CIMA 2015 GLOBAL BUSINESS CHALLENGE

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CIMA Global Business Challenge

Scenario

YJ - Oil and gas industry

Today's date is the 1 August 2014.

You are a management consultant to YJ, an oil/gas exploration and production company.

Prepare a report that prioritises, analyses and evaluates the issues facing the board of YJ. You should make recommendations where appropriate and show all calculations in the form of appropriate appendices.

Read all the information provided before you begin

You work as a management consultant with expertise in the oil and gas exploration and production industry (E&P). The board of YJ is faced with a number of issues which it is seeking your advice on before they decide what to do. You should summarise the underlying issue, provide analysis of the issue and give your own detailed recommendations as to what you think the board should do.

Where the issues have ethical dimensions the board wish you to explain the underlying ethical issue and indicate the possible courses of action in order to remain ethical as a business.

Licence application results
Of the four licence applications applied for earlier in the year YJ has won the right to test drill on three different fields (EEE, FFF and GGG). It was unsuccessful on the fourth (HHH) where it is rumoured that the licence was awarded to an independent E&P business with a very relaxed attitude to "facilitation payments". The YJ share price immediately rose on the news to a new record level of US$35.

Ullan Shah is delighted with the news but even he is unsure whether YJ has the financial or managerial capacity to **test drill** all three sites. No contracts have yet been signed but the licence offers are open for acceptance for a two-week period only. In all cases test drilling must be commenced by 31 March 2015 and all test-drilling operations are expected to last 12 months. All the sites are in shallow water and all are within YJ's technical capability.

Orit Mynde (CFO) is off sick and not expected to be fit for work for about a month, which is too late to do any meaningful work on the financing for the new licences given the two-week acceptance period mentioned above. Ullan Shah wants to know how much the business could raise from a rights issue and from loans, and how much the business will generate in cash in the year to 31 March 2015. The test drilling expenditure required has been estimated by Milo Purdeen as part of the tender process for the licences and these calculations are shown in appendix 1 on page 7.

Ullan Shah has done a little research and found two newspaper articles, which he believes reflect the current thinking of the various providers of finance involved. These articles are shown in appendix 2 on page 8. He has also made some assumptions about the financial performance of YJ for the year to 31 March 2015, which he had previously agreed as reasonable with Orit Mynde before he went off sick (**and before the licence application results were known**) and these are shown on appendix 1 on page 7.

Ullan Shah thinks that with the above information you should be able to:

1. Estimate the finance capacity of YJ based on the 31 March 2014 figures (in case finance is needed in advance) and the forecast 31 March 2015 figures.
2. Provide an assessment of whether YJ could afford to test drill all sites.
3. Provide a broader assessment of other factors that YJ should consider before embarking on **all three** test drilling projects.

Farm out offer

Regardless of the decision whether to test drill all three sites the YJ board is clear that YJ will lack the financial capacity, and the managerial and productive capacity to bring all three wells into production. Accordingly YJ is considering an interesting farm out offer from a business called Liquid Gold (LG).

Normally a farm out deal is negotiated at the time a field is ready to be farmed out. In this case LG has offered an option payment, payable now, which will give it the right but not the obligation to produce the oil in field GGG from 31 March 2016 (which is the expected date that test drilling will have been completed and production work could start). If GGG has commercial reserves then LG can extract them should they wish, but if GGG proves to be barren of oil and gas the option payment is kept by YJ. In this way the option deal carries risk for LG.

The offered option deal is as follows:

1. The option payment is US$10m payable on 31 August 2014 and is not repayable unless any of the conditions below are breached.

2. The field test drilling must be completed and reserves independently proven by 31 March 2016. For every complete or part month this date is exceeded YJ will have to pay US$1m without limit.

3. LG requires presence at the board meetings of YJ whenever the GGG field is on the agenda. This is intended to keep LG up to date with progress and ensure LG's interests are protected.

4. The US$10m is to be held in an escrow account [1], being released in tranches as follows:
   - US$2m on successful signing of the GGG test drilling licence with the government in question.
   - US$2m on commencement of actual test drilling and 100m below sea bed drilling depth has been achieved.
   - US$6m once the test drilling is completed and the extent of any reserves is established.

5. The current average normal price for buying proven reserves is around US$11m per mmbbl (or mmbble for gas), but LG wants a 10% discount. The geologist reports indicate that the GGG field could have between 8 and 10mmbbl/mmbble of oil and gas. The option contract will fix the price that LG pays at US$11m less 10% regardless of what happens to oil and gas values over the intervening period. In this way LG will make a lower overall margin on the extracted reserves but will have lower risk since the reserves will be proven. These figures assume a normal mix of oil and gas is discovered in the field.

Ullan Shah would like your opinion on the option deal **and** you should discuss each condition in turn and reach a conclusion as to whether YJ should accept the offer or simply wait to see what deal they could get to farm out GGG post the test drilling period. Your recommendations should include suggestions to improve (from YJ's perspective) the terms and conditions offered even if overall you think YJ should not go ahead with the deal itself.

[1] An escrow account is money held in an account by a trusted intermediary (a solicitor for example) and is only paid out from that account once set conditions have been met. In this way both parties to a contract can be assured that the money is safe.

Protest by the Greenbies Party
The YJ head office was targeted last week by a protest about the use of finite fossil fuels. This was a co-ordinated attack against the industry rather than YJ alone. It sought to highlight the lack of interest E&P businesses have in sustainable development of renewable energy sources. Twelve other E&P independents were also targeted at the same time. The local and national news agencies picked up the story and although YJ was not mentioned in the broadcast it was considered bad publicity for the industry in general.

Ullan Shah was unimpressed, as he couldn't park his brand new BMW 650i in his normal spot and had to walk 400 metres in the rain. "Finding oil and gas is what we do and the world should be grateful for that!" he said "without oil and gas we would all be walking and getting wet, and by the way sitting in the dark!" he went on.

Outsourcer - DrillIT
Since YJ outsources all of its production work to others, the control of the outsourcers is considered a vital role for YJ. Spot checks are carried out on a regular and rotational basis. These are carried out by a YJ supervisor who checks the evidence that safety controls have been performed properly and on time. All YJ's supervisors are experienced in this task.

DrillIT Limited is the chosen outsourcer at the AAA field and has been working with YJ from the start. They have a good reputation and have always worked well within YJ's and industry regulations.

AAA is off the coast of an African country that has recently been the subject of considerable unrest. The government is under attack by militants and the country is now considered to be a very dangerous place to be for everyone. Consequently DrillIT has started to find it difficult both to retain staff and to recruit replacements. This has put considerable strain on its systems of control and operations.

One of YJ's supervisors, whilst on a spot check control visit, noticed irregularities with the control log records. It appeared that the records showed the signature of a Mr. Paul Brown as carrying out the checks, but the payroll records revealed that Mr. Brown had left DrillIT two months previously. Although no accidents had occurred the control in question directly concerned the flow of oil and would normally be considered a vital safety check.

On investigation it appeared that Mr. Brown's signature had been forged, as a suitably qualified replacement engineer could not be found immediately after he left. A new engineer has now been offered the job and will start in one month, after he has served his notice period with his existing employer. DrillIT's management are insistent that the control was carried out to the best of their abilities and are very apologetic about the cover up.

A routine government check of procedures is due in three weeks time when a government official will visit the field. Lee Wang, in particular, is very worried about this visit. He has suggested that apart from doing everything YJ can to check things are now safe YJ should conceal its knowledge of the past irregularities mentioned above. He argues that since there were no actual accidents YJ should accept DrillIT's assurances that the controls were carried out properly and hence focus on the future not the past.

YJ's long-term future

Ullan Shah surprised the board recently by suggesting that YJ needs to consider its long-term future with specific regard to the inherent lack of sustainability of fossil fuels. YJ's existing reserves from oil fields already in operation will last around seven more years and the new fields do not look like adding significantly to that figure (although more will be known once test drilling is completed).

Ullan Shah wants you to prepare a briefing paper (as part of your report) that considers the question of what next for YJ. Clearly YJ could simply exit the E&P market once its fields run dry. Alternatively it could explore the possibility of becoming an energy company where it sources energy in a broader sense from wherever is viable.

Ullan Shah does not want you to consider a specific alternative but wants you to discuss the main factors involved in this decision and as usual issue a recommendation.

YJ: Appendix 1 to the briefing paper
Assumptions about the financial performance of YJ's existing business in the year to 31 March 2015 as agreed between Ullan Shah and Orit Mynde

Revenue
Oil and gas volumes from AAA and BBB will be the same as in the year to 31 March 2014. CCC will grow in volume terms by 30% for both oil and gas. Oil and gas prices are very difficult to predict but an average 5% increase is widely accepted as likely. The year to 31 March 2014 average oil price is to be taken as US$109.80 per barrel for all fields and the gas price to be US$18.25 per barrel equivalent.

Gross profit
The higher prices and the economies of scale from extra CCC volumes will push up the GP% to 48% on average in the year to 31 March 2015.

Distribution and administration costs will remain unchanged from the 2014 accounts.

Finance costs (net) will remain at 2014 levels.

Working capital - The level of inventories will reduce by US$10m, the level of receivables will increase by US$2m but the level of payables will increase by US$5m due to a longer payment period being agreed and taken.

Taxation will now be payable on all profits at 24% since the operating tax losses have been used up. No deferred tax change is expected. Tax is payable 9 months after the year end.

Non-current assets: To maintain existing assets to an acceptable safety level it is expected that US$30m will have to be spent. The depreciation charge is expected to be US$28m.

Dividends will have to commence in the financial year to 31 March 2015 as Orit had indicated that at a recent shareholders meeting. An initial US$10m was suggested.

Predicted cash needs for wells EEE, FFF, GGG, HHH.

	EEE	**FFF**	**GGG**	**HHH**
Test drill costs US$m	**20**	**25**	**18**	**25**

YJ: Appendix 2 to the briefing paper
The following is a reproduction of two articles that appeared in the business pages of a reputable newspaper last month.

Article 1

Shareholders make their views known!
This week was an exciting week on the London Stock Exchange with two high profile rights issues floundering on the rocks of disappointment.

Fracture (a gas fracking company) upset its previously happy shareholders with a cash call that proved a step too far. It asked for one new share to be bought for every two already held and offered no discount on the existing market value. A Representative of the institutional investors commented, “We are not a bottomless pit, nor are we fools. A one in two request is just too much of an extra investment; it represents a 50% increase in our already significant investment. With all the uncertainty surrounding the future regulation in the fracking industry we urge a little more caution. Equally we wanted a discount on the existing market value of at least 15%, we have costs as well and champagne isn’t getting any cheaper you know!” “They have certainly fractured our friendship with this” he added with a smile.”

Exactly what was acceptable was not made clear but one in four generally works well. The representative was right about the champagne prices.

Article 2

Banks refuse to dig deep in the murky waters of E&P
The major banks are short of funds and coming under increasing pressure not to take extreme risks. Such is the claim of banking regulator, the Bank of England. Accordingly the Bank of England has issued guidelines on the maximum loans that would normally be seen as acceptable in the E&P industry.

For expanding E&P businesses adding more fields is a costly business and one that strains the cash flow. A bank should be cautious about total lending being more than three times the operating profits of the latest published accounts. Existing loans must be accounted for, so that overall debt levels remain within the above acceptable limits. There are always exceptions but there would need to be a convincing case of growth, proven reserves and solid cash control before more should be given.

The banks have to balance the need for the world economy to grow to provide jobs and prosperity and the need to protect their own business risk profile. This guidance is an attempt to provide both that balance and a degree of certainty needed by many ambitious E&P businesses.