

## ROC Oil Ltd.

Improved planning leads to greater utilisation

Roc Oil Company Limited (ROC) is one of Australia's leading independent upstream oil and gas companies with a presence in China, South East Asia and Australia. The company operates across the full range of upstream business activities from exploration and appraisal to development and production. The project was undertaken at the Arrowsmith Stabilisation Plant (ASP) which processes oil from the Cliff Head fields about 10km off the coast of Dongara in Western Australia.

"Renoir have empowered and enabled the team to perform their day to day activities with improved structure, efficiency and overall control. Enabling the business to pursue, with improved confidence, implementation of a step change in how we operate, unlocking access to further efficiencies."

**WA Production &  
Development Manager**

### Key Results

The evaluation period from week 10 to week 14, yielded the following results:

Plan Attainment:  
124% Improvement

Utilization: 167% Improvement

**Backlog Average due days and  
number of backlogs:**

33% Reduction in backlog  
average due days

49% Reduction in number  
of backlogs

**Maintenance data  
integrity metrics**

Actual Labour Hours Integrity:  
27% Improvement

Estimated Labour Hour  
Integrity: 456% Improvement

Estimated Duration Integrity:  
64% Improvement

### PROJECT GENESIS

ROC wanted to explore the possibilities of alternative operating models at ASP, to improve efficiencies and identify the most cost effective model that matched the stage in the asset life cycle, without a negative effect to HSEQ. The existing management control systems and day to day operational work flow management by the O&M contractor, was considered to be an unsuitable platform to allow implementation of alternative operating models. ROC engaged Renoir to review their O&M contractor's existing MCS, identify efficiency gaps and develop a robust Management Control System to effectively manage resource utilisation.

### ANALYSIS

Analysis of the O&M Contractor's current management systems revealed:

#### Operations & Maintenance

- Not all maintenance work was planned or recorded in the CMMS system.
- Work orders were not clear and lacked detail on what actually needs to be done, therefore leading to delays in preparation of the work or non-completion, as per the schedule.
- There was no standard job library that detailed the parts, tools, equipment needed for the regular maintenance work.
- The current maintenance capacity utilisation could not be established, making resource planning difficult.
- Job planning and execution relied on experience rather than a systematic approach.
- When a work order/project plan couldn't be completed on time, the plan was overwritten, without recording reasons for the variances.
- Backlog was only recorded in terms of number of work orders. There were no estimated times, so it was impossible to ascertain the resources required to execute the work.

#### Supply Chain and Warehouse

- Purchase Orders were created in both the CMMS and Proactis systems which caused rework (for inventory purchases only).
- Although there was an online PO creation system, many documents were still printed and scanned.

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Project Larry has been an invaluable experience and one that will continue to resonate with me. I met the DILOs with scepticism, however after having done one and looking at all the results, the insight was surprising and drove me to find new solutions I would not have thought of before. Understanding and designing the processes took me a lot of time as Renoir introduced concepts I had not encountered before such as inventory management and planning. Their patience came through and now my work in planning is better and I have a new found understanding of when and how to use KPIs to deliver. Lastly, the team was very supportive through implementation as discussions and conversations with people were not always pleasant. In the end, I can appreciate now the difference between implementing and sustaining a change, and I am more confident now how to do it myself in the future

**Task Force  
(E&I Engineer: Planner)**

- There was no inventory management system in place to flag when parts were running low which caused stock-outs.
- Poor compliance to Procurement and Inventory processes in CMMS e.g.: parts ordered without work orders inaccurate data entry and inventory movement is not recorded.
- Lack of daily/weekly inventory control (stock in/stock out) in the warehouse resulting in wasted time reconciling inventory.
- Inconsistent labelling of parts caused delays when looking for parts

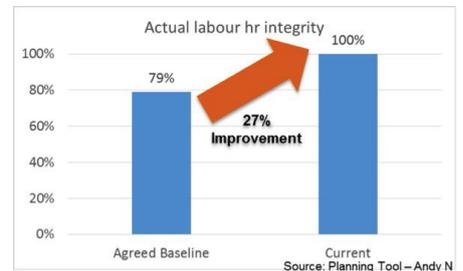
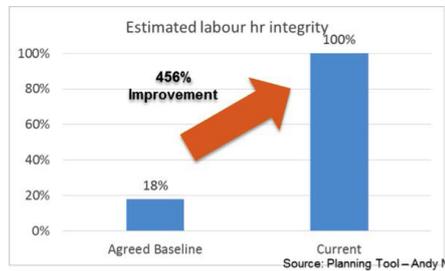
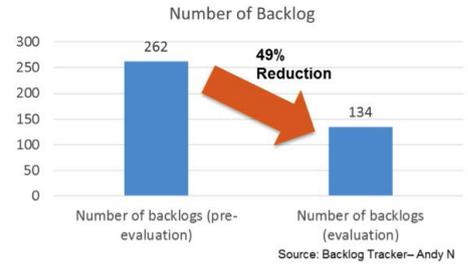
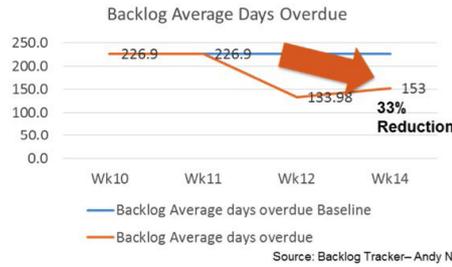
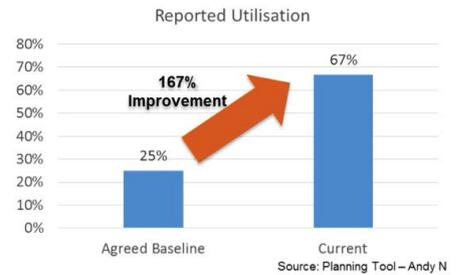
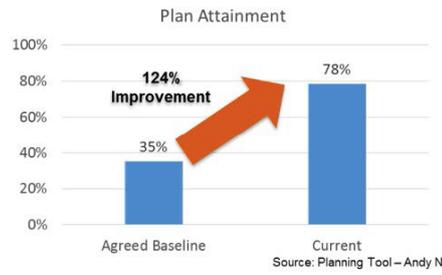
### PROJECT APPROACH

With the completion of a 5-week analysis and scoping exercise, a 14-week change program was put in place with a team of one Project Manager, one Consultant and two full-time members of a Task Force provided by the O&M Contractor and ROC. The brand name given to the project was Project Larry – named after a famous lobster festival in Dongara.

Due to site based personnel availability, the implementation phase was later extended by another 2 weeks to assist ROC in ensuring a smooth transition of the management control system (MCS) ownership to key stakeholders.

More studies were conducted during the Focus Process® phase and the findings validated the analysis outcome. With more involvement of shop floor personnel and managers during this phase, efficiency gaps within the areas of maintenance planning, warehouse management and procurement processes were identified. Leading root causes to the identified inefficiencies were ineffective planning and review meetings, minimalistic/basic planning process, lack of understanding on warehouse and procurement processes and lack of KPIs monitoring.

A new ASP/CHA Management Control System was put in place to address the identified efficiency gaps. Some of the major key elements were, planning tool, purchase requesting forms, planning process, goods inwards/outwards swim lanes, supervisory check lists, demarcation of roles and responsibilities, inventory management process, weekly planning & review meetings (KPI monitoring) and modification to the daily pass meetings.



## THE RENOIR GROUP

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