

Installation date: _____

Commissioning date: 15, FEB. 2019

Fire Pump Set

Electric Motor Driven Pump	<input checked="" type="checkbox"/>	_____
Diesel Engine Driven Pump	<input checked="" type="checkbox"/>	<u>2 Nos.</u>
Jockey Pump	<input checked="" type="checkbox"/>	<u>1 No.</u>

Client Name: AL Noor Petroleum OIL Depot

Project Name: AL Noor Depot Sahiwal

Client P.O. No.: _____

Consultant Name: PEC

Contractor Name: Inter globe Construction

Representatives:

Were the following present to witness the test:

- | | | | |
|--------------------------------|------------------------------|-----------------------------|------------------------------|
| A. Client / Representative | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| B. Consultant / Representative | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| C. Contractor / Representative | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |

Handing Over: We Hereby Conform, That the Testing & Commission of Equipments & Entire System Is Satisfactory & in Operation with Acceptable Conditions.

CLIENT'S REPRESENTATIVE NAME & SIGNATURE		CONSULTANT'S REPRESENTATIVE NAME & SIGNATURE	
<u>Muhammad Mujeeb</u>		<u>[Signature]</u>	
_____		_____	

PUMP ROOM HAS BEEN HANDED OVER TO.		ZARA ENGINEERS REPRESENTATIVE NAME & SIGNATURE	
_____		<u>FAREED AHMED</u>	
_____		<u>15. FEB, 2019</u>	
_____		<u>[Signature]</u>	

Note: For Further Detail See Attached Reports

Fire Water Engine Pump Vendor given checklist for startup

Date: 14, FEB. 2019

S.No.	DESCRIPTION	YES	NO
A	Pre-Checks Engine:		
I	Fuel tank installed and correctly vented per installation instructions NFPA-20.	✓	
II	Fuel lines ran to the engine per NFPA-20 (Note: Galvanized pipe not to be used).	✓	
III	All control wires connected between engine and controller, and field wiring contacts.	✓	
IV	Power wiring to the controller for the battery charger completed.	✓	
V	Battery terminals cleaned and connected to the engine.	✓	
VI	Batteries filled with recommended electrolytes and fully charged.	✓	
VII	Engine cooling system filled with correct mixture of antifreeze and water per engine manufacturer.	✓	
VIII	Engine filled with oil per engine manufacturer.	✓	
IX	Sufficient fuel in the fuel tank to complete the test.	✓	
B	Pre-Checks Pump:		
I	Sufficient water to complete the test must be present.	✓	
II	All piping completed.	✓	
III	Pump shaft turns freely (this is to be done with the pump uncoupled from the motor & Engine).	✓	
IV	Automatic air release valve has been installed correctly.		N/A
V	Flow measuring device must be installed.	✓	
VI	Pump and driver aligned to coupling manufacturer's specifications.	✓	
C	Static-Checks (Pre-Operation):		
I	Pump set is secured to foundation	✓	
II	Pump set base is grouted	✓	
III	Coupling or driveshaft aligned and serviced	✓	
IV	Coolant plugs and coolant installed	✓	
V	Crankcase oil level full	✓	
VI	Fuel supply and return lines connected, (no galvanized or copper piping), tank at proper elevation, tank filled	✓	
VII	Pump room air supply and ventilation equipment complete, adequate, and functional	✓	
VIII	Pump set is properly protected and temperature controlled if necessary.	✓	
IX	Exhaust system complete	✓	
X	Controller wired according to supplier's instructions	✓	
XI	Batteries filled, secured, connected, and charged	✓	
D	Running Checks:		
I	Manual start at fire pump controller in off position	✓	
II	Manual start at Fire Pump Controller in automatic position	✓	
III	Engine Stop solenoid Valve in functional.	✓	
IV	Engine functioning correctly	✓	
VII	No leaks at fuel, water, exhaust		
VII	Engine Full Load (RPM):	2900 RPM	

Remarks:

Checked by: FAREED AHMED

Date: 14, FEB. 2019

Signature: [Signature]

Fire Pump Startup/Commissioning

<p>Client: <u>AL NOOR OIL DEPOT.</u></p> <p>Consultant: <u>PEC</u></p> <p>Supplier: <u>Zara Engineers</u></p> <p>Contractor: <u>Interlobe construction</u></p> <p>Project: <u>AL NOOR OIL DEPOT. SANIVAL</u></p> <p>Address: <u> </u></p>	<p style="text-align: center;"><u>Diesel Engine No. 1</u></p> <p>Shop/Serial number: <u>128DF0618004</u></p> <p>Model or type: <u>FC6150</u></p> <p>Engine HP/KW: <u>128 HP(U) 1465(FM)</u></p> <p>Rated Speed: <u>2900 RPM</u></p> <p>Battery Voltage: <u>24VDC</u></p>
<p>Startup Date: <u>15, FEB. 2019</u></p> <p>Driver: <input checked="" type="checkbox"/> Electric Motor <input checked="" type="checkbox"/> Diesel Engine</p>	<p style="text-align: center;"><u>Diesel Engine No. 2</u></p> <p>Shop/Serial number: <u>128DF0618003</u></p> <p>Model or type: <u>FC6150</u></p> <p>Engine HP/KW: <u>128 (UL) 1465(FM) HP</u></p> <p>Rated Speed: <u>2900 RPM</u></p> <p>Battery Voltage: <u>24VDC</u></p>
Main Fire Pump (Engine Driven)	
<p>Pump: ----- <input checked="" type="checkbox"/> End Suction <input type="checkbox"/> Vertical</p> <p>Manufacturer: <u>SFFECO</u></p> <p>Shop/Serial Number: <u>SFE16032-H08170002</u></p> <p>Model or type: <u>SFP750 - 32EM</u></p> <p>Rated Flow: <u>750 USG/PM</u></p> <p>Rated Pressure: <u>162 PSI</u></p> <p>Rated Speed: <u>2900 RPM</u></p> <p>Cut In: <u>09 BAR</u></p> <p>Cut Off: <u>Manual BAR</u></p> <p>Suction from: <input checked="" type="checkbox"/> Positive Suction <input type="checkbox"/> Negative Suction</p>	<p style="text-align: center;"><u>Pressurization Pump (Jockey)</u></p> <p>Pump: ----- <input type="checkbox"/> End Suction <input checked="" type="checkbox"/> Vertical</p> <p>Manufacturer: <u>LIFECO by SFFECO</u></p> <p>Shop/Serial number: <u>LFGMJ001728005198710</u></p> <p>Model or type: <u>CVR 16-100</u></p> <p>Rated Flow: <u>50 USG/PM</u></p> <p>Rated Pressure: <u>12900 BAR</u></p> <p>Rated Speed: <u>2900 RPM</u></p> <p>Cut In: <u>10 BAR</u></p> <p>Cut Off: <u>12 BAR</u></p> <p>Suction From: <input checked="" type="checkbox"/> Positive Suction <input type="checkbox"/> Negative Suction</p>
Standby Fire Pump (Engine Driven)	
<p>Pump: ----- <input checked="" type="checkbox"/> End Suction <input type="checkbox"/> Vertical</p> <p>Manufacturer: <u>SFFECO</u></p> <p>Shop/Serial number: <u>SFE10032H05180005</u></p> <p>Model or type: <u>SFP750 - 32EM</u></p> <p>Rated Flow: <u>750 USG/PM</u></p> <p>Rated Pressure: <u>162 PSI</u></p> <p>Rated Speed: <u>2900 RPM</u></p> <p>Cut In: <u>06 BAR</u></p> <p>Cut Off: <u>Manual BAR</u></p> <p>Suction from: <input checked="" type="checkbox"/> Positive Suction <input type="checkbox"/> Negative Suction</p>	<p style="text-align: center;">PSV DETAIL:</p> <p>PSV Installed on Pump: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>PSV Rating: _____ BAR PSI</p> <p>PSV Setting Pressure: _____ BAR PSI</p>