

## SEP-ISYS™ LOW PRESSURE PRODUCTION UNIT (LPPU)

The Sep-iSYS™ Low Pressure Production Unit (LPPU) is a compact system specially tailored to enhance production and increase lifespan of low pressure and depleting wells. The system is designed to receive production fluids at minimal pressures and boost the pressures of liquids such that the liquids can flow into the production header without the requirement of rotating equipment. The system is jointly developed and owned with PETRONAS.

### ABOUT THE SYSTEM

The system consists of two vessels; a low pressure separator that operates continuously at close to atmospheric pressures to allow wells to flow at minimal pressures and a surge vessel located below the separator that operates in batches to collect the low pressure liquids from the separator and discharge it at much higher pressure using high pressure motive gas. The system is a self-regulating system and self-contained system with minimal utility requirement in the form of instrument air and minimal high pressure motive gas, typically from the gas-lift source and no power requirement. This proprietary system is designed with no rotating equipment and minimal controls, thus, ensuring very high reliability and availability and no operational manning requirements. This compact design coupled with simple static equipment makes the system very suitable for remote unmanned platforms that have low pressure and depleting wells.



3D Model of the SEP-iSYS™ LPPU for ANDR-A.



SEP-iSYS™ LPPU Lifting and Installation on WLDAP-B.

### MAIN FEATURES AND BENEFITS

- Increases pressure of production fluids without exerting backpressure on wells, thus ensuring wells can produce at minimal pressures
- Expands the lifespan and increases the production of low pressure wells
- Self-contained system with no external power requirement and minimal motive gas requirement
- Self-regulating system with ability to adapt to change in production header pressures without requirement of operator intervention
- Compact & light weight
- No rotating equipment
- No operator attendance and minimal maintenance requirement
- Able to recover the gas if required
- Suitable for remote wellhead facilities

TRACK RECORD



West Lutong Bravo (WLDP-B)  
for PETRONAS CARIGALI  
SARAWAK OPERATIONS

Design Capacity:  
Max Liquids : 3500 BLPD  
Max Gas : 5.0 MMscfd  
Inlet Pressure : Atmospheric  
Discharge Pressure : up to 17 barg  
Package Dimensions  
L(m) x W(m) x H(m) : 2.8 x 4.2 x 6.6  
Dry Weight : 11 tons



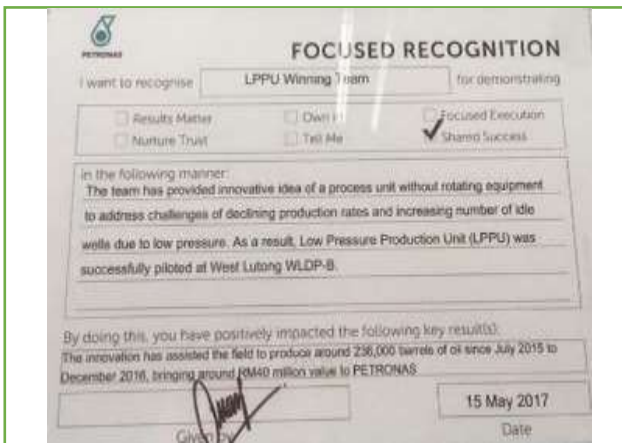
ANGSI A (ANDR-A) on Angsi Field for  
PETRONAS CARIGALI  
PENINSULAR MALAYSIA OPERATIONS

Design Capacity :  
Max Liquids : 8000 BLPD  
Max Gas : 7.0 MMscfd  
Inlet Pressure : 3.5 barg  
Discharge Pressure : up to 20 barg  
Package Dimensions  
L(m) x W(m) x H(m) : 2.5 x 6.0 x 7.0  
Dry Weight : 18 tons

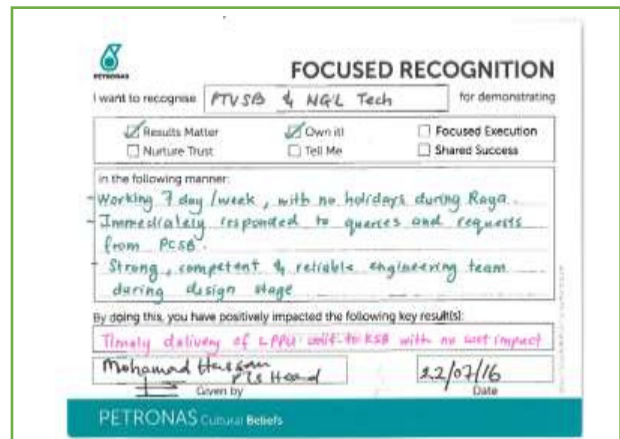


ANGSI C (ANDP-C) on Angsi Field for  
PETRONAS CARIGALI  
PENINSULAR MALAYSIA OPERATIONS

Design Capacity :  
Max Liquids : 8000 BLPD  
Max Gas : 10.0 MMscfd  
Inlet Pressure : 3.5 barg Discharge  
Pressure : up to 30 barg  
Package Dimensions  
L(m) x W(m) x H(m) : 2.5 x 6.0 x 7.0  
Dry Weight : 23 tons



Focused Recognition from PETRONAS Carigali Peninsular  
Malaysia Assets (PMA)



Focused Recognition from PETRONAS Carigali Sarawak Asset  
(SKA).