

Loss of Production Income An Underwriter's Perspective

Paul W. Dawson

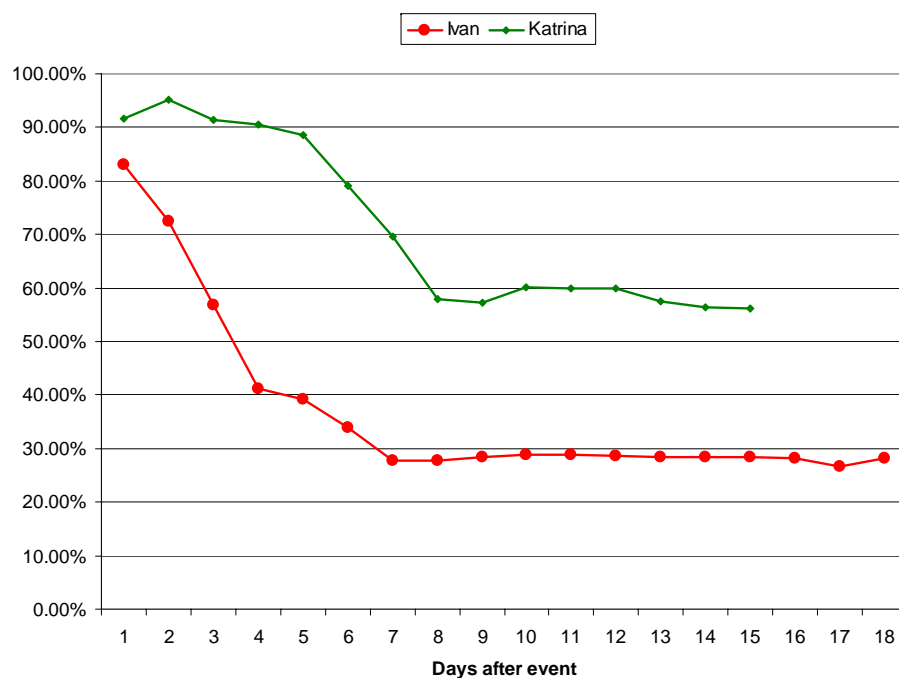
Joint Rig Committee



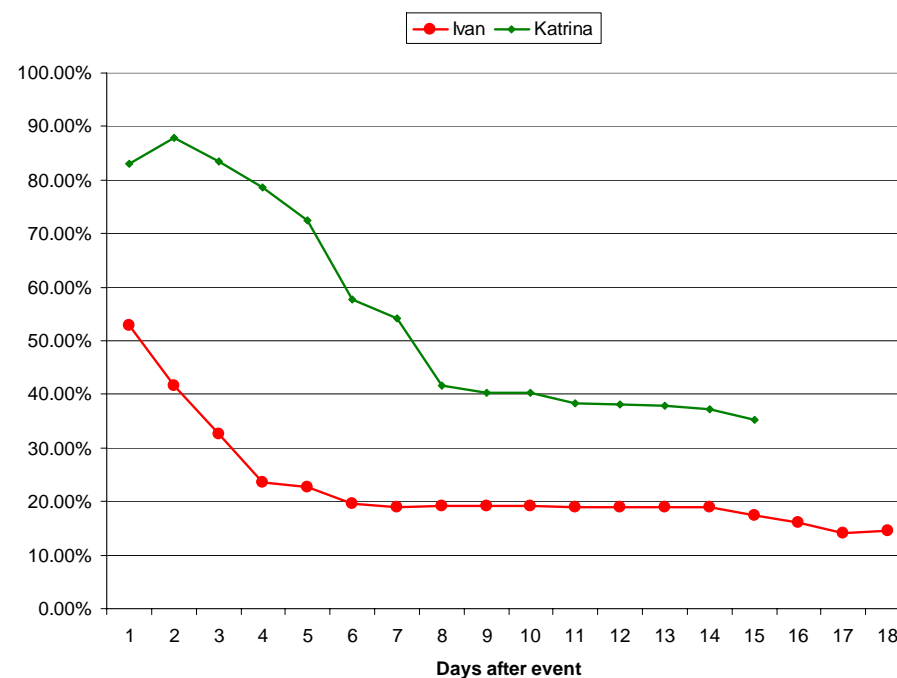


% of GOM Daily Shut-In Production for Hurricanes Ivan & Katrina

- Shut in – Tuesday September 13th – Oil 846,720 BOPD, Gas 3.72 BCFPD



Oil (bbls)

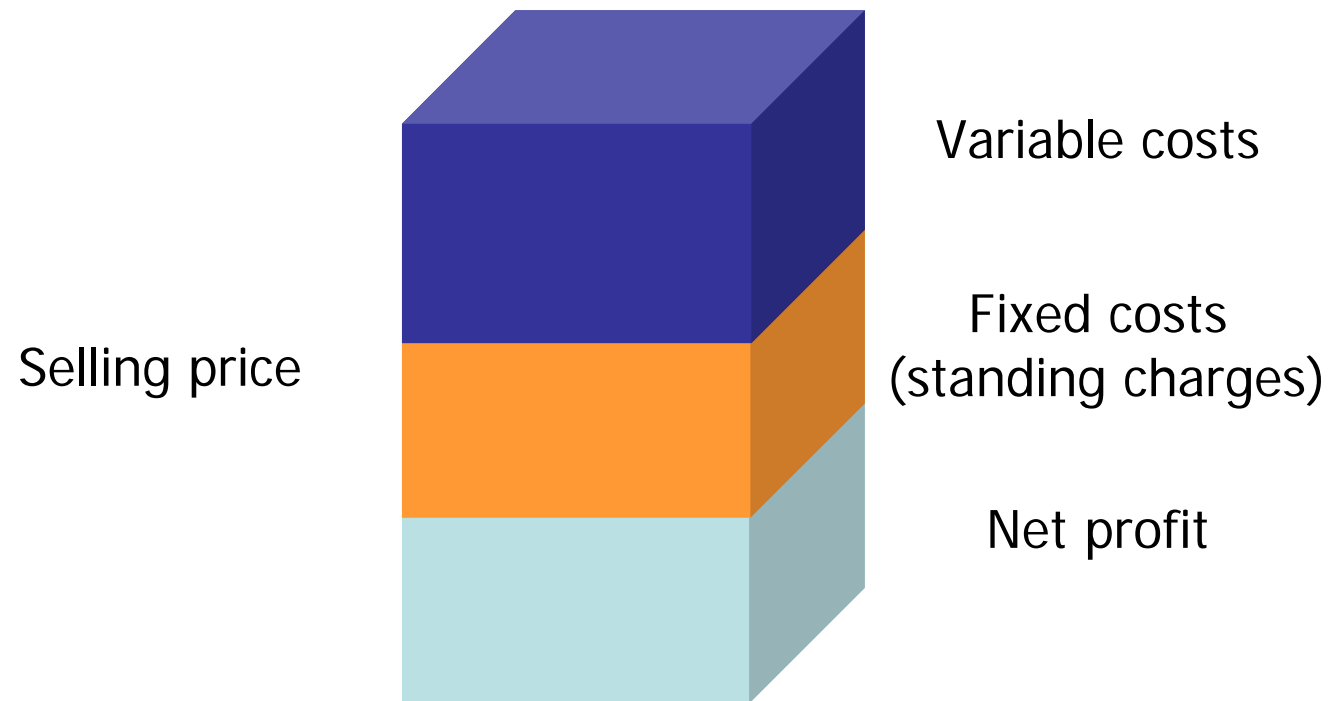


Gas (MMCFPD)

Types of Consequential Loss

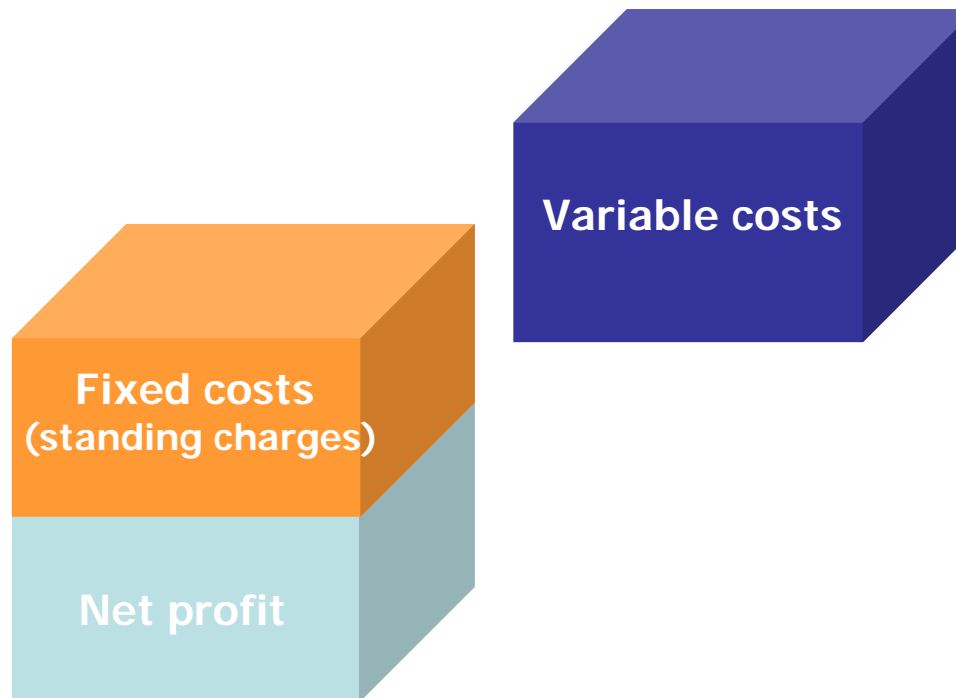
- **Anticipated Profits**
- **Continuing Trading Expenditure**
- **Increased Trading Expenditure**
- **Other Capital Losses & Expenditure**
- **Liquidated Damages**
- **Third Party Liabilities**

Business Interruption



Business Interruption

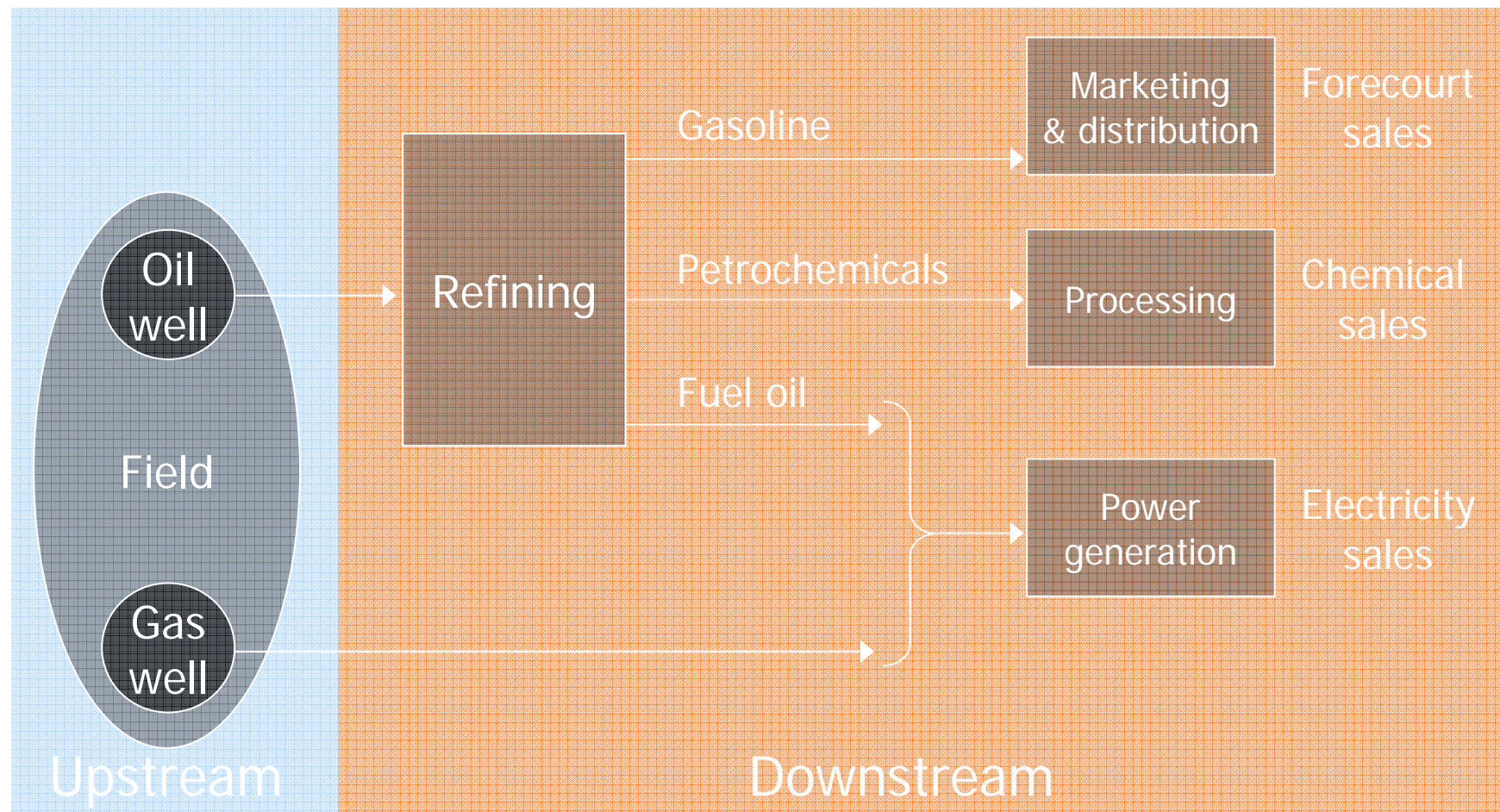
Gross profit



Loss of Production Income



Integrated energy company



Which Margin ?

As of 12th September 2005

	Day Ago	4 Weeks Ago	Year Ago	52 Week Avg.
Natural Gas Prices (\$)				
Next Months Future Contract	\$11.263	\$9.588	\$4.658	\$7.217
Strip Average	\$10.803	\$9.510	\$6.099	\$7.511
Henry Hub Spot	\$11.030	\$9.600	\$4.580	\$6.978
Oil Prices (\$)				
West Texas Intermediate	\$64.08	\$66.86	\$44.64	\$52.55
North Sea Brent	\$62.36	\$66.36	\$41.88	\$50.28
Persian Heavy	\$50.40	\$54.04	\$32.84	\$39.93
Bonny Light	\$65.26	\$67.08	\$42.64	\$50.99
Ural / Mediterranean	\$57.28	\$61.39	\$37.67	\$45.99
OPEC Daily Basket	\$57.58	\$59.14	\$38.74	\$46.48
Refining Margins (\$)				
East Coast 5-3-2	\$20.27	\$14.48	\$9.48	\$10.79
Gulf Coast 3-2-1	\$23.26	\$15.29	\$5.81	\$8.03
Mid-Continent 3-2-1	\$18.89	\$16.39	\$8.08	\$9.31
West Coast 5-3-2	\$25.24	\$25.60	\$15.55	\$20.62

The Production Loss Sustained Wording JRC 2005/003A

Loss of Production

- **Shortfall being**
Adjusted Production – Actual Production
not exceeding
Daily Value or Unit Volume as schedule

Which Assets are Covered?

- **Insured's Premises**
- **Dependency Premises**
 - **As Declared**
 - **Non Declared**

Insured's Premises

Insured's Premises shall be defined as facilities and/or platforms and/or pipelines **as stated in the Schedule** which are owned by or in the care, custody or control of the Insured and/or in which the Insured has an interest as co-venturer.

Dependency Premises shall be defined as real or personal **property upon which the Insured's production at the Insured's Premises is dependent**, other than the scheduled Insured's Premises themselves, but including

- (i) real or personal property situated at Insured's Premises in which the Insured has no interest as owner, operator or co-venturer
- (ii) real or personal property situated elsewhere, whether or not the Insured has an interest as owner, operator or co-venturer.



The Schedule

<u>Insured's Premises</u>	<u>Unit Volume</u>	<u>Volume Measure</u>	<u>Unit Price</u>	<u>Daily Value</u>	<u>Waiting Period (days)</u>	<u>Maximum Recovery Period (days)</u>

Occurrence Limit:

Standard Period 180 days

[Dependency Premises](#)

[Sublimit for unscheduled Dependency Premises \(if not \\$250,000\)](#)

Which Perils ?



Direct Damage

No claim shall be payable under this Section:

- (i) Unless and until a claim has been paid, or liability admitted, in respect of direct physical loss or physical damage to the Insured's Premises under Section X of this Policy or unless or until direct physical loss or physical damage to Dependency Premises occurs which would if said Dependency Premises were scheduled herein as Insured's Premises be indemnifiable by application of the terms, conditions and exclusions applicable to Section X of this Policy; or
- (i) In respect of Well Out of Control, unless and until a claim has been paid, or liability admitted, under Section Y of this Policy.

This condition shall not apply if the sole reason for no such payment having been made, or liability admitted, is the operation of a deductible

When does Recovery begin ?

When does Recovery end ?

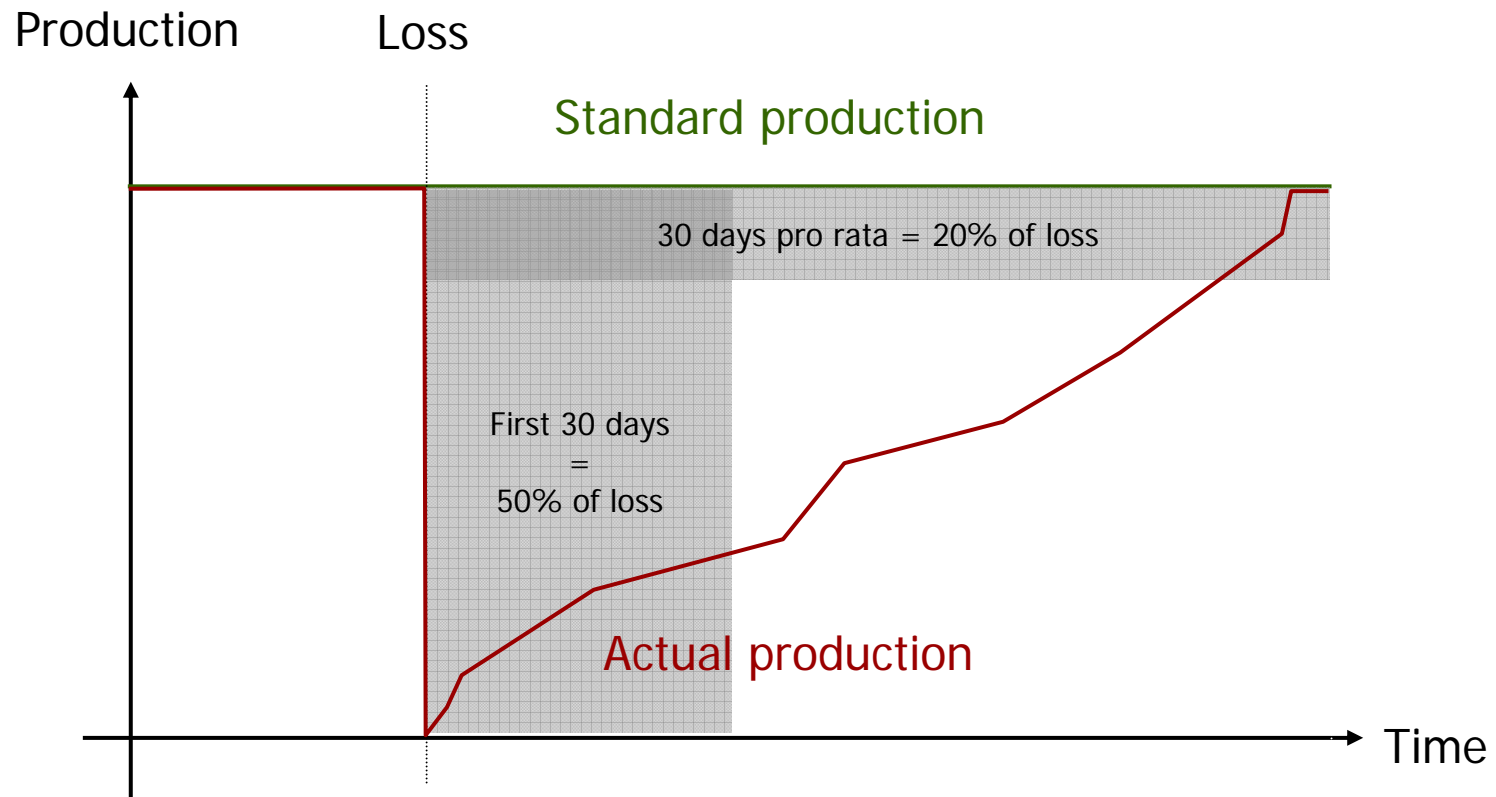
Period of Recovery

The period in respect of which Underwriters shall indemnify the Insured for Loss of Production and/or Increased Cost of Working shall, in respect of each Occurrence, **not commence until the Insured has suffered Loss of Production, consequent upon such Occurrence**, for the number of days stated in the Schedule as the Waiting Period (**for the purpose of ascertaining the Waiting Period days of lost production shall be aggregated and will not be required to be consecutive**); the Recovery Period shall then continue for as long as such Loss of Production persists but not exceeding

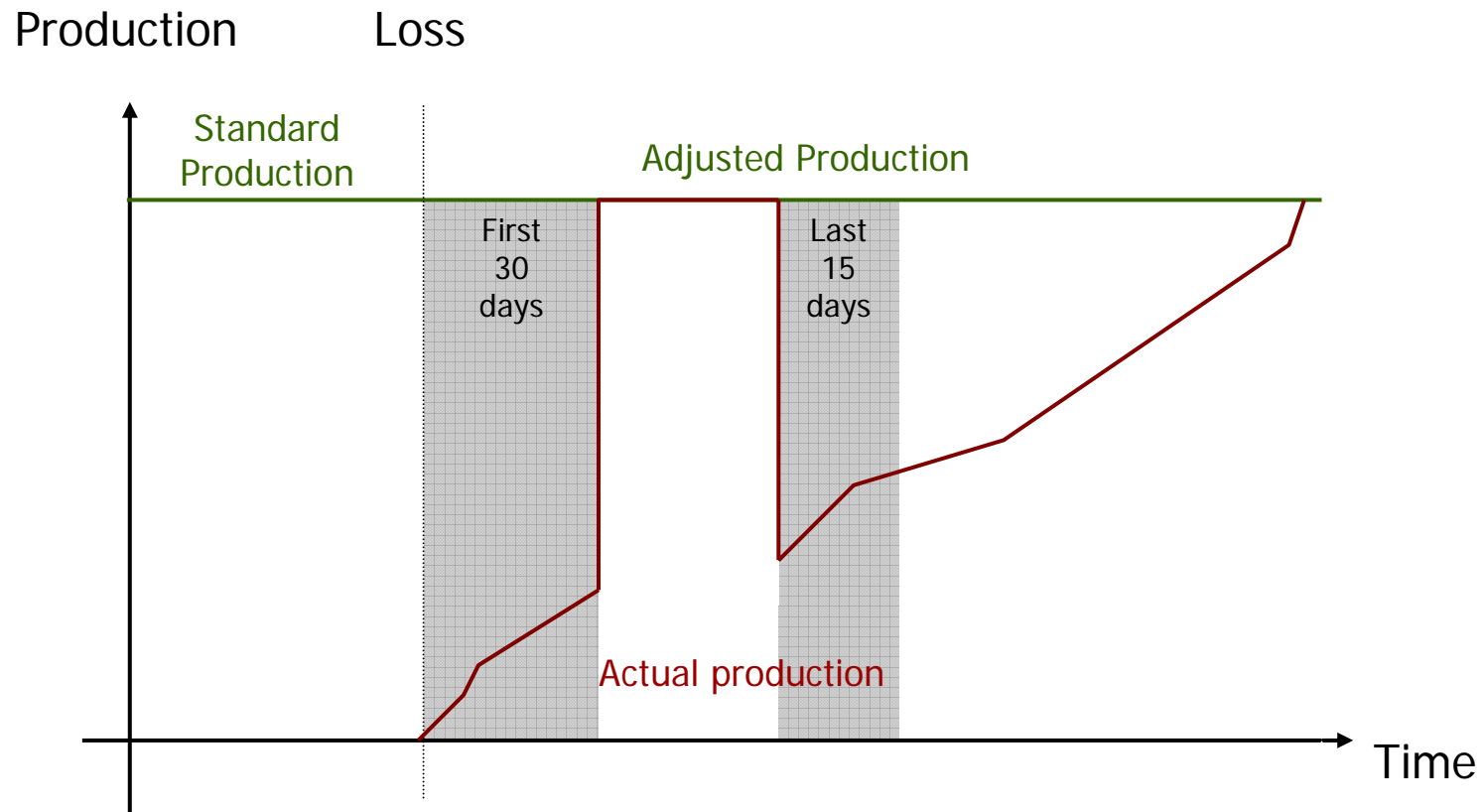
- (i) such time as, with the exercise of **due diligence and dispatch**, Normal Operations could be restored and **prioritising**, when appropriate in the interest of Underwriters and the Insured in reducing loss hereunder, **the repair, reinstatement or replacement necessitated by the Occurrence**, nor
- (ii) the unbroken length of time stated in the Schedule as the Maximum Recovery Period.

The Recovery Period hereunder shall not be limited by the expiry date of this Section.

Waiting Period



Waiting Period

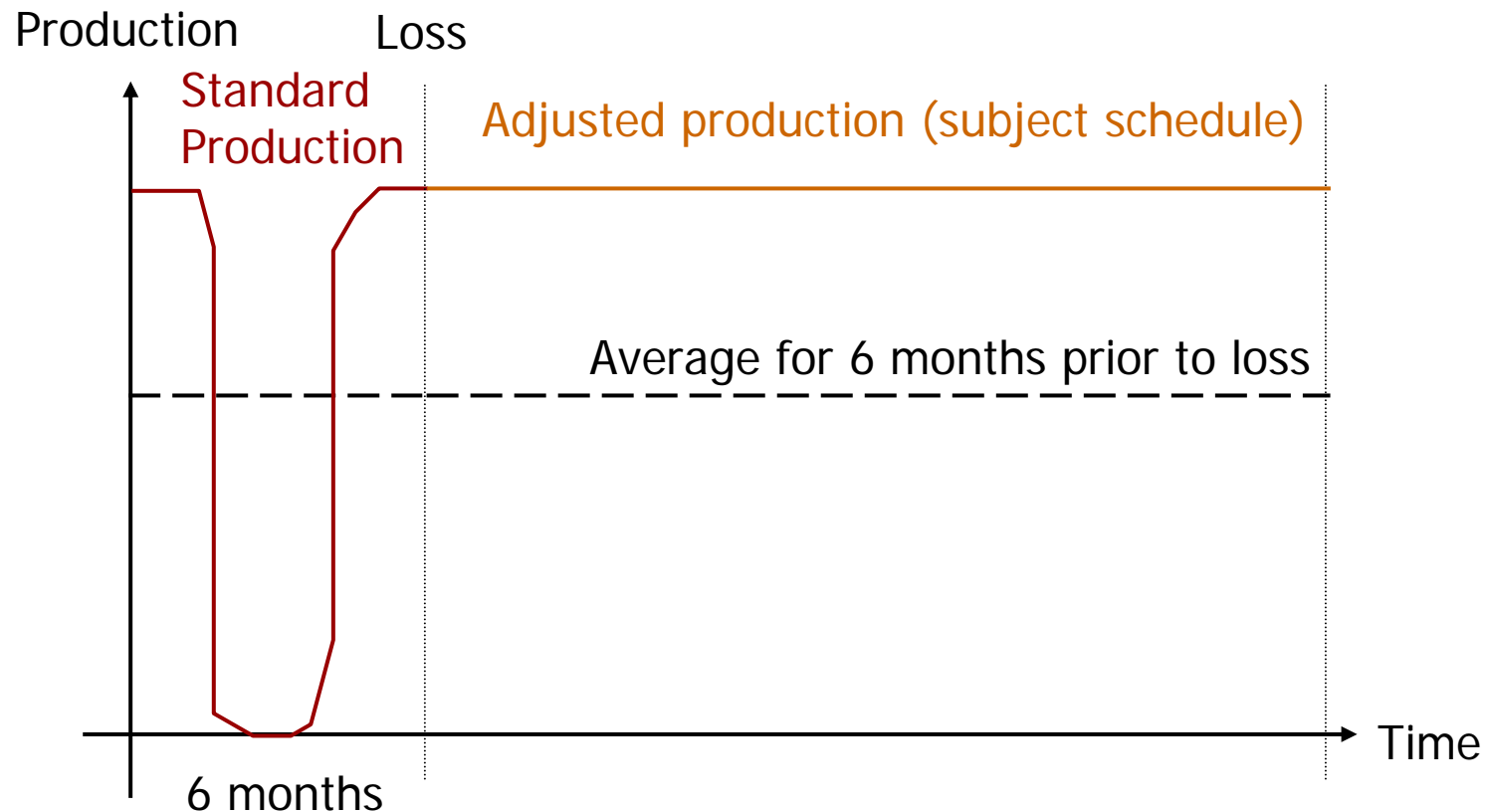


- Say a 45 day Waiting Period

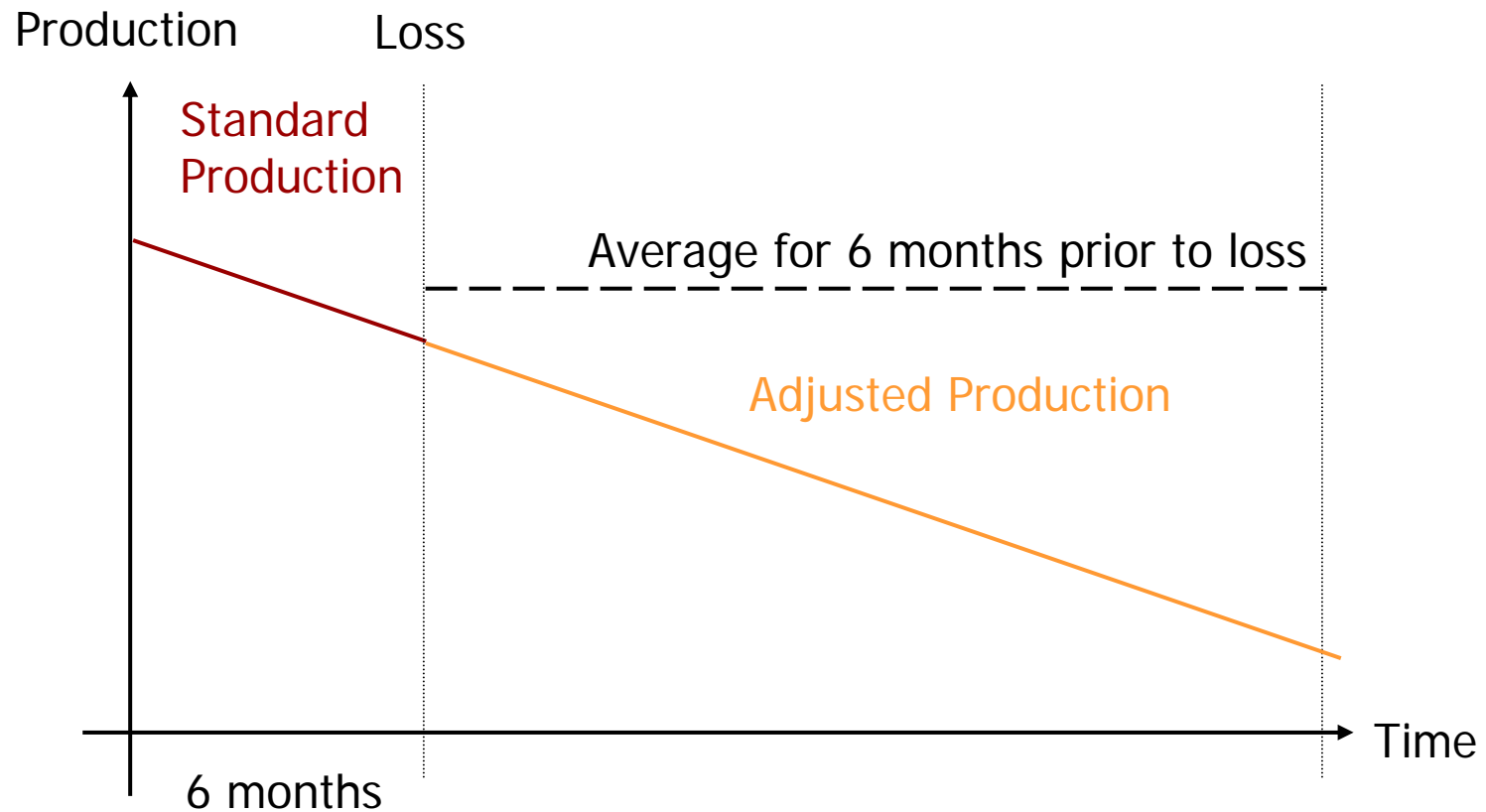
Change of Circumstances

Adjusted Production defined as Standard Production **adjusted as may be necessary to provide for variations in Volume** or other special circumstances including but not limited to planned or unplanned shutdown or a change in the Insured's financial and/or working and/or ownership interest which affects Volume either before, during or after the loss.

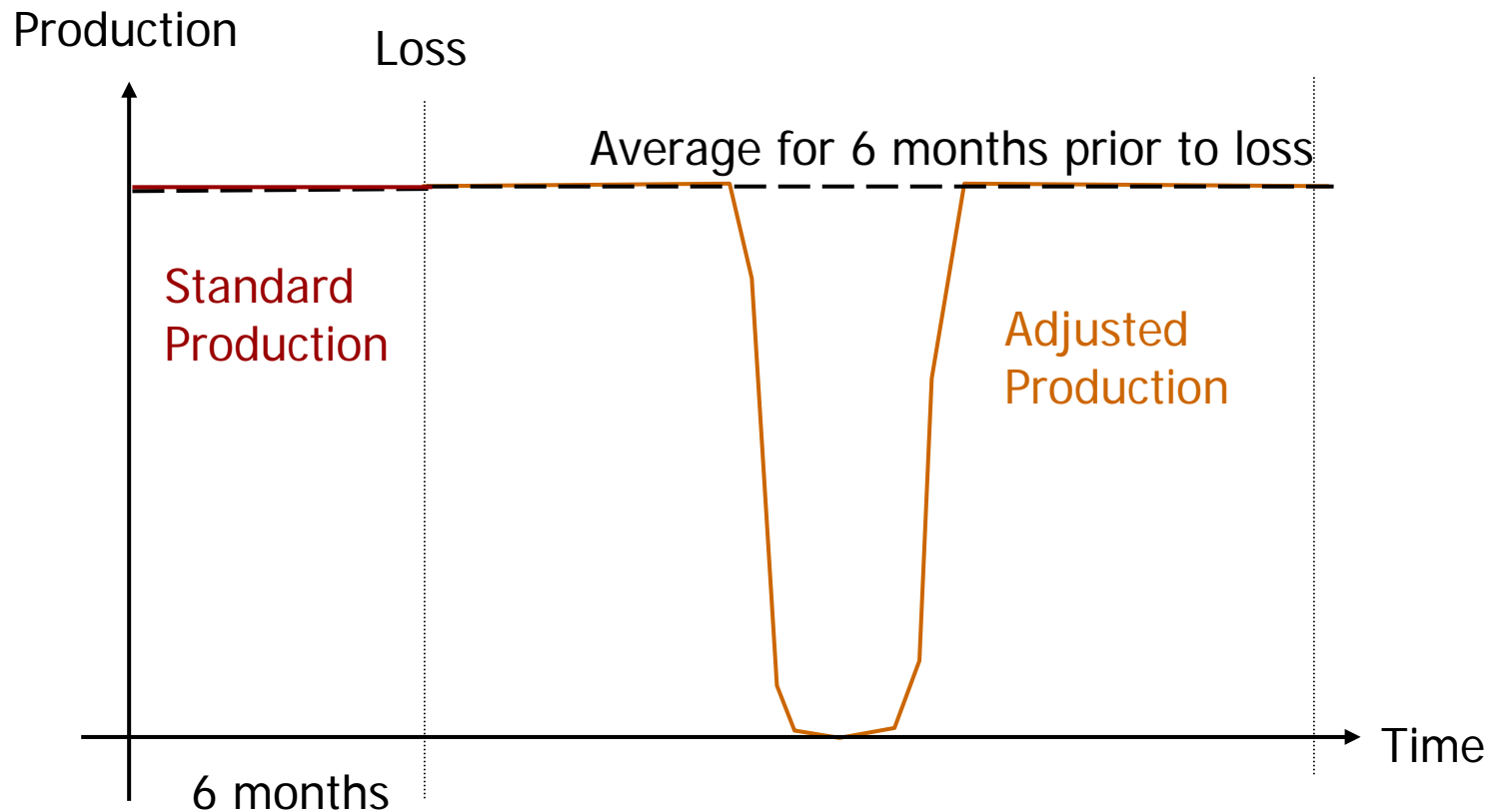
Shutdown prior to loss



Declining Well

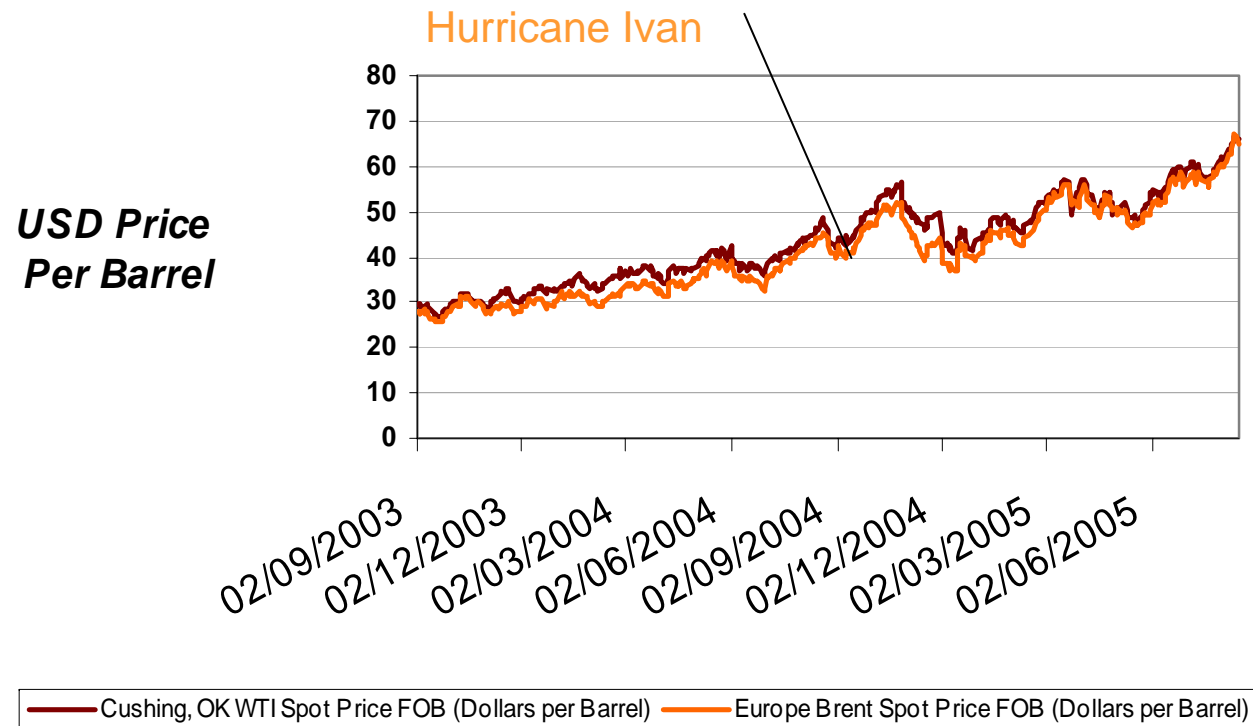


Shutdown after loss



How is Value of Recovery calculated ?

Price Volatility



Crude Oil Price – Where next?

- **Merrill Lynch**

2006
\$52

2009
\$42

- **Goldman Sachs**

2006
\$68

2009
\$60

Measure of Recovery

Loss of Production X Unit Price

where Loss of Production is:

Shortfall of Adjusted Production – Actual Production



The Schedule

<u>Insured's Premises</u>	<u>Unit Volume</u>	<u>Volume Measure</u>	<u>Unit Price</u>	<u>Daily Value</u>	<u>Waiting Period (days)</u>	<u>Maximum Recovery Period (days)</u>

Occurrence Limit:

Standard Period 180 days

Dependency Premises

Sublimit for unscheduled Dependency Premises (if not \$250,000)

