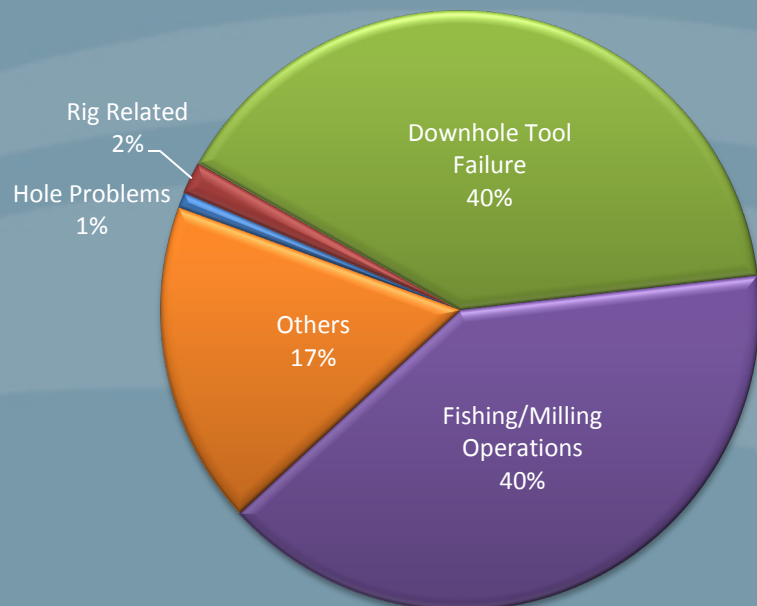
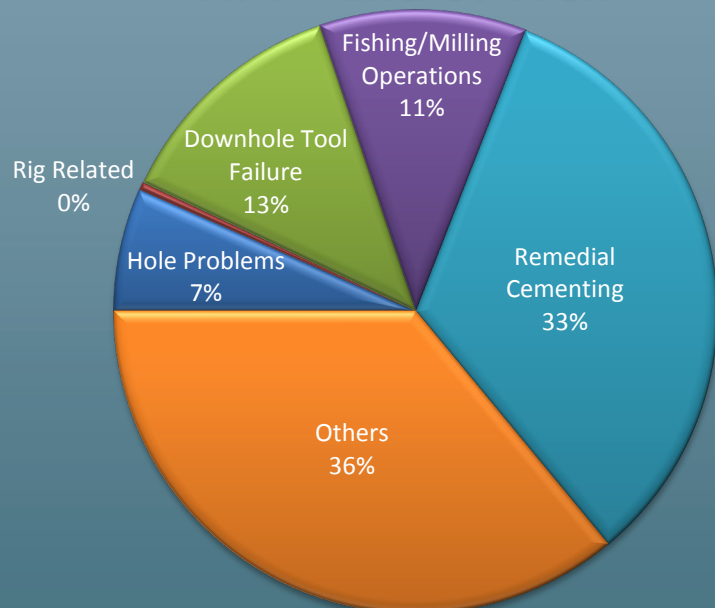


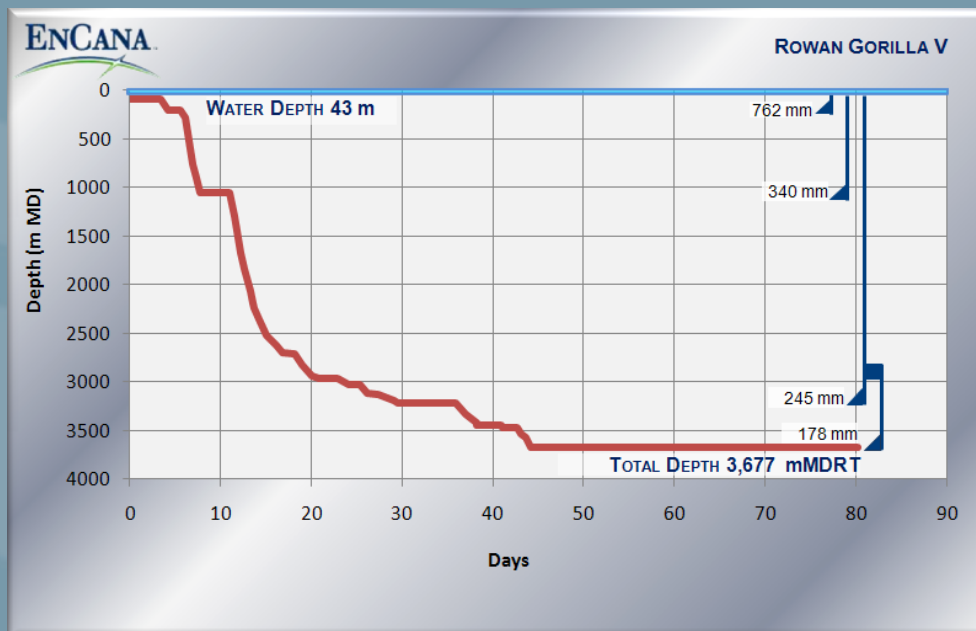
## NPT - TD



## NPT - End of Well



Normal Pressure Shelf



## AVENUES FOR IMPROVEMENT

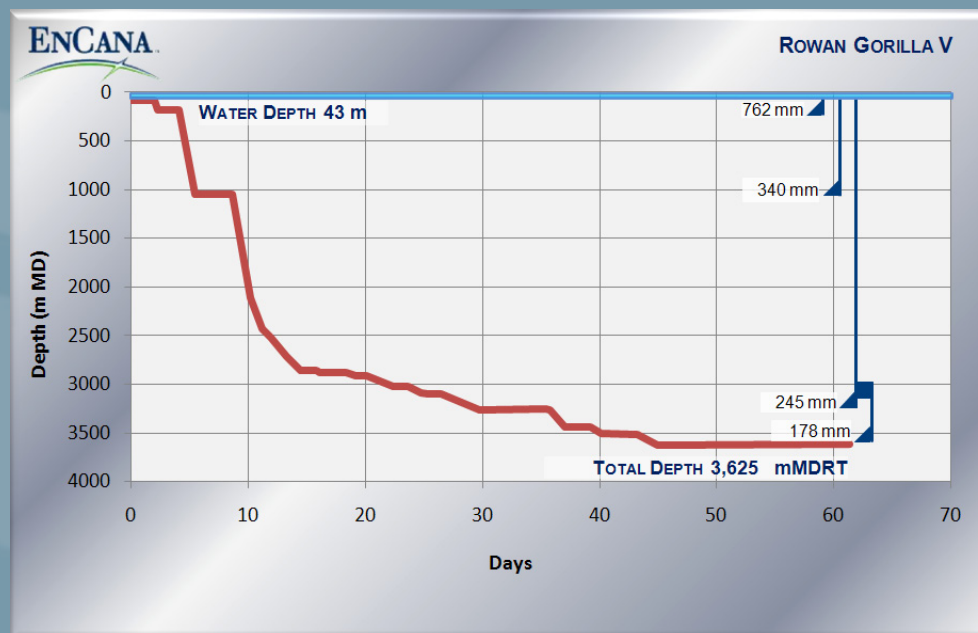
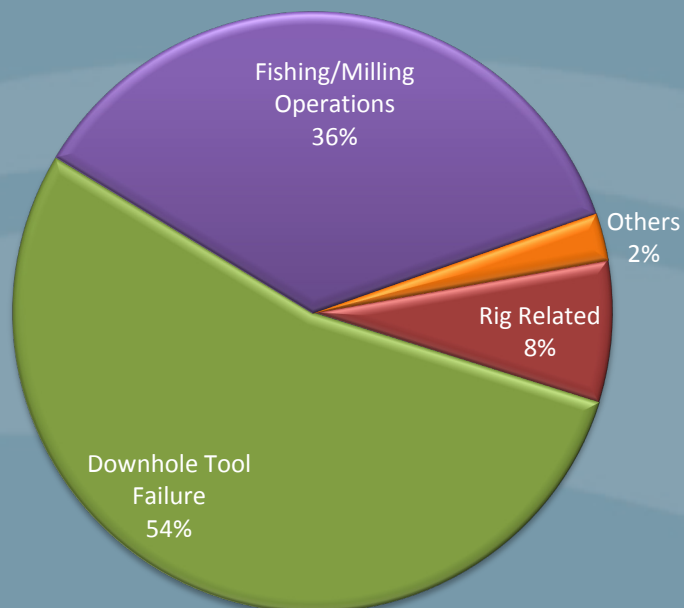
- Casing design, coupling selection optimization
- Bit selection, 311 mm hole interval

## REASONS FOR NPT

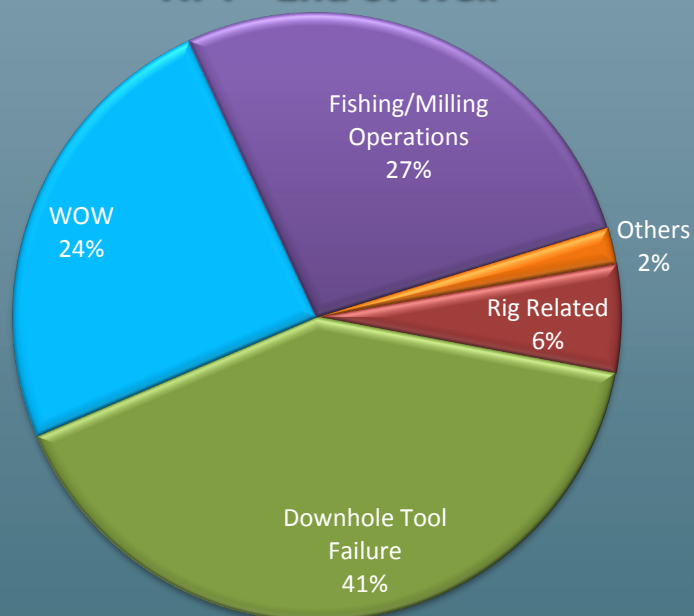
- Casing design, coupling selection optimization
- Bit selection, 311 mm hole interval
- Remedial job – 178 mm wiper plug system failed

TIME DISTRIBUTION, DAYS	TD	END OF WELL
Total Time	44.1	80.6
NPT	2.4	6.8
Total Time less NPT	41.8	73.8
% NPT	5%	8%

## NPT-TD



## NPT - End of Well



### AVENUES FOR IMPROVEMENT

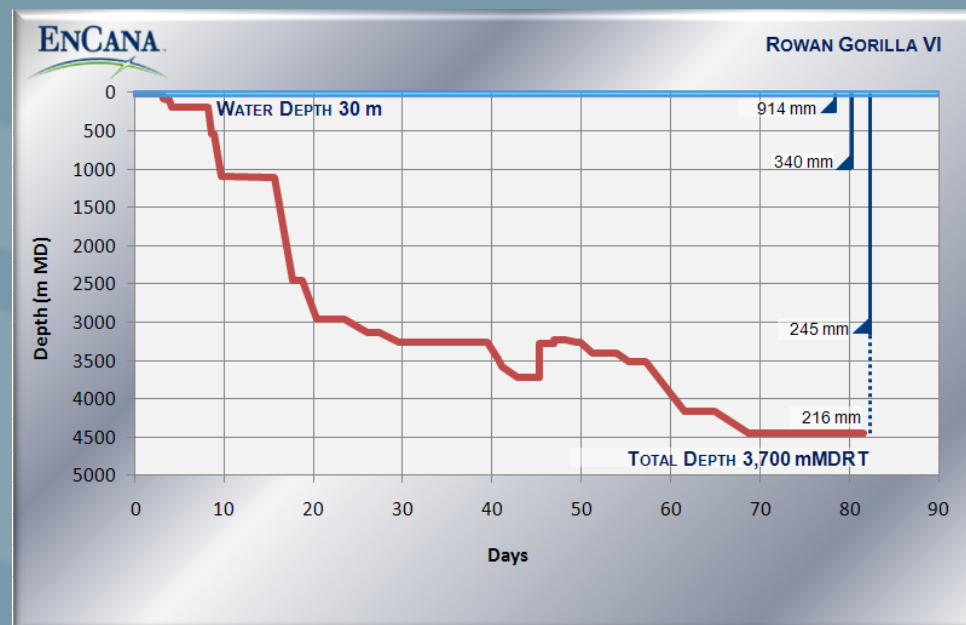
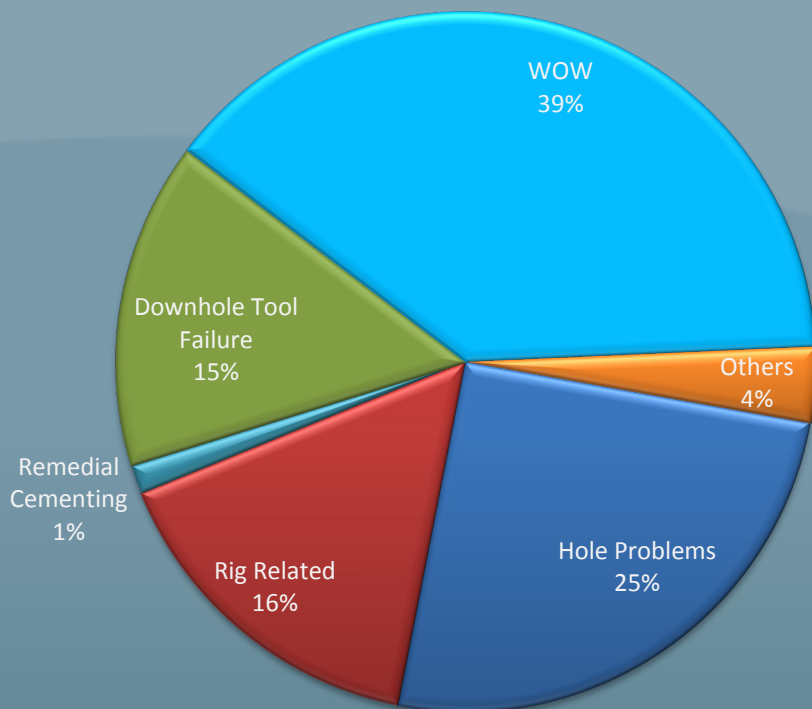
- Downhole Tool reliability

### REASONS FOR NPT

- MWD and Logging Tool Failure
- PDC Bit Failure resulting in Milling Trip

TIME DISTRIBUTION, DAYS	TD	END OF WELL
Total Time	45.0	61.7
NPT	4.1	5.4
Total Time less NPT	41.8	73.8
% NPT	9%	9%

## NPT-End of Well



## AVENUES FOR IMPROVEMENT

- Rig Inspection and Acceptance
- Hole conditioning prior to running casing strings

## REASONS FOR NPT

- Loss circulation and hole bridging
- Rig Repair
- WOW

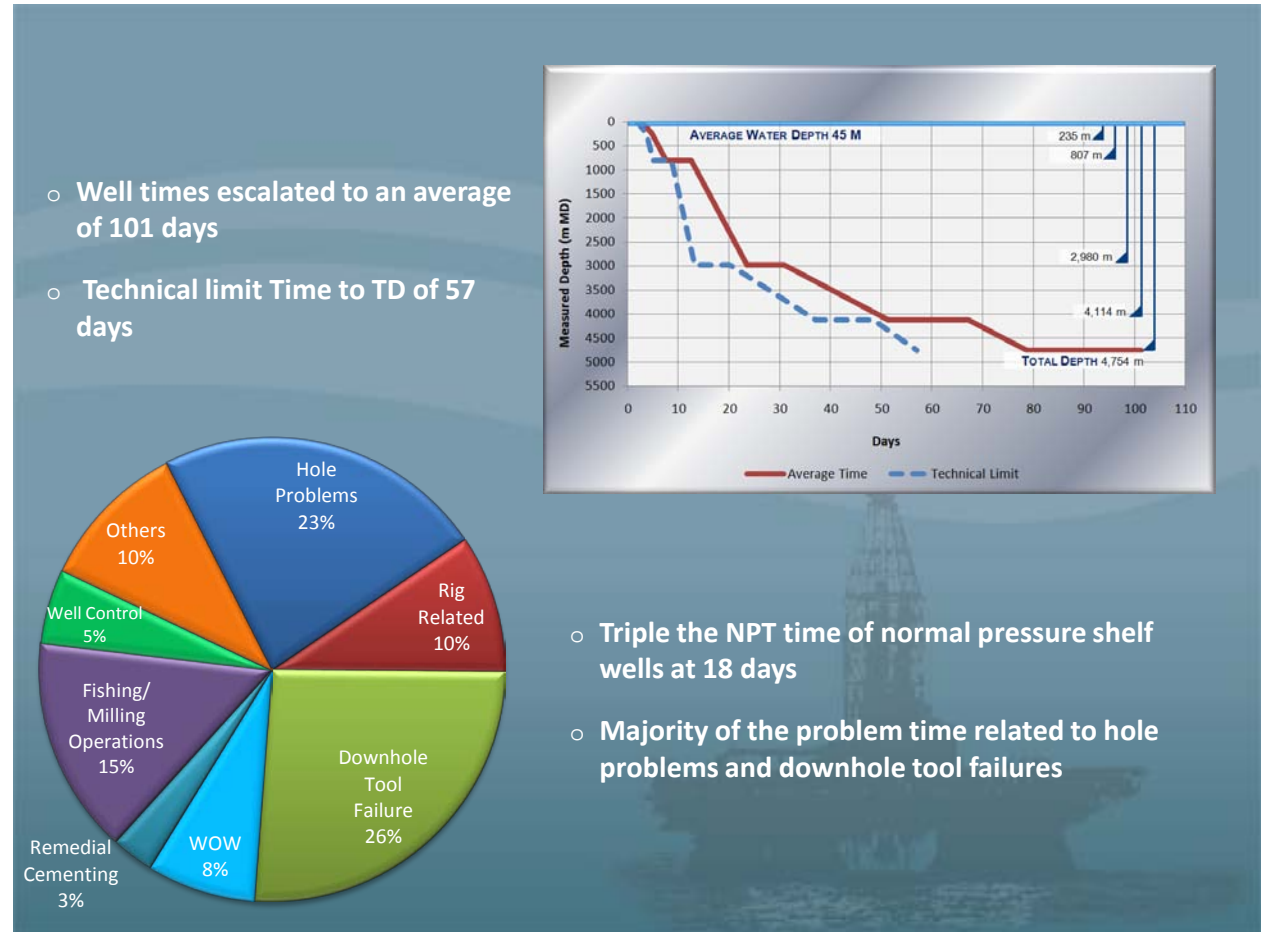
## TIME DISTRIBUTION, DAYS

	END OF WELL
Total Time	56.5
NPT	9.3
Total Time less NPT	47.2
% NPT	16%

### 3.0 OVERPRESSURE SHELF WELLS

In contrast to the normal pressure shelf wells, the overpressure shelf category had close to triple the NPT time at 18 days. While well control issues were present the majority of the problem time related to hole problems and downhole tool failures. The more challenging wells escalated the well time an average of 101 days but a Technical Limit time to TD of 57 days exists to be targeted.

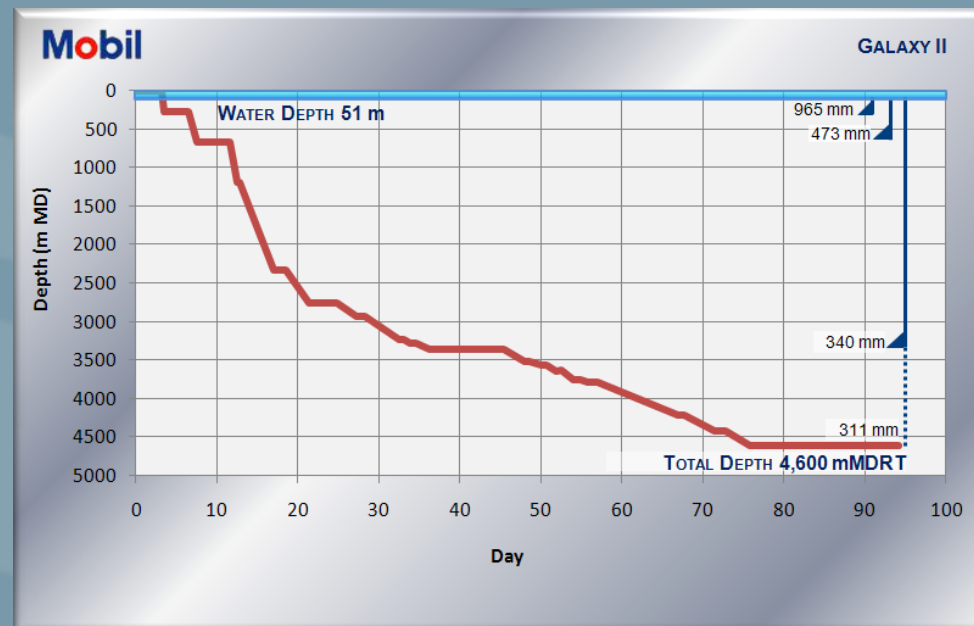
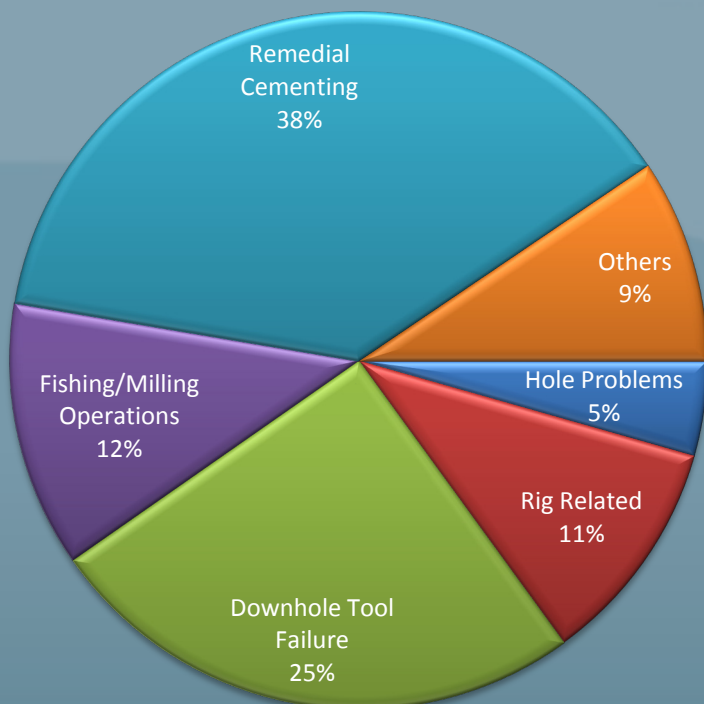
#### 3.1 Average and Technical Limit Performance



#### 3.2 Wells in Category

As follows:

## NPT - End of Well



## AVENUES FOR IMPROVEMENT

- Primary Cement Integrity
- Downhole tool reliability

## REASONS FOR NPT

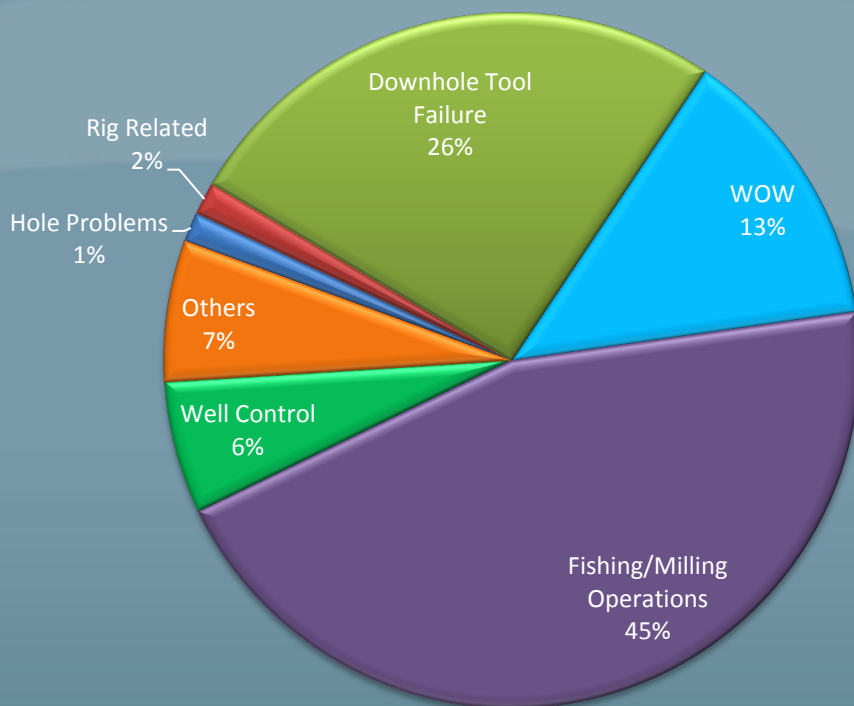
- Remedial Cementing of Casing Shoe
- Directional and Logging Tool Failures

## TIME DISTRIBUTION, DAYS

	END OF WELL
Total Time	94.4
NPT	7.1
Total Time less NPT	87.3
% NPT	8%



## NPT - End of Well



## AVENUES FOR IMPROVEMENT

- WellBore Condition
- Downhole tool reliability

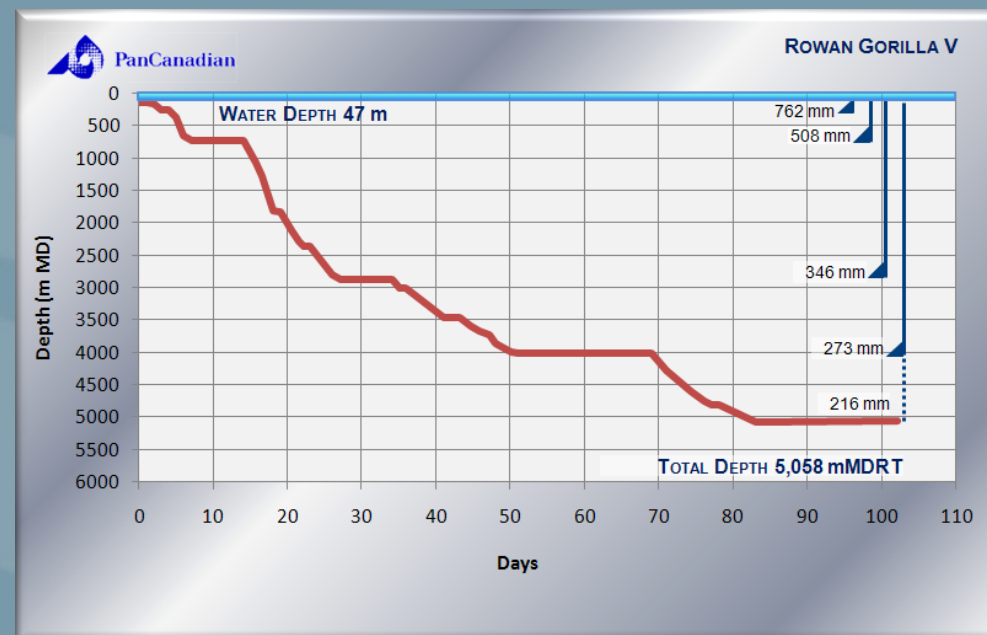
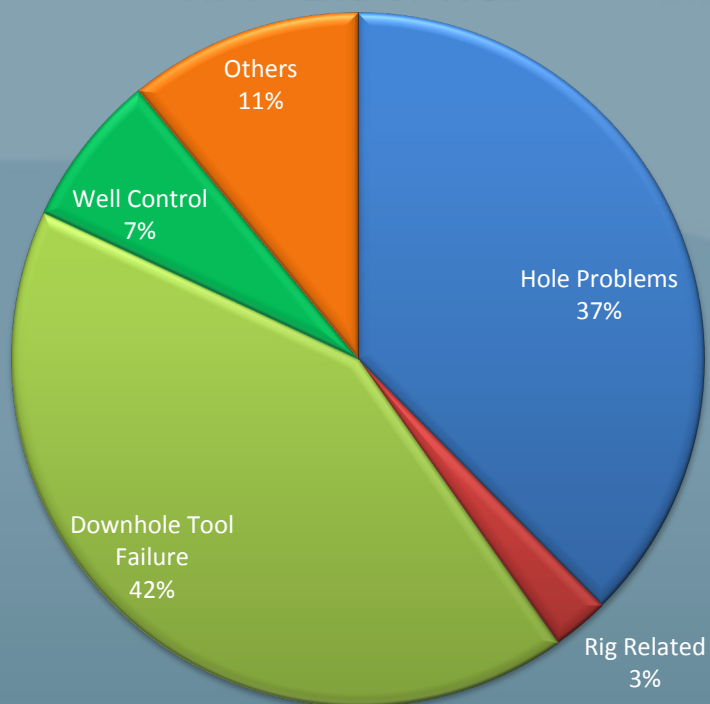
## REASONS FOR NPT

- Stuck Drill string and Wireline Tools
- Directional Tool Failure
- Bridge Plug and Casing Shoe Failure

## TIME DISTRIBUTION, DAYS

TIME DISTRIBUTION, DAYS	END OF WELL
Total Time	94
NPT	15
Total Time less NPT	79
% NPT	16%

## NPT - End of Well



## AVENUES FOR IMPROVEMENT

- WellBore Condition
- Downhole tool reliability

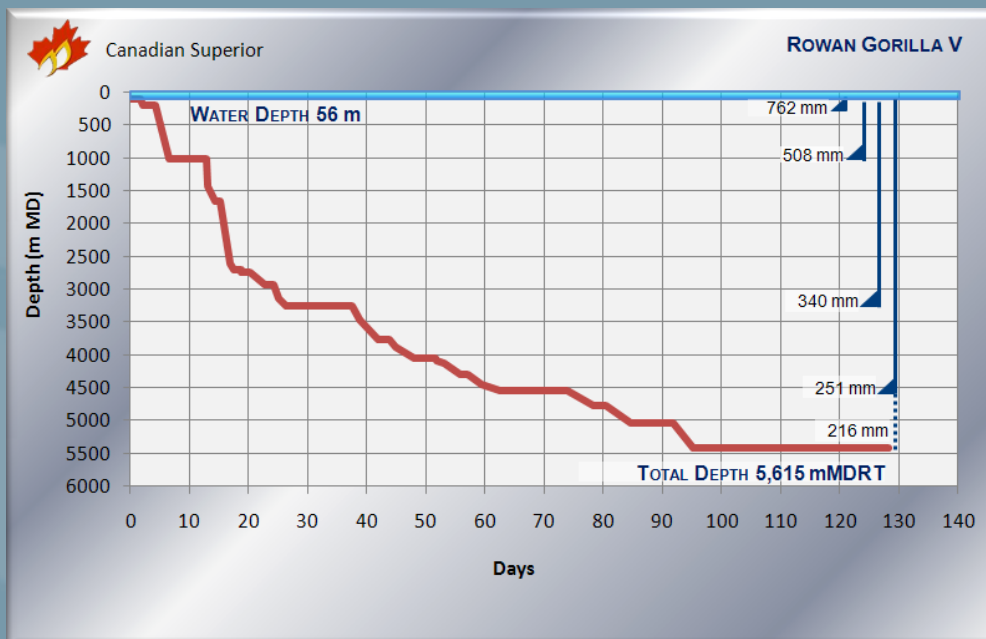
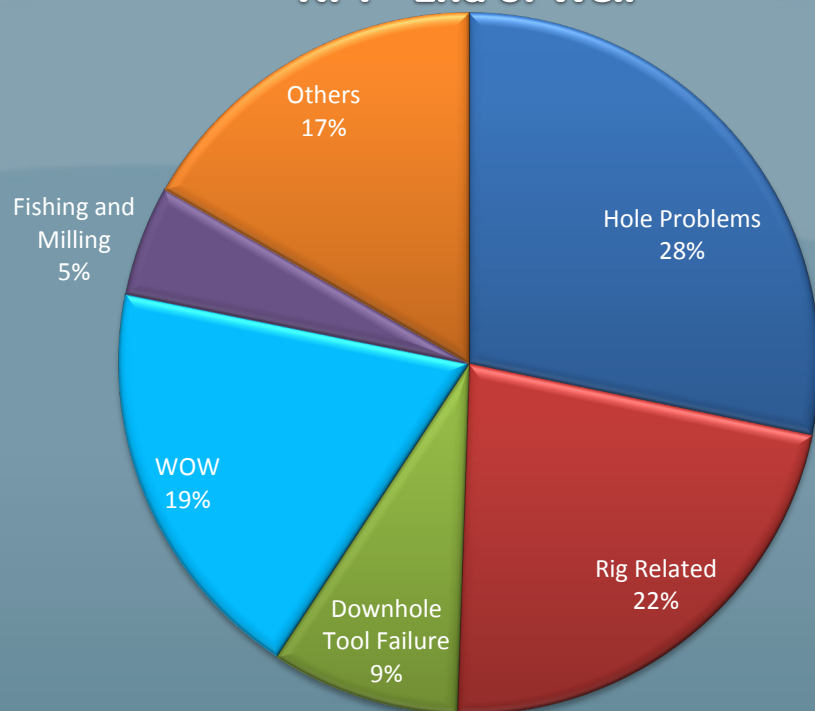
## REASONS FOR NPT

- High Pore Pressure and Loss
- Casing Cementing Blockage

## TIME DISTRIBUTION, DAYS

TIME DISTRIBUTION, DAYS	END OF WELL
Total Time	101
NPT	31
Total Time less NPT	70
% NPT	31.4%

## NPT - End of Well



## AVENUES FOR IMPROVEMENT

- Drilling Fluids Management
- Rig and Wellhead Equipment Reliability

## REASONS FOR NPT

- Induced mud losses
- Rig and Wellhead Equipment Failure

## TIME DISTRIBUTION, DAYS

TIME DISTRIBUTION, DAYS	END OF WELL
Total Time	129
NPT	25
Total Time less NPT	104
% NPT	19%