

Corrosion Protection for an Out-of-Service Crude Oil Storage Tank on Sand Foundation by Internal Flood and Underside Injection IDS

Project Specifics

Installation Dates
Sept. 23, 2019 to Oct. 5, 2019
Feb. 17-27, 2020

Location
Sangachal, Azerbaijan

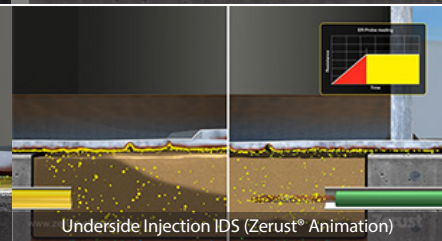
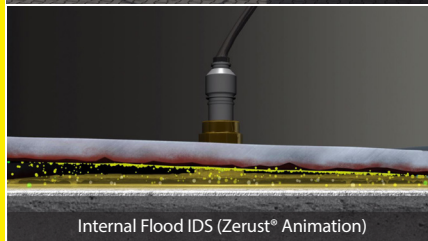
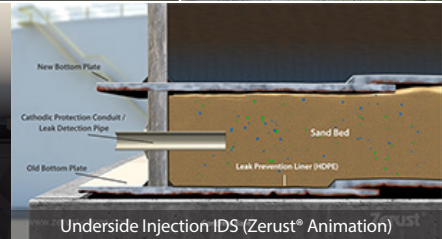
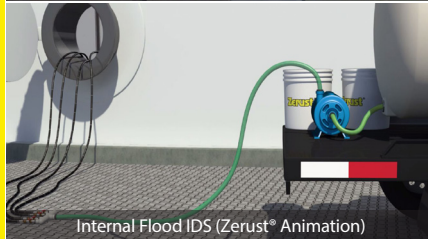
Environmental Conditions
Sept. 23, 2019 to Oct. 5, 2019
68-77°F, ~50% humidity

Feb. 17-27, 2020
40-50°F, ~70% humidity

Asset Details
Diameter: ~328 Feet
Storage Product: Crude Oil
Vessel Construction: Out-of-Service
Foundation Media: Compacted Sand (~100-mm Depth)

Inhibitor Delivery System (IDS)
Internal Flood IDS & Underside Injection IDS
with IDS Sealant & Monitoring Systems

Zerust Product(s) Used
Zerion® FAN-5 Corrosion Inhibitor Powder
Zerion® FVS Corrosion Inhibiting Powder



Project Specifics

The client wanted corrosion protection for an enormous out-of-service crude oil aboveground storage tank on sand foundation with a concrete ring wall, liner, and no anchor bolt(s).

Zerust Solution

The engineers at Zerust® Oil & Gas developed custom solutions for this client, and with the support of local contractors, successfully installed an IDS sealant system around the chime area of the targeted asset and completed the injection of the corrosion inhibiting solution on the tank using Zerust's Internal Flood and Underside Injection IDS methods, as well as the installation of ER probes for IDS monitoring.

Project Installation

Zerion® FAN-5 and Zerion® FVS Corrosion Inhibitor Powder solution was applied to the tank floor through the ports located in Zones A, B, and C as shown in the tank schematic via Zerust's Internal Flood IDS and through the tank ring wall through the Injection Ports 1-4 via Underside Injection IDS.

Conclusion

All provided corrosion inhibitor was applied beneath the targeted asset, the chime area sealed for the IDS and monitoring equipment installed.

The client was advised to record data from installed IDS monitoring system on a monthly basis. This data was requested to be sent to Zerust Oil & Gas for monitoring of the efficacy of the applied corrosion inhibitor compounds.

TANK SCHEMATIC | DRAWING FOR REFERENCE ONLY

