

Mobile Oil Treater (M.O.T)

Project Title

Second Winner

Innovation

Initiator:

Chagalesh Consulting Engineers (CHCE)



Representative:

M. J. Dadari (Eng.)

Abstract

The Mobile Oil Treater can be used for newly drilled oil wells or oil wells under renovation and acidifying. It can separate gravel from water and after neutralization of acids, produce standard crude oil for production units. Advantages of the project:

- Prevents loss of millions of dollars annually (about 5 - 6 million US Dollars considering the present oil price)
- Protects environment against pollution due to burning of thousands of barrel of unstandard crude oil.

- (M.O.T) saves annually 6 million dollars foreign currency to the benefit of our country. The (M.O.T) unit costs about 3 million dollars and due to utilization of (M.O.T), about 100,000 barrel of oil each year is saved. If we assume each barrel is worth 50\$, therefore the return on investment is about 6 months. Up to now, two units of (M.O.T) have been built and are in operation on the oil wells in the south. (M.O.T) units can be exported to other countries of the world and gain considerable foreign currency for our country.

Description of (M.O.T) and its Operation : (M.O.T) consists of four mobile trailer units containing all required equipments.

A- First trailer unit includes: • Desander • 3-phase separator • Slurry tank • Distiller package • Crude Oil Transfer pumps

B- Second trailer unit includes: • Electrical crude oil dehydrator • Surge drum • Crude Oil Booster pump

C- Third Trailer unit includes :

• 3 chemical packages: each package consists (Demulsifier injection package, Corrosion inhibitor injection package, Caustic soda injection package)
• Diesel generator • Instrument air system package • Gas oil tank • Nitrogen package

D- Fourth trailer unit or caravan includes :

• Control system of all (M.O.T) • Laboratory • Personnel rest room