Major insurance claims arising out of joint venture/third party oil refining, transportation and storage operations.

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- **Consulting scientists, chemical analysts and surveyors.**
- **Deal with insurance claims that have a scientific nature.**
- **Personal speciality – claims arising in connection with bulk oil and chemicals.**

Joint Venture Refining & Storage

- **In last 10 years, shortage claims amounting to well over $500,000,000 investigated.**
- **How have these claims arisen?**
- **What might be done to anticipate, prevent or minimise them?**

Understanding Inventory

- **Claims arose where oil was shipped into and out of installations in many operations over a period of time.**

- **The normal calculation of shortage:**

Input – Output = Shortage

or, commonly,

BL Quantity – Out-turn Quantity = Shortage

does <u>not</u> apply

Understanding Inventory

- **Instead the equation should be :**

Input – (Output + Inventory) = Shortage

- **Failure to understand and deal with this has led to some huge losses, demonstrated in the examples which follow.**

Example 1 – Background

- A Trader supplied crude oil by VLCC to a small independent North American Refiner.
- Refiner was to pay for feedstocks by delivering back to the trader a percentage by volume of the feedstock supplied in petroleum products.
- Trader used independents to monitor inputs and outputs, but did not maintain a physical inventory check.

Example 1 – Planned Operation

Crude Oil processed in Refinery

90% yield for Trader

10% yield for Refiner

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Example 1 – Actual Operation

Crude oil delivered by Trader

2% yield loss

88% yield for Trader

10% yield for Refiner

Example 1 – Actual Operation

Crude oil delivered by Trader

Yield for Trader Further Reduced

Further product illegally removed

2% yield loss

10% yield for Refiner

Example 1 – Results

- **After 50 cargoes…**
- **Trader requested a Jet A-1 cargo. Refinery could not fulfil loading due to insufficient stocks**
- **Stocktake identified product shortage amounting to $44,000,000 (2 full VLCC's of Feedstock) !**
- **Traders successfully claimed bulk of loss from Insurers**

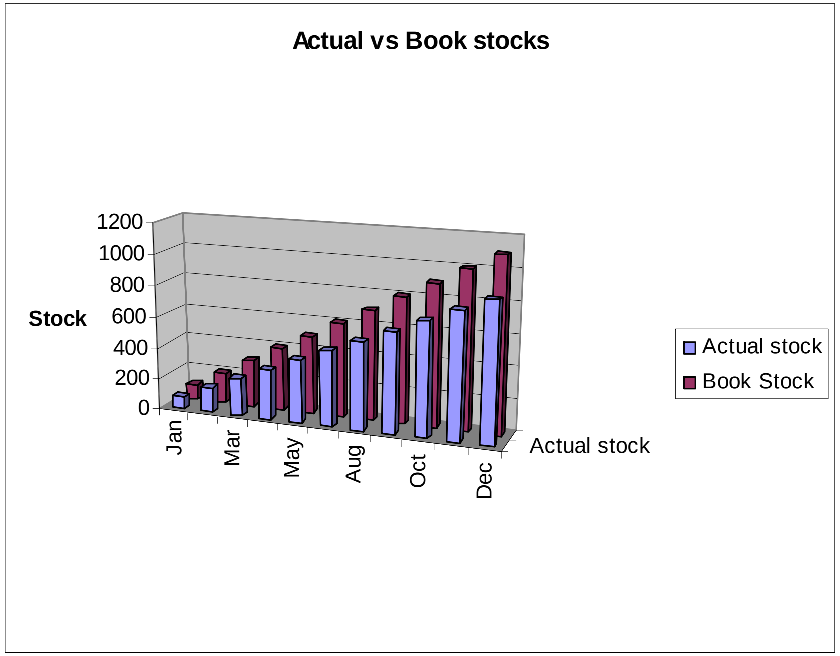
Example 2 – Background

- **Arose at a refinery in the Americas owned & operated by a small company that was primarily a trader.**
- **Insufficient storage capacity in refinery for planned (and actual) throughput.**
- **Additional storage capacity was hired at an adjacent independent storage terminal.**

Example 2 – Background

- Super-Inspectors appointed to monitor inputs into storage terminal.
- Outputs were independently monitored.
- No inventory checks were made.
- But Super-Inspectors ALSO earned a bonus for minimising outturn losses, i.e. maximise out-turn

Example 2 – Actual Operation



- Surveyors overstated outturns in order to earn bonuses.
- Book stocks continually increased against actual stocks.
- Poor yields caused further product losses.

Example 2 – Results

- Trading losses caused financial difficulties.
- Banks withdrew credit facility.
- Stocktake identified product shortage amounting to $30,000,000.
- Traders claimed against Insurers.
- Insurance claim was rejected.

Example 3 - Background

- Major oil company owned and operated an island refinery in the Caribbean.
- Insufficient storage capacity in the refinery for the feedstocks required to support the planned production.
- Hired further tankage on a long term participatory basis at an adjacent independent storage facility

Example 3-Planned Operations

Allowed Outturn loss - 0.3% max

Crude oil stored at 3rd party terminal

Transferred to refinery -0.3% max

Trader's Refinery

Example 3 – Actual Operations

“*Surplus” oil removed*

Allowed Outturn loss - 0.3% max

Crude oil stored at 3rd party terminal

Transferred to refinery -0.3% max

Trader’s Refinery

Example 3 – Actual Operations

“Surplus” oil removed

Allowed Outturn loss - 0.3% max

Crude oil stored at 3rd party terminal

Transferred to refinery -0.3% max

6 cargoes illegally removed

Trader’s Refinery

Example 3 – Results

- Thefts continued un-noticed.
- Former employee “blew the whistle”.
- Stocktake identified product shortage exceeding $30,000,000.

Example 4 – Planned Operations

- Traders imported fuel oil from FSU via Caspian Sea into northern Iran.
- Fuel oil transported by train & truck to an Iranian port on the Persian Gulf.
- Fuel oil exported by sea once sufficient product available.

Example 4 – Actual Operations

- **Some trucks diverted elsewhere.**
- **Unauthorised exports by sea.**
- **Reduced availability caused increased periods between export vessels.**

Example 4 – Results

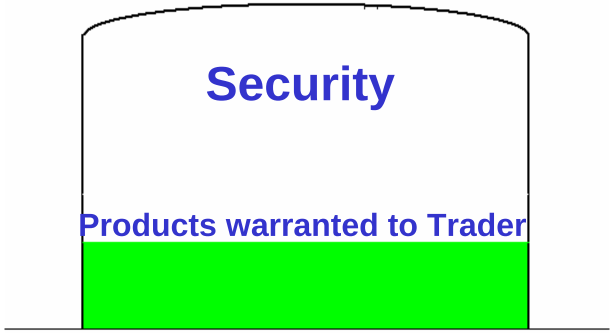
- Time-lag between vessels became unacceptable to Trader.
- Operation halted and stock check performed.
- Shortage of $12 million identified and a claim made.

Example 5 – Background

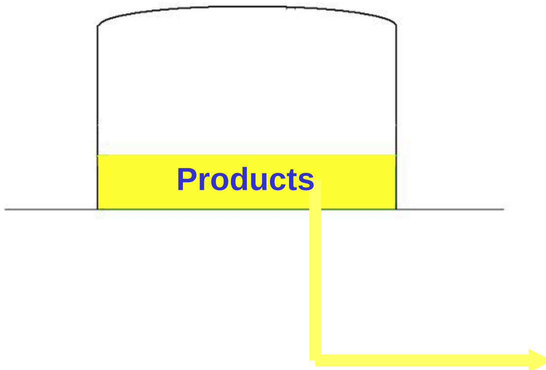
- Oil Trader supplied FSU Refiner, who was having cash flow difficulties, with crude oil feedstocks.
- Refiner was to provide Trader with a certain yield of mainly gas-oil & gasoline products.
- Remaining yield (fuel oil & residues) was to be kept by Refiner to cover processing costs & profit on the deal.

Example 5 – Planned Operation

Cargo 1



Crude Oil delivered by Trader

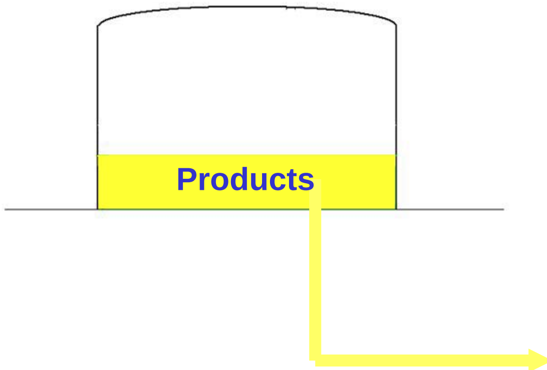


Sold by Refinery

Example 5 – Actual Operation

Cargo 2

Crude Oil delivered by Trader



Sold by Refinery

Example 5 – Actual Operation

Cargo 3

Crude Oil delivered by Trader

Security

No extra warranted products

No extra warranted products

Products warranted to Trader

Products

Sold by Refinery

Example 5 – Actual Operation

Warranted Products Sold Elsewhere

Security

Products

All Products Sold by Refinery

Example 5 – Results

- Refiners ran into financial difficulties & refining operations were suspended.
- Stock check by Trader revealed that the Trader's book stock exceeded the physical stock at the refinery by about $20 million.
- Trader claimed against insurance for theft.

Summary

- These claims are all very large.
- Mostly joint ventures or long term deals between large international companies and smaller local operations.
- Underwriters had frequently insured the large company not the small one, the latter being unknown to them.
- Claim almost always caused by fraudulent actions of the local, smaller partner.

Summary

- Use of independent inspectors did not prevent losses of this type from arising.
- Frequently the deal giving rise to the claim was in effect the financing of the smaller partner by the larger.
- Losses all achieved huge proportions over a long period of time because there was no adequate monitoring of the inventory position under the deal.
- In all cases the large loss came as big surprise at the end of a long period.

Recommendations

- The operation should be monitored by an independent party who has a full understanding of the deal, a right of access to all relevant information from both parties and who carefully checks the relationship between the imports, exports and inventory.
- The standard inspection operation by cargo inspectors would not fulfil this role.

Recommendations

- Monitoring of inventory through the deal is crucial.
- If this is very difficult, for example because the storage facility is common to a multitude of users whose inventory position cannot be ascertained, then this may be reason to decline to provide cover.