

# Lifting operations support for large scale gas plant

**CLIENT** Unocal East China Sea, Ltd (a subsidiary of Chevron Corporation)  
**ASSET** Xuanhan natural gas treatment plant  
**LOCATION** Sichuan province, China

Supply of technical experts ensures lifting operations are controlled, planned, supervised and executed safely

## BENEFITS

Two-year commissioning programme successfully brought the gas treatment plant online

Development of all safe system of work for cranes, rigging and lifting for production and maintenance

Improved safety performance in lifting operations

Engineering solutions delivered for difficult lifting operation

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**900+**  
stop work  
authorities

**3,500**  
safety audits logged

**230,000**  
man-hours without  
a recordable incident

**DELIVERY ASSURED**

## CHALLENGE

Unocal is the operator of the Chuandongbei (CDB) natural gas project on behalf of itself and China National Petroleum Corporation (CNPC).

Operations are over a large scale area (800km<sup>2</sup>) including rugged terrain, high population and sour gas.

Sparrows was employed to provide safety oversight of high-risk lifting operations during the Major Capital Project (MCP) phase of operations which included the development of two well pads, 30km pipeline, three train sour gas processing plant, a sulphur plant and gathering station. Through hazard analysis of crane, rigging and lifting activities, CDB identified the need to employ a lifting specialist to provide oversight, supervision and instruction to the crane contractor and Sparrows was selected through relationships on other global projects.

## SOLUTION

- Ten specialist personnel with expertise in cranes, rigging and lifting activities deployed to provide safety supervision across all lifting operations
- Training, coaching, support and supervision provided to enhance safety awareness and change mindset of the workforce towards lifting activities and improved performance
- During MCP phase Sparrows exercised over 900 stop work authorities, performed more than 3,500 safety audits (including +20,000 observations), provided inspection services for all lifting equipment utilised on the project and logged over 230,000 man-hours without a recordable incident
- Following Sparrows performance in the MCP phase of operations, Unocal extended the contract by three years to include support functions for production and maintenance
- Sparrows current role includes the provision to supply lift supervisors / technical experts to control, plan, supervise and execute all lifting operations being performed across the CDB project
- For the production and maintenance contract over 700 lifting plans have been created to include planned maintenance tasks, bespoke lifting operations for field operations and turnaround activities
- Sparrows provide engineering solutions for particularly difficult lifting operations which require technical support to ensure a safe system of work is achieved
- Sparrows also provide the provision of inspection services including all lifting appliances and accessories utilised in all areas of the project, as well as the statute government periodic inspections of client owned 'special equipment'
- The lift supervisors check the training and competency standards of all national crane operators, signallers, slingers and riggers on the CDB project.

## SUMMARY

- Crane and lifting services management
- Multi-discipline engineering/design
- Crane operations
- Rigging/lifting
- Training and coaching

1.



2.



1.  
Planning and supervision of a complex lifting operation to remove the 1st reheater

2.  
Planning and supervision of a complex lifting operation to remove a DN1100 pipe spool

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