Guaranteed Safe & Non Hazardous Tank Cleaning Solution!

Why Irvine & Vision for Tank Cleaning. .?

- **V6 is a novel engineered safe to use chemical solution.**
- **Rapid, typically 4 week tank cleaning turnaround.**
- **Generates a substantial revenue from recovered crude.**
- **Safe and minimal site disturbance at tank location.**
- **Leaves minimal non hazardous inert solids.**
- **No further remediation of solids required.**
- **Leaves drain disposal quality water (pH neutral).**
- **No toxic emissions or byproducts.**
- **Can create local employment.**

Safety first at all times

Non Hazardous Clean Sand Solids

Drain Quality Disposal Water

Health & Safety

- **Small, typically 5 person team.**
- **No personnel tank entry required at any part of the cleaning process.**
- **V6 requires no heating, no boilers or fuel at site.**
- **V6 requires minimal equipment at site.**
- **V6 is non-flammable.**
- **V6 has no acid content.**

The Environment

- **V6 is an environmentally friendly chemical, 100% organic.**
- **V6 is injected with carrier crude, 100% soluble, no contact with the environment and easily recovered from the crude at the crude processing stage.**
- **V6 has no impact on any metal content including nickel, vanadium, ferum and sodium due to it's 100% organic makeup.**
- **V6 has no impact on sulphur, mercury or salt content.**

Irvine Engineering
11, Jalan 14/2, Taman Tar,
Ampang, Salangor, Kuala Lumpur.
68000
Tel.: +60 342665601
Mob.: +60 123210824
+60 178810807

Visit our website
www.irvineeng.com

IRVINE ENGINEERING

VISION PETROLEUM MALAYSIA

Irvine Engineering
&
Vision Petroleum

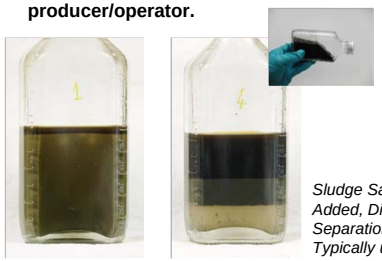
"Supplying a Guaranteed Safe & Non Hazardous Tank Cleaning Solution"

"No more long duration and hazardous acid tank cleaning operations!"

Guaranteed Safe & Non Hazardous Tank Cleaning Solution!

Tank Storage and Cleaning – The Main Issues:

- Long term sludge in storage tanks is an accumulating problem.
- Sludge volume takes up valuable crude storage space.
- Typical conventional acid based sludge removal:
  - Health & safety risks are high for personnel and facilities (long term exposure to tanks and ignition risks).
  - Quality and amount of any recovered oil is unknown, a lost resource and revenue to producers.
  - Storage tanks out of commission, typically ~12 to18 months.
  - Solids in sludge (sand) requires further cleaning/treatment.
  - Water from sludge requires further treatment.
  - A personnel and equipment intensive operation.
  - Is an expensive and timely operation to the producer/operator.



Sludge Sample with V6 Added, Displays the Separation Process, Typically under 4 minutes

Simple, safe and clean chemical injection spread supported by 2 off chemical storage tanks and 2 off injection pumps (1 as back-up)

EXAMPLE SHEDULE

Tank Pre-survey
Sampling for Laboratory Tests
(2 weeks)

Site Team Mobilisation
(1 week)

Site Tank Verification Sampling
(1 week)

Injection of V6 with Carrier Crude, Chemical Reaction
(1 week)

Water is Drawn Off
(1 day)

Liberated Crude Piped to Process facility
(Pumping 5 days)

Remaining Non Hazardous Solids Removed
(1 week)

Tank is Ready for Service
(complete operation start to finish ~7 weeks)

Vision Petroleum's Solution - Features

Formulated Site Specific V6 Sludge Breaker:

- Guaranteed safe and rapid sludge removal, typically ~4 weeks!
- The formulation itself maximises sludge breakers interaction with the sludge.
- Maintains fluidity of the sludge, creating processible crude.
- Assist with surfactant dispersion & penetration.
- Minimizes and prevents wax formation.
- No toxic byproducts, leaves wet solids for easy disposal.

V6 Sludge Breaker Properties:

- Low temperature, nano chemistry hydrocarbon recovery agent.
- Surfactant based sand control chemical.
- Low temperature, nano chemistry heavy oil viscosity modifier.
- Low dosage nano chemistry core demulsifier.
- Nano chemistry sand oil surfactant.
- Universal paraffinic pour point depressant.

V6 dosage is tested in the lab where it is aligned with the Clients crude ensuring not too much or too little V6 is used at site.

Benefits of the V6 Sludge Breaker

- >90% crude recovery from the sludge.
- Recovered crude meets with sales crude quality turning sludge into a substantial revenue.
- Rapid cleaning schedule, typically 4 weeks (conventional acid cleaning methods can be as long as 18 months!).
- Rapid tank turnaround time.
- Typically a 5 person team with minimal equipment.
- Excellent mechanical tank cleaning process.
- Greatly improved health and safety liability as far less tank exposure to personnel.
- More environmentally friendly as remaining solids and water are treated within the process.

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