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Appendix A

The basic steps of the analytic method of play analysis process in FASPU

program are:

1) Select play type

2) Select oil as the first resource to be assessed

3) Compute the mean and variance of each of the following hydrocarbon volume attributes of oil accumulation in the play which are; 1) area of closure 2) reservoir thickness 3) effective porosity 4) hydrocarbon accumulation 5) depth to the reservoir 6) hydrocarbon saturation. Determine the mean and variance from the estimated 7 fractiles, assuming a uniform distribution between fractiles, that is, a piecewise uniform probability density function (as was done in the situation of the simulation method). Recall that the hydrocarbon saturation distributions depends on whether the estimated reservoir lithology is sandstone or carbonate.

Calculate the mean and variance of the product of effective porosity and hydrocarbon saturation, assuming they display near perfect positive correlation. Also compute the mean and variance for the reciprocal of the oil formation volume factor, which is a function of reservoir depth through a series of formulae.

4) Compute the mean and variance of the accumulation size of oil in place using a reservoir engineering equation. The equation involves the product of a constant, area of closure, reservoir thickness, trapfill, effective porosity, hydrocarbon saturation and

the reciprocal of oil formation volume factor (B_o). Various laws of expectation and variance are involved in the calculations.

5) Model the accumulation size distribution by the lognormal probability distribution with mean and variance from step 4. Calculate various lognormal fractiles of the accumulation size for oil.

6) Compute the probability that a prospect has an oil accumulation, given the play is favorable. This is termed the conditional prospect probability of oil. This probability is the product of the conditional deposit probability, the probability that reservoir is shallower than oil floor depth, and the hydrocarbon type probability of oil.

7) Compute the mean and variance of the conditional prospect potential for oil, which is the quantity of oil in a prospect (given the prospect is favorable). They are arrived by the applying conditional prospect probability of oil to the mean and variance of the accumulation size of oil.

8) Compute various fractiles of the conditional prospect potential for oil by a transformation to appropriate lognormal fractiles of the accumulation size of oil using the conditional prospect probability of oil.

9) Compute the mean and variance of the number of prospects from the estimated 7 fractiles, assuming a uniform distribution between fractiles (as also is the situation in the simulation method).

10) Compute the mean and variance of the number of oil accumulation, given that the play is favorable. They are arrived by applying the conditional prospect probability of oil to the mean and variance of the number of prospects.

11) Compute the mean and variance of conditional (A) potential for oil, which is the quantity of oil in the play, given the play is favorable. They are determined from

the probability theory of the expectation and the variance of a random number (number of prospect) of random variable (conditional prospect potential).

12) Compute the conditional play probability of oil, which is the probability that a favorable play has at least one oil accumulation, and is a function of the conditional prospect probability of oil and number of prospect distribution.

13) Compute the mean and variance of conditional (B) play potential for oil, which is the quantity of oil in the play, given the play is favorable and there is at least one oil accumulation within the play. They are arrived at by applying the conditional play probability of oil to the mean and variance of conditional (A) play potential.

14) Compute the unconditional play probability of oil, which is the probability that the play has at least one oil accumulation, and is the product of the conditional play probability of oil and the marginal play probability.

15) Compute the mean and variance of conditional play potential for oil, which is the quantity of oil in the play. They are arrived at by applying the unconditional play probability of oil to the mean and variance of conditional (B) play potential for oil.

16) Model the probability distribution of conditional (B) play potential for oil by the lognormal distribution with mean and variance from step 13. After that, calculate for 7 lognormal fractiles.

17) Compute various fractiles of the conditional (A) play potential for oil by a transformation to appropriate lognormal fractiles of the conditional (B) play potential for oil using the conditional play probability of oil.

18) Compute various fractiles of the unconditional play potential for oil by a transformation to appropriate lognormal fractiles of the conditional (B) play potential for oil using the conditional play probability of oil.

19) Select non-associated gas as the second resource to be assessed. Repeat steps 3 to step 18, substituting non-associated gas for oil, with two basic modifications as follows. The reservoir engineering equation is used to calculate the accumulation size of non-associated gas in place. The conditional prospect probability non-associated gas is equal to the conditional deposit probability minus the conditional prospect probability of oil.

20) Select the dissolved gas as the third resource to be assessed. Repeat steps 3 - steps 18, substituting dissolved gas for oil, with two basic modifications as follows. The reservoir engineering equations for the accumulation size of oil in place is multiplied by a gas-oil ratio which is a function of the reservoir depth. The conditional prospect probability of dissolved gas is the same as the conditional prospect probability of oil.

21) Select gas as the fourth resource to be assessed. Repeat steps 4 to 18, substituting gas for oil, with two basic modifications as follows. Replace steps 4 to compute the mean and variance of accumulation size of gas in-place by using conditional probability theory and conditioning on the type of gas. The conditional prospect probability of gas is the same as the conditional deposit probability. A simplified flowchart of the analytic method of play analysis is presented in Figure 3.3.

Note: FUSPU can be calculated both in unit of English and Metric, but this assessment will use English Unit.

Appendix B

Thailand III Fiscal Regime

Thailand III

THAILAND III term means the new fiscal regime adopted in 1989 when there was an amendment to the Petroleum Act to the effect that the royalty is levied on the sliding scale basis and special remuneration benefit is collected from the surplus profit. Instead of a fixed rate of 12.5 percent royalty rate, a sliding scale royalty rate applies to the concession agreements awarded in 1989 or the old concessions of the holders of said old concessions apply to the Ministry of Industry to have his concession subject to THAILAND III term. The sliding scale royalty rate is as follows:

- up to 60,000 barrels per month	5.0 %
- 60,000 - 150,000 barrels per month	6.25%
- 150,000 - 300,000 barrels per month	10.0%
- 300,000 - 600,000 barrels per month	12.5%
- in excess of 600,000 barrels per month	15.0%

Thailand concession system follows the common characteristics of general concession system. Under the concession system, once a concession is awarded the concessionaire is entitled to explore and produce petroleum from the areas awarded. If a discovery is made, the title to such discovered petroleum belongs to the

concessionaire. The concessionaire, then, has the right to sell the petroleum produced at the reasonably profitable price.

In Thailand a concession as such is a unilateral grant, made by the government, of exclusive rights to a concessionaire to explore and produce petroleum in the area awarded. The rights and obligations of the concessionaire is regulated by the Petroleum Act, Ministerial regulations and other administrative announcements. In this kind of arrangement, the rights and obligations are subject to the unilateral change by the government because concession as such is regarded as an administrative license. In order to make sure that certain fundamental rights and obligation between the concessionaire and government will not be changed unilaterally, the concessionaire will consist that a concession agreement shall be signed between the concessionaire and the government in order to bring the concession into the jurisdiction of civil law and a clause will be entered in the agreement stipulating that the Minister shall ensure that the term of the concession concerning the concessionaire's benefits, rights and duties in certain matters shall not be changed unilaterally. The concession agreement has converted the administrative nature of the concession to the contractual rights and obligations binding on the parties to the concession agreement which are the Ministry of Industry and the concessionaire. As to the nationality of the concessionaire, in Thailand I and Thailand II the concessionaire may be a foreign company. However, in Thailand III, it is required that the concessionaire must be a Thai limited company with registered capital not less than 100 million baht.

Scope of the contract

In Thailand, the government can actively anticipate in critical decisions such as the pace and extent of exploration or determination of a discovery. The Government of Thailand does not involve itself in the petroleum operations. The role of the government is not that a joint manager of petroleum operation as that inherent in production sharing contracts (PSC). The government will monitor petroleum operations of the concessionaire for the purpose of royalty collection only. The monitoring activities involve an inspection of production records and verification of market price.

The areas awarded are divided into blocks. In Thailand one concessionaire may be awarded up to 5 blocks, each block has an area of not exceeding 4,000 square kilometers or in total not exceeding 20,000 square kilometers as maximum. There is no acreage limit for deep-sea blocks in the Andaman Sea.

In the concession agreement the private investor is called a concessionaire. The term "effective concession area" is the only word that is defined in the concession agreement. Other words are defined in the Petroleum Act, and the Petroleum Income Tax Act.

In designing petroleum development regime, the appropriate duration of the rights grant is one of the serious strategic objective which must be taken into account in order to strike the appropriate balance in the structuring of the government take. In

Thailand, the duration of the concession agreement has been recently reviewed.

Under Thailand III term, the duration of the concession agreements can be described as follows:

Exploration Period: exploration period is for six years, with additional three year possible renewal.

Production Period: production period is for twenty years from the end of the exploration period, with additional ten year possible renewal. Although the production period begins from the end of the exploration period, the concessionaire can produce petroleum at any time during the exploration period if the commercially of a discovery of petroleum can be established.

Reserve Exploration Area: the concessionaire is entitled to reserve exploration areas in the block on which he has already obtained the right to produce petroleum to an aggregate area not exceeding 12.5 percent of the initial area of the block for a period not exceeding 5 years after the end of the exploration period.

Relinquishment: at the end of fourth year from the date of the commencement of the exploration period, the concessionaire is required to relinquish 50 percent (35 percent in the case deep-water block) of the area of that exploration block. After six years from the starting date of the exploration period, the concessionaire has to relinquish 25 percent (40 percent in case of deep-water block) of the area of that exploration block.

In the concession system, work program and expenditure budget as to exploration are required to be submitted to the government for approval. The submission is required for the purpose of overseeing the seriousness of the concessionaire in the exploration activities and not for the purpose of involving the government in sharing the costs and the risk of exploration.

In Thailand, work program and expenditure budget is required to be submitted only in connection with the exploration phase. The concessionaire is required to fulfill the work according to the work plan he proposes in the concession agreement. It is also required that actual amount of expenditure shall be spent according to the proposed expenditure budget failing which the concessionaire shall have to pay the unspent expenditure to the Department of Mineral Resources.

Rights and obligations of the parties.

Under the concession agreement, all petroleum operation including the determination of the commercially of discovery are vested with the concessionaire. The title to the discovered petroleum belong to the concessionaire who can produce and sell at a reasonably profitable price. The concessionaire is the owner and manager of all petroleum operations both at the exploration phase and at the production phase. The government has no right to share the profit from the production and has to be satisfied with the collection of royalty, taxes and special benefits in accordance with the fiscal regime adopted in advance through the Petroleum Act and the concession agreement. The said fiscal regime once adopted

can not be changed unilaterally by the government. In Thailand, the rights and obligations of the parties to the concession agreement follow the above mentioned conventional pattern.

Rights of the concessionaire

The right of the concessionaire are listed as follows:

1. The right to explore and produce petroleum in the exploration block awarded.
2. The right against the nationalization. The state can not nationalize the properties of the concessionaire and the right to explore or produce petroleum.
3. The right to bring into Thailand the expatriate personnel, machinery, equipment, tools, structure, transport vehicles, accessories, spare parts and other materials which are necessary for the conduct of petroleum operations
4. The right to be exempted from certain taxes, duties, and levies.
5. The right to the use of land as exploration block and production areas for the petroleum operations, including the use of any land located beyond its exploration blocks and production areas for storage or transport of its petroleum.
6. The right to retain and remit foreign currency abroad.
7. The right to sell or dispose of the petroleum produced at a reasonably profitable price.
8. The right to export the petroleum produced except in the case of national security the Minister of Industry may forbid the export of petroleum.
9. The right to store and transport petroleum.

10. The right to have the sanctity of certain fundamental provisions. The government may not change these fundamental provisions unilaterally.

Obligations of the concessionaire

The obligations of the concessionaire are listed as follows:

1. The obligation to explore and produce petroleum in the production blocks awarded with due diligence and utmost efforts.
2. The obligation to implement the work program and expenditure budget as proposed to and approved by the Ministry of Industry.
3. The obligations to pay royalty, taxes and any other special benefits in accordance with the fiscal regime adopted in the Petroleum Act.
4. The obligation to have the office in Thailand.
5. The obligation to deposit of paid up registered capital with commercial bank in Thailand.
6. The concessionaire eligible for a concession to be awarded under Thailand III term must be a Thai limited company with paid up registered capital not less than 100 million baht.
7. The obligation to give preference to sell of natural gas to the government.
8. The obligation to prevent and mitigated damage caused by petroleum operations, and to secure insurance cover such risks on terms agreed by government.
9. The obligation to pay 15 percent interest per annum on amount in default.
10. The obligation to give preference to Thai flag.

11. Various other obligations, such as employment and training of Thai, preference to local goods and services etc.

Right of the Government

The right of the government may be listed as follows:

1. The government has an option to undertake petroleum operations in production areas and reserve exploration areas at its sole risk. The option may only be exercised after a 12 month negotiation period. If the government does not proceed within 2 years, the concessionaire may request return of the area. If the government proceeds and realizes profits, the concessionaire will be reimbursed its costs. For a period of 3 years, the concessionaire may elect to co-venture with the government.

2. The government is entitled to the royalty, taxes or any special benefits in accordance with the fiscal regime already adopted in the petroleum Act and the Petroleum Income Tax Act.

3. The government may be required to supply the local market.

4. The government has the right to forbid the export of petroleum for national security.

5. The government has the power to fix the price of oil or have the price floated.

Obligations of the Government

The obligations of the government may be listed as follows:

1. The government may not change certain fundamental provisions unilaterally.
2. The government may not nationalize the properties of the concessionaire and the right to explore and production petroleum.
3. The government may reasonably facilitate the conduct of concessionaire's operations and if requested by the concessionaire, assist the concessionaire's contracts with other government agencies or authorities concerned in order to expedite the matter.

Fiscal Regime and Cost Recovery

In designing a fiscal regime under a concession system in Thailand, a special royalty formula is introduced in 1989 in order to overcome the inflexibility of a fix rate royalty. Together with the new petroleum income tax and the new Special Remuneration Benefit (SRB), this new regime was adopted in 1989 by making amendments to the original Petroleum and Petroleum Income Tax Acts. The said new regime, also known collectively as The Thailand III term, consists of Three main fiscal features:

1. Sliding scale royalty rate
2. New petroleum income tax
3. Special remuneration benefit (SRB)

Sliding Scale Royalty Rate

Royalty is charged monthly on gross revenues of the petroleum produced and sold with the following sliding scale rate based on production levels on a block-by-block basis.

Production level	Rate
0 - 2,000 B/D	5.00 %
2,000 - 5000 B/D	6.25 %
5,000 - 10,000 B/D	10.00 %
10,000 - 20,000 B/D	12.5 %
> 20,000 B/D	15.00 %

In case where the petroleum produced is natural gas, a ratio of ten million BTU of natural gas is regarded as equal to one barrel of crude oil for the royalty collection. Such a generous conversion factor is due to the fact that investment in gas generally more expensive than in an oil field. Thus, to promote gas development, the higher value than true-heat-equivalent conversion is provided.

The rate of royalty in deep-water blocks (Over 200 meters) is 70 percent of the above rates. Royalty in kind will be a volume equivalent in value to royalty paid in cash. Royalty disputes are referred to the Thai courts for resolution instead of international arbitration.

Petroleum Income Tax

- Petroleum income tax is charged on profit at 50 percent (or 35 percent on profit plus 23.08 percent remittance tax under Royal Decree)
- Petroleum income tax is payable annually
- Capital cost may be amortized over 5 to 10 years (Accelerated depreciation is permitted)
- Operating cost are expensed
- SRB is expensed

Special Remuneration Benefit (SRB)

The SRB is the unique form of “windfall profits” tax without precedent. The purpose of SRB is to increase the state revenues arising from substantial increase in price of petroleum, bonanza discoveries or very low-cost discoveries. No SRB is payable except in accounting years in which the concessionaire has “Petroleum Profit for the Year”, i.e. the petroleum cost for the current and past years have been recovered. In calculating “Petroleum Profit for the Year” there may be deducted the followings from the annual gross revenue : Capital Cost, Operating Cost, Royalty, Special Reduction, and Loss carried forward.

The SRB will be calculated annually on a block-by-block basis. If the concessionaire has “Petroleum Profit for the Year” the SRB is calculated at the following rates, subject to the ceiling of 75 percent of Petroleum Profit for the Year:

Rate Annual Income Per One Meter of Well Drilled	SRB
UP to Baht 4,800	Zero
Baht 4,800 - 14,400	1% per each Baht, 240 increment
Baht 14,400 - 33,600	1% per each Bath, 960 increment
Over Baht 33,600	1% per each Baht, 3,840 increment

In order to determine "Rate annual income per one meter of well drilled", first : the annual revenue per one meter of well drilled must be calculated and adjusted for inflation and exchange rate; secondly : the accumulated total meters of wells (exploration wells, appraisal wells, production wells, etc.) drilling during the period of concession must be calculated; thirdly : the rate annual income per meter of well drilled is the product of Adjusted Petroleum Income divided by total depth of all wells plus GSF. GSF means "Geological Stability Factor", which shall be fixed for each geological region of Thailand and shall not be less than 150,000 meters. The number will be increase in area in which drilling is more difficult.

Valuation of Petroleum

Valuation of petroleum is important to the calculation of gross revenues which depend directly on the value that is given to oil and gas produced and sold.

Oil

Crude oil has inherent value differences depending on the quality of the crude or location of the production. Light low sulfur crude oil with a low pour point and low metal content have a high value while heavy high sulfur crude have a low value. Crude oil produced at the locations close to the markets have a high value while those produced at locations that are distance from the markets have a low value because of the intimidation of high transportation costs.

Furthermore, crude oil sold under different contractual agreements will have different prices. Therefore, actual sell prices have little importance because of the possibility for transfer pricing. This is true whether the crude oil is sold to the affiliate or the "Third Party". It is possible to sell crude oil to a third party and make an arrangement to sell it back to an affiliate. Thus, the actual sales price may or may not be the real market price.

It is generally accepted practice to use real market price as a basis for valuation of oil for payment of royalty and for calculation of the amount of gross revenue used for other purposes. The real market price should be the international "arms length" or strictly commercial market price. However, such a price can be difficult to establish. Consequently, methodology to arrive at an agreement of what the real market price should be arranged. In Thailand, the value given to oil for royalty payment purpose is based on the real market price.

Gas

Valuation of gas is easier because gas is sold in the domestic market to users at prices which are strictly commercial. Therefore, the real market price of gas can be easily established. The practice of pricing in Thailand as regards crude oil is that the price set by the concessionaire shall not exceed that of imported crude oil. As to the pricing of natural gas, the price is negotiable.

Domestic supply obligation

In Thailand, the government may require the concessionaire to supply the petroleum produced to local market. In case where the total amount of crude oil produced in Thailand is more than ten times of the total domestic demand, the concessionaire may sell the petroleum at a reasonable profit price.

Taxes and Royalty Payment

Under Thailand III term, petroleum income tax is one of the main feature of the new fiscal regime introduced in 1989. Petroleum income tax is payable semi-annually at 50 percent on profits. Payment of petroleum income tax is made by self assessment and filing of income tax returns with the Revenue Department on a semi-annual basis. This requirement conforms to the practice applicable to all business in Thailand. of paying an estimated income tax based on mid-year results.

Payment of royalty is also by self assessment and filing a royalty payment form with the Department of Mineral Resources. Under Thailand III term, the payment of royalties was accelerated from quarterly payments to monthly payment.

Equipment

Like in production sharing contracts, legal title of all equipment acquired by the concessionaire under Thailand III term vests in the government.

Employment and Training of Personnel

Under Thailand III term, the concessionaire is to undertake the employment and training of Thai personnel including the transfer of technology.

Arbitration

Under Thailand III term, any disputes arising out of the concession shall be settled through arbitration. The place of arbitration shall be in Bangkok, if not otherwise agreed. Rules of the International Court of Justice of May 6th, 1946 as amended shall be referred to as the applicable rules of the arbitration. However, royalty dispute must be referred to Thai Court for solution.

Termination

Under Thailand III term, the concession agreement will be terminate due to occurrences of the following events:

1. upon the termination of the petroleum production period.
2. through the voluntary relinquishment made by the concessionaire.
3. when the concession is revoked due to failure to pay the SRB, failure to commence exploration within six months from the date of concession, failure to conduct petroleum operations with due diligence, become bankrupt or in breach of the concessionaire's obligations.
4. when the corporate status of the concessionaire is terminated.

To make sure that the concessionaire has conducted the petroleum operations with due diligence, the government through the Department of General Resources may audit the Work Program and Expenditure Budget of the concessionaire.

In concession system, the government does not involve in the actual implementation of the Work Program. Its role is to verify that exploration and production activities are carried out with due diligence and proper revenues are received. In this connection, the auditing does not involve any prior clearance of activities or budgets. It is different in the production sharing contract where the audits may used as a tool of management. Approval of the Work Program and approval for the expenditure is a necessary step of implementation of the Work

Program and Expenditure Budget. Books and accounts, therefore, must be accessible by all parties.



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Appendix C

CASH FLOW TABLE DESCRIPTION

Column

A = Year

B = Gas production per day (MMCF)

C = Gas production per year (MMCF)

D = Gas Price (US\$/MMBTU) constant over the contract

E = Condensate production per day (BBL)

F = Condensate production per year (BBL)

G = Condensate Price (US\$/BBL) constant over the contract and set at 17.00
US\$/BBL

H = Gross revenue sale income (MMUS\$) = $[(1,000 \times C \times D) + (F \times G)] / 1,000,000$

I = Royalty sliding scale 5 percent of gross revenue (MMUS\$) = $H \times 0.05$

J = Year

K = Gross revenue = H

L = Capital cost (MMUS\$) = R+S+T+U+V+W+X

M = Operating cost (MMUS\$) = $(C \times 400) / 1,000,000 = Y \times$ escalation factor (2%) for
each year

N = Royalty = I

O = Income Tax (MMUS\$) = $AD \times 0.5$ (50 percent of Taxable Income accounted
when the project start getting profit)

P = Annual cash flow = K-L-M-N-O

Q = Discounted cash flow (NPV@12.5%) = P x discounted factor each year

R to X = Investment cost (divided to Tangible cost 80 percent and Intangible cost 20
percent)

$Z = \text{Total Investment Cost (MMUS\$)} = R+S+T+U+V+W+X+Y$

$AA = \text{Depreciation rate } 20 \% \text{ of } Z \text{ (straight forward 5 years)}$

$AB = \text{Write off (MMUS\$)} = I+R+S+T+V+X$

$AC = \text{Total Allow Expense} = \text{Total } AA + AB$

$AD = H - AC$

$AE = \text{Income Tax (MMUS\$)} = AD \times 0.5 \text{ (50 percent of Taxable Income accounted}$
when the project start getting profit)



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Cash Flow table explanation

A B C D E F G H I

(F75 : 1 accumulation)

YEAR	GAS PRODUCTION		GAS PRICE	CONDENSATE PRODUCTION		CONDENSATE PRICE	GROSS REV. SALE INCOME	ROYALTY SLIDING SCALE(5%)
	MMCF/D	MMCF/Y	US\$/MMBTU	BBL/D	BBL/Y	US\$/BBL	MM US\$	MM US\$
2000	0.00	0.00	2.90	0.00	0.00	17.00	0.00	0.00
2001	0.00	0.00	2.90	0.00	0.00	17.00	0.00	0.00
2002	0.00	0.00	2.90	0.00	0.00	17.00	0.00	0.00
2003	0.00	0.00	2.90	0.00	0.00	17.00	0.00	0.00
2004	0.00	0.00	2.90	0.00	0.00	17.00	0.00	0.00
2005	13	4,745.00	2.90	390.00	142,350.00	17.00	16.18	0.81
2006	15	5,475.00	2.90	450.00	164,250.00	17.00	18.67	0.93
2007	16	5,840.00	2.90	480.00	175,200.00	17.00	19.91	1.00
2008	16	5,840.00	2.90	480.00	175,200.00	17.00	19.91	1.00
2009	16	5,840.00	2.90	480.00	175,200.00	17.00	19.91	1.00
2010	13	4,672.00	2.90	384.00	140,160.00	17.00	15.93	0.80
2011	10	3,737.60	2.90	307.20	112,128.00	17.00	12.75	0.64
TOTAL		36,149.60			1,084,488.00		123.27	6.16

Cash Flow table explanation (continued)

J K L M N O P Q discount factors

(F75 : 1 accumulation)

YEAR	CASH FLOW SUMMARY						DISCOUNTED CASH FLOW (NPV @ 12.5%) MM US\$	12.5% DISC. FACTOR	2% EŞCAL. FACTOR
	GROSS REVENUE	CAPEX	OPEX	GOVERNMENT TAKE		ANNUAL CASHFLOW			
				ROYALTY	INC. TAX				
MM US\$	MM US\$	MM US\$	MM US\$	MM US\$	MM US\$	MM US\$			
2000	0.00	5.00	0.00	0.00	0.00	-5.00	-5.00	1.0000	1.0000
2001	0.00	4.08	0.00	0.00	0.00	-4.08	-3.63	0.8889	1.0200
2002	0.00	6.24	0.00	0.00	0.00	-6.24	-4.93	0.7901	1.0404
2003	0.00	24.41	0.00	0.00	0.00	-24.41	-17.14	0.7023	1.0612
2004	0.00	4.33	0.00	0.00	0.00	-4.33	-2.70	0.6243	1.0824
2005	16.18	0.00	1.90	0.81	0.00	13.47	7.48	0.5549	1.1040
2006	18.67	0.00	2.23	0.93	0.00	15.50	7.65	0.4932	1.1261
2007	19.91	0.00	2.43	1.00	0.00	16.49	7.23	0.4384	1.1486
2008	19.91	0.00	2.48	1.00	0.05	16.39	6.39	0.3897	1.1716
2009	19.91	0.00	2.53	1.00	8.20	8.20	2.84	0.3464	1.1950
2010	15.93	0.00	2.06	0.80	6.54	6.54	2.01	0.3079	1.2189
2011	12.75	0.00	1.60	0.64	5.21	5.21	1.43	0.2737	1.2433
	123.27	44.06	15.32	6.16	20.00	37.74	1.61		
						PIR	0.86		
						IRR	13.6%		

Cash Flow table explanation (continued)

INVESTMENT COST										DEPRECIATION (20%)										WRITE OFF	TOT. ALLOW. EXPENSE	TAXABLE INCOME	INCOME TAX (20%)
2D	3D	PLATFORM	DRILLING		PIPELINE		OPER. COST	TOTAL	TANGIBLE EXPENSE														
MM US\$	MM US\$	MM US\$	MM US\$	MM US\$	MM US\$	MM US\$	MM US\$	MM US\$	2000	2001	2002	2003	2004	2005	2006	2007	2008	TOTAL					
1.00			0.80	3.20			0.00	5.00	0.84									0.84	1.80	2.64	-2.84	0.00	
			0.80	3.20			0.00	4.00		1.48								1.48	0.80	2.28	-2.28	0.00	
			1.20	4.80			0.00	6.00			2.44							2.44	1.20	3.64	-3.64	0.00	
	4.00	15.00	0.40	1.60	0.40	1.60	0.00	23.00				6.84						6.84	19.80	26.64	-26.64	0.00	
			0.40	1.60	0.40	1.60	0.00	4.00					7.48					7.48	0.80	8.28	-8.28	0.00	
							1.90	1.90						6.64				6.64	2.71	9.35	6.63	0.00	
							2.23	2.23							6.00			6.00	3.17	9.17	9.00	0.00	
							2.43	2.43							5.04			5.04	3.43	8.47	11.45	0.00	
							2.48	2.48								0.44		0.44	3.47	4.11	15.80	0.00	
							2.63	2.63										0.00	3.62	3.62	16.39	8.20	
							2.06	2.06										0.00	2.86	2.86	13.07	6.84	
							1.68	1.68										0.00	2.32	2.32	10.42	5.21	
1.00	4.00	15.00	3.60	14.40	0.80	3.20	15.32	87.32										37.40	45.88	83.28	39.99	20.00	

F75: 1 accumulation

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VITAE

Akkhapun Wannakomol was born on September 30, 1972 in Chonburi province, Thailand. He received his BS. in Geology from the Faculty of Science, Chiang Mai University in 1995. He has been a graduate student in the master degree program in petroleum engineering of the Department of Mining and Petroleum Engineering, Chulalongkorn University since 1995.



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