Quin Company

Protecting your investment

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GIANT SUCTION PIT-VAULT FOR RADON AND VAPOR INTRUSION

DISCLAIMER:

WELCOME

Thank you for your time and attention today!

Traditional Pits

- **The Traditional method of retro fitting a Sub-Slab Depressurization System into a structure starts with installing a Suction Pit that is around 5 gallon bucket in size. This method works okay but has many limiting factors.**

Problem Statement

- **What do you do when a Traditional Radon Suction Pit will be ineffective for you situation?**

- **What do you do when you have a Large Foundation Footprint, Difficult Soils, Restricted Pit Locations, Complexed Foundation or other limiting factors?**

What is a Giant Pit

- A void excavated into the soil under the slab that is about 11 to 40 time larger than a 5 gallon bucket . The soil surface area exposed in the pit is increased to approximately 5 to 19 times a 5 gallon bucket.
  - Surface area 5 gallon bucket – 615 sq in
  - Surface area 55 gallon barrel – 2875 sq in
  - Surface area 200 gallon tote – 11,520 sq in

Giant Pit Benefit

- The giant void under the slab increases likely hood a utilities trench line can be opened to the pit.
- The deeper pit will expose additionally soil layers that have varying permeability.
- The giant void causes the negative pressure to be applied over more surface area improving the pit effectiveness.
- A single giant pit can replace multiple separate pits.
- We have used a single giant pit on 4,000 to 12,000 sq ft foundation.

Giant Pit Concerns

- **The large void that is created under the slab has a potential of internal pit wall failure.**
- **The void removes the bearing material from under the slab and increase the chance of slab damage.**
- **It is reccommended the void be back filled with clean drain gravel, stone, internal plenums, combination or some other means to ensure pit structural integrity.**

Giant Pit Development

- Process begins by opening the access hole through the slab, which is standard practice in the industry
- Access holes for giant Pits are typically 4-8” in diameter in slabs that typically range from 4-16+” thick
- Pit are not uniform in dimension and may take any shape. Approximately 55-200+ Gallon in size.
- When possible, it is recommended for utility trench lines to penetrate Pit.

Giant Pit Excavation Tools Common

Augers with multiple extensions
Breaker/Pry bars of multiple length
Narrow extended handle spades
Spades or digging bars
Other common retail digging tools

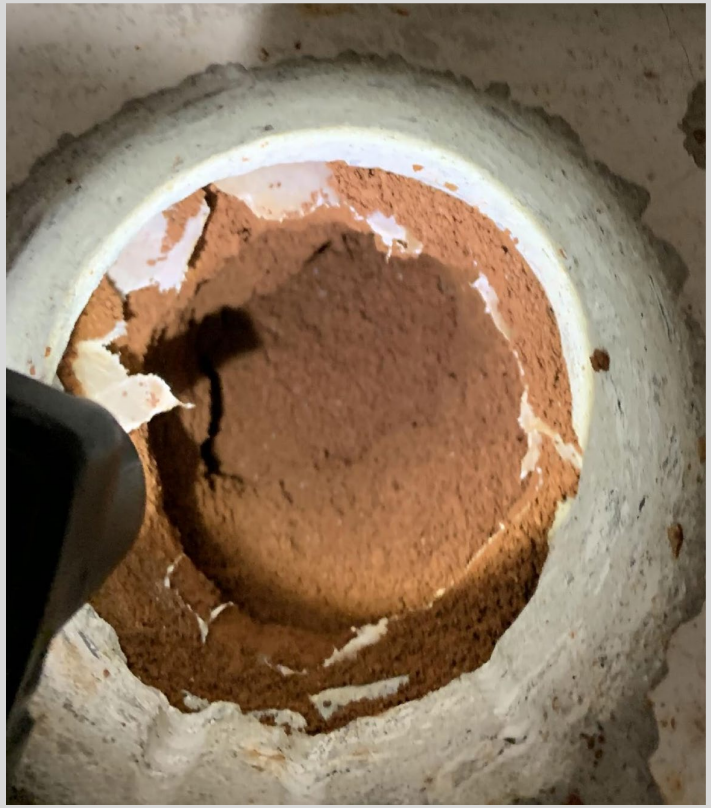
Giant Pit Excavation Tools Specialty

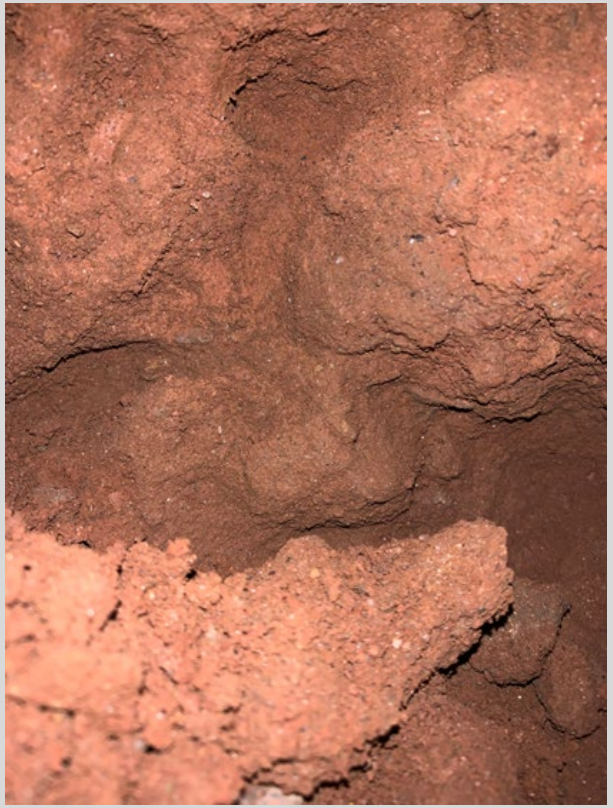
AIRCAVATOR **Radon Ready Kit**

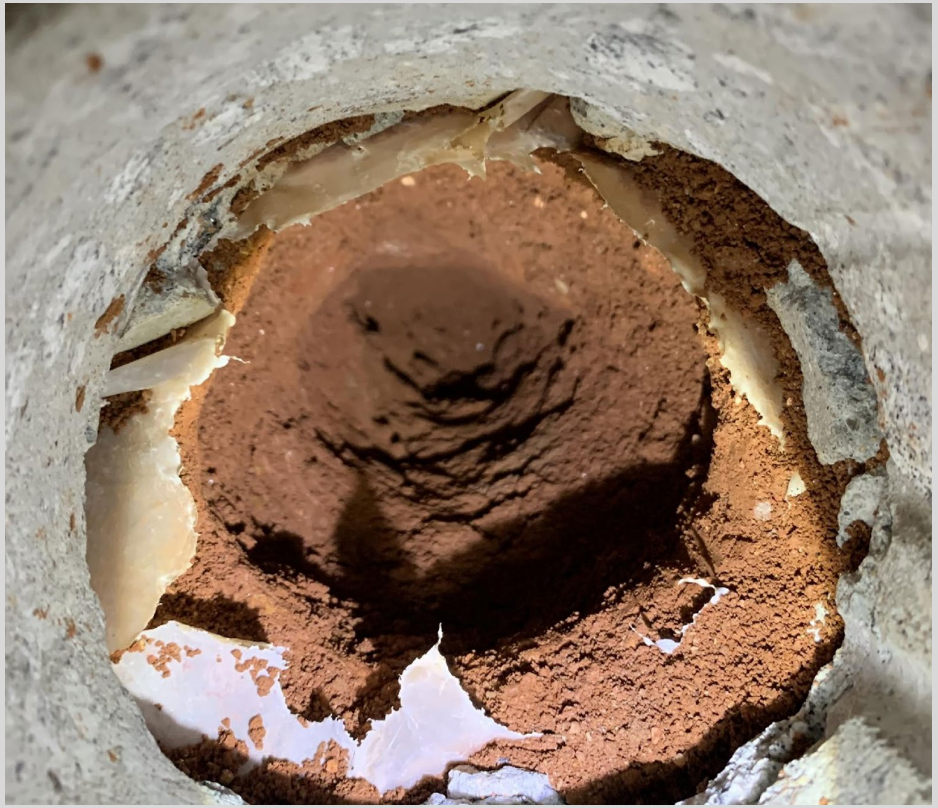
Pneumatic, hydraulic and electrical equipment

Modified/Customized/Homemade tools

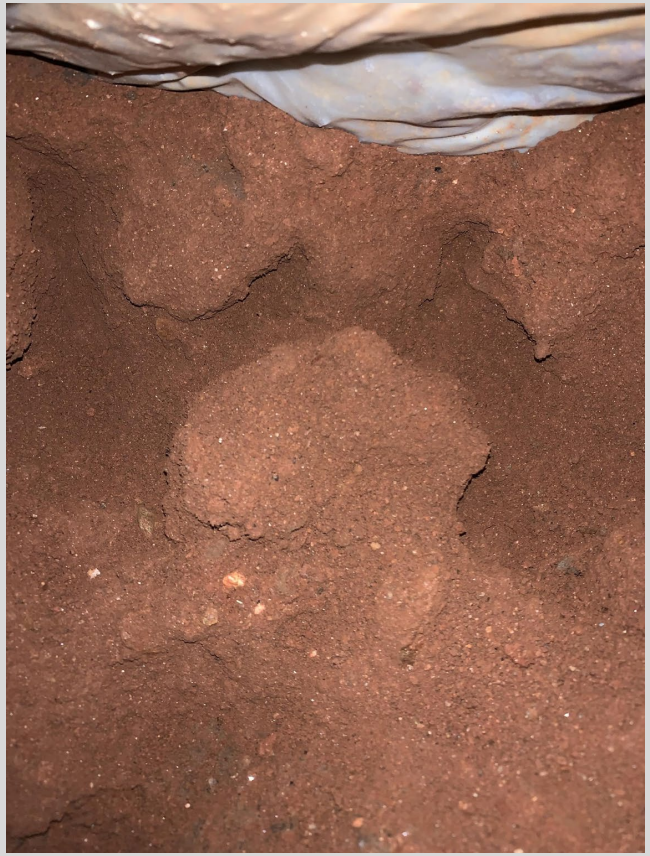
Pit/Vault







Pit/Vault



QUESTIONS?

Once again, thank you for your time and attention today!

True or False

1. **All Pits have limiting factors.**

True or False or Maybe

A single Giant Pit can be used on a 50,000 sq ft foundation footprint.

True or False

Surface area of a 55 gallon barrel is 12875 sq in.

True or False

It is reccommended the Giant Pit void be back filled with clean sand.

True or False

To make a Giant Pit you must have specialty tools.