

CHEMICAL COMPOSITION

<p>SCREEN</p>	<p><i>Corrosion Rich</i></p>
<p>GENERIC DESCRIPTION</p>	<p><i>Chemical formulation to address corrosive tendencies downhole</i></p>
<p>FUNTIONAL APPLICATIONS</p>	<p><i>A formulated blend of amines, high molecular weight Imidazolines and surfactants to passivate corrosion issues. It provides film persistency and protection in turbulent environments and protection in the presence of acid gases. This formulation has also been modified with the addition of an alkyl pyridine coco quat and a triazine based scavenger combination for high acid gas (CO₂,H₂S) environments.</i></p>
<p>SCREEN</p>	<p><i>Hydrogen Sulfide Scavenger Compound</i></p>
<p>GENERIC DESCRIPTION</p>	<p><i>A triazine based compound used a scavenger to remove hydrogen sulfide from crude oil. Triazine is a heterocyclic structure similar to benzene, but with three carbons replaced by nitrogen atoms.</i></p>
<p>FUNTIONAL APPLICATIONS</p>	<p><i>Triazine reacts with H₂S to form dithiazine, the main byproduct. (Notice the Figure below.) The triazine based scavenger is integrated into the OSI corrosion inhibitor Compound to assist in passivation by assimilating the acid gas. This component along With the Alkyl Pyridine Coco Quat can provide comprehensive corrosion inhibition.</i></p>



SCREEN	<i>Scale Rich</i>
GENERIC DESCRIPTION	<i>Chemical formulation to address scaling tendencies downhole</i>
FUNTIONAL APPLICATIONS	<i>Formed mixture consisting of phosphate, high molecular weight polymers, phosphonic acids, phosphoric acids, phosphonates and orthophosphates to inhibit the formation of scale in wide spectrum of temperature and pressure environments. Iron chelators (THPC-Tetrakis hydroxyl methyl phosphonium chloride + THPS – Tetrakis hydroxyl methyl phosphonium sulfate) have also been added to sequester metal compounds and promote film persistency for the active corrosion inhibitors</i>

SCREEN	<i>Acid Surfactant Compound</i>
GENERIC DESCRIPTION	<i>A acid-based surface active agent to assist with wellbore cleanup when a presence of iron-sulfide or calcium carbonate scale is detected. The droppable sticks are used during the workover operation. The four sticks are dropped separately in the open hole to solubilize the scale components and promote suspension so that the flushing phase of the cleanup can discharge the residue.</i>
FUNTIONAL APPLICATIONS	<i>Phosphoric acid surfactants solubilize scale components and promote metal integrity by leaving a residual protective layer on all exposed metal.</i>
SPECIALIZED APPLICATION	<i>Droppable stick; used during workover operation. Completely compatible with OSI Chem. Screen components.</i>



SCREEN	<i>Paraffin Rich</i>
GENERIC DESCRIPTION	<i>Chemical formulation to address paraffin deposition</i>
FUNTIONAL APPLICATIONS	<i>A formulated blend of pour point depressants, surfactants, solvents and demulsifiers to inhibit and disperse paraffin at its nucleation stage prior to deposition and adherence in the tubing column</i>
SPECIALIZED APPLICATION	<i>Droppable stick; used during workover operation. Completely compatible with OSI Chem. Screen components. Higher activity level than common "soap stick" technology. (78% activity level)</i>

SCREEN	<i>Asphaltene Compound</i>
GENERIC DESCRIPTION	<i>An environmentally friendly crude oil-soluble solvent encapsulated in the OSI solid matrix which has been formulated to diminish deposits downhole in producing wells. Tight deposits are slowly dissolved, releasing any solids present which will then be removed, thereby increasing the efficiency of the production equipment.</i>
FUNTIONAL APPLICATIONS	<i>Asphaltene solvents assist in mitigating heavy solids deposits downhole and residual concentrations can slow down surface deposits in transfer lines and vessels.</i>
SPECIALIZED APPLICATION	<i>Droppable stick; used during workover operation. Completely compatible with OSI Chem Screen components. Higher activity level that common "soap stick" technology (60% activity level)</i>

SCREEN	<i>Defoamer</i>
GENERIC DESCRIPTION	<i>A silicone based defoamer in the two-stage release matrix. The active compound is in a hydrocarbon carrier media. The basic chemistry is a compound that consists of a hydrophobic silica dispersed in silicone oil.</i>
FUNCTIONAL APPLICATIONS	<i>Silicone defoamers can have varied applications. They can be used to knock down surface foam and release entrained air. They are also suitable in non-aqueous environments such as crude oil, oil refining and gas lift operations where foaming and high condensate, high gravity hydrocarbons are present</i>
SPECIALIZED APPLICATION	<i>Droppable stick; used during workover operation. Completely compatible with OSI Chem. Screen components. Higher activity level than common “soap stick” technology</i>

