/sampling tests for Phase II site assessments and excavations
- ✓ Ease of use - requires no special training, or external instrumentation
- ✓ Working with a safe test containing a "De Minimus" (<0.1%) concentration of test chemicals

Other OilScreenSoil[™] test Kits include:

✚ **OILSCREENSOIL (INDIGO BLUE)[™]**
For use with red soils/clays

✚ **OILSCREENSOIL (FLUORESCENT)[™]**
For use with black oils

✚ **OILSCREENSOIL (SCARLET)[™]**
A non-mutagenic red dye