Accounting petroleum practices for tangible and intangible costs and materials transfers under IFRS, US GAAP, Joint Arrangement and Production Sharing

Hamdy Rashed, CMA; CAPM
Bsc of Accounting and Auditing,
, E-mail: hamdyrashed1@yahoo.com, Website: http://www.accountingsoul.com/
Dated on June 1, 2012

Abstract

We suggest in this paper a framework to improve some accounting practices for how recognizing tangible assets or intangible assets that are maintained joint venture and what is the impact on corporate accounts under successful effort method, how the moveable assets be controlled and reported. Also, in our below discussion, we don't say which practice is correct or incorrect because the practices are depend on many factors such as contractual terms, legal factor, local GAAP and management philosophy or manner, we only provide a guidance for how to recognizing the joint venture assets in oil and gas exploration and production industry. We start referring to the some provisions of IFRS 6, IASs,.IAS framework, US GAAP, PSC, and JOA that can help us in the below suggestion.

Keywords: Tangible and Intangible costs; Joint Venture Assets, Petroleum Accounting for matrial transfers.

In US taxation the distinction between intangible and tangible cost is very important for tax purposes, whereas integrated oil producer is allowed to expense 70% of domestic Intangible Drilling Cost IDC and capitalize 30% of it to be amortized over 60 months but the foreign IDC should be amortized over 10 years, Also, IFRS 6 requires to classify E&E assets into tangible and intangible according to the nature of the assets acquired.

As per SFAS 19, par 19 and 26 the cost of exploration equipments and facilities shall be pending determination of proved reserve. Means, the well has found proved reserves even though the well has not been completed as producing well, those costs will be part of well that shall be amortized or depreciated over their useful life. If the well found no proved reserves, the capitalized costs and net of any salvage value shall be expensed. Support Equipment and Facilities that are used in oil and gas producing activities shall be capitalized their depreciation and applicable operating costs become an exploration, development or production cost as appropriate.

However, exploration for and evaluation of mineral resources are excluded from scope of IAS 16 and IAS 38, par 8-12 of IAS 8 require the companies to disclose their accounting policy for exploration for and evaluation of mineral resources. Also, And IFRS 6 par 15-16 require companies to classify the exploration and evaluation assets to tangible or intangible according to the nature of assets acquired. How we could classify the E&E assets and development costs into tangible and intangible costs. The following provisions of IAS 16, IAS 38, IAS 2, IFRS 6, IAS 31, FAS 19, and JOA and PSC can help us to identify which costs that should be categorized under tangible and intangible costs and how they should be treated when they incurred and in the subsequent period.

- Per IAS 16 par 6 the property, plant and equipment is defined as follow *"Tangible items that; a) are held for use in the production or supply of goods or services, for rentals to others or for administrative purposes; b) are expected to be used during more than one period."*

- IAS 16 par 7 indicates that cost of property, plant and equipments are recognized only if; a) there is probable future economic benefits associated with item will flow to company; b) cost of those items can reliably measured.

- IAS 16 par 8, and IAS 2 par 6 indicates that the spare parts and servicing equipments should be considered as inventory and recognized in income statement when they are consumed. As per the above indication,

- IAS 38 par 21, 65, 66 and 71 and IAS 16 par 49 indicates that intangible assets shall be recognized if only there is likelihood that the expected future economic benefit will flow to company, and the cost of intangible assets can be reliably measured. Also, any costs expensed before shall not be capitalized into intangible costs. The cost of intangible assets comprises the following attributable costs: 1) services or materials used or consumed for generating the intangible costs, 2) G&A overhead that is directly attributable to generate intangible asset and 3) depreciation of property, plant and equipments that are used for development activities are considered part of cost of intangible assets.

- IFRS 6 par 15-16 & 9-10 & 25 indicates that the following costs shall be considered as initial costs of Exploration and Evaluation (E&E) Assets; 1) acquisition of rights to explore, 2) G&G cost, 3) exploratory drilling, 4) trenching, 4) sampling, 5) and study for evaluating technical feasibility and commercial viability of extracting oil/gas. Company shall determine accounting policy to determine what costs that shall be expensed in the same year when it is incurred, what costs shall be capitalized temporarily until proved reserves found or expensed when proved reserves not found. The expenditures that are related to development activity shall not be recognized under E&E assets, it shall be recognized as per the guidance of IAS 38. Also, using tangible assets to develop an intangible assets does not change a tangible assets into intangible assets.

- IAS 31 par 13-17, 30-37 & 48-50 the company has option to choose either proportionate consolidation or equity method. Per IFRS 11 that is effective in Jan 2013 the Company that has jointly controlled operations will be treated as joint operations that need to be used proportionate consolidation method. Venturer may combine its share of each of the assets, liabilities, expenses, and income of jointly controlled operations with similar its items. For materials and equipments transfers between venture and joint venture or between joint ventures and another joint venture, any gains or loss recognized for transfers from venture to joint venture, venture shall be recognized its portion of such gain or loss that is billed to other partners, but gains or loss generated by transfer from joint venture to ventuerer, gains or loss shall not be recognized by venture until it is resold to third party.

- IAS Framework recommend to recognize assets if the following criteria are met:
    - Probable to provide future economic benefits
    - The entity is able to own the benefit or control it by restricting other entities to have access to the benefit.

- Past event was occurred to provide the entity a right to receive the benefits.

- FAS 19 par 11.b, 11.c, 17.d, 21.b, 21.c, 22, 24.a-c, 25, 26, 36 and RBA 43 all those paragraphs indicate that support equipment and facilities shall be capitalized and their depreciation shall be allocated appropriately to exploration, development, and production costs. The cost of exploration, development and production shall not include the expenditure to acquire support equipment and facilities. Well equipment or equipping wells include casing, tubing, pumping equipment, wellhead assembly and other tangible drilling costs that have been installed in development wells shall be capitalized even if the development well is dry. Well equipment or equipping wells include casing, tubing, part of wellhead and centralizers that have been installed in exploratory wells shall be pending determination of proved reserves, if the proved reserves are found, they should be capitalized, but if not, they should be expensed. For unused drilling materials and supplies and materials used for operation they should be presented as inventory, and shall be capitalized as above if they are taken out of stock and installed in the well.

- Many of Joint Operation Agreement does not allow the operator to dispose significant materials, supplies and equipment inventory held in respect of joint venture without an agreement of other partners who generally have pre-emptive rights, and operator and non-operators have the right to include their share of the inventory in their own accounts.

- Some Production Sharing Contracts such as of Tanzania's, Kurdistan's require the contractor to exclude any accumulated materials surplus and their costs may not be recoverable costs. However, other PSC such as Lybian PSC may accept the inventory surplus and considered it as recoverable cost, or credited the accounts by the disposed surplus or obsolete inventory as long as it is in accordance with procedure approved by management committee, but it requires controls over the material inventories and any overage or shortage of materials inventory by amount not exceeding US$100,000 needs approval of management committee. Also, many of PSCs indicates that the moveable assets are automatically and gradually entitled to host government when the cost of those assets are recovered by cost oil or when the contract is terminated whichever is earlier and the operator has the fully right to use those assets free of charge by government even if the assets titled to the government but has no right to dispose them without governmental approval after the title transfer date.

After showing the provisions of IFRS and IASs, FAS, JOA and PSC, We can understand the following:

Tangible Cost

1- Quantities of drilling materials and supplies that are expected to be installed for more than well and purchased as long lead materials are supposed to be considered as drilling materials inventory until they are consumed in the wells, and the consumption will reduce the inventory and be charge to cost of wells as tangible drilling costs such as the following materials

i. Casing
ii. Tubing
iii. Wellheads
iv. Packer
v. Centralizers

Characteristics of drilling well costing is similar to job order costing system and the drilling materials inventory it can be similar as Just-In-Time Inventory. How first question is should we record the purchased drilling equipments and materials from third party for joint venture property as an inventory or be directly charged to the well costs?

The cost of purchased drilling materials are either a) to be charged directly to tangible drilling costs or to purchases account that are considered as part of tangible drilling well cost, or b) to warehouse or inventory account as contraaccount or control account rather than financial account to charge the well by the materials consumed. For determining which accounting entry is suitable for recording the cost of purchased drilling materials, we need to know either the characteristics of drilling materials and supplies inventory is similar as JIT inventory or not. The objective and desirability of management needs to be identified either; a) management considered the drilling materials of joint venture are desirable, b) management seeks to reduce the joint venture drilling materials inventories to minimal level, c) Accordance to technical management experience, the drilling materials forecasts are reliable, d) According to technical and logistic experience, materials expected and ordered insignificantly vary from what is installed, e) Lead time between preparation proposed well plan and required to get materials ready to start drilling is adequately at reasonable level, means, company can obtain any materials from any other suppliers within short time without causing drilling stoppage, f) management seeks to reduce the carrying and handling costs of joint venture inventory, or g) management seeks to reduce the investment in joint venture inventory and in space to store inventory, h) Management does change their plan significantly from time to time, i) the cost of inventory is recovered or paid by cost oil. All the above criteria can help us either to record the purchased materials directly to the well cost or to warehouse/inventory account. If the above criteria meet, it is preferred to use direct charges to well cost. If not, it is preferred to use the warehouse or inventory account for recording the purchased drilling materials and equipments.

a. The installed tangible equipments and materials shall be recorded as tangible drilling costs of exploratory well and will be pending determination of proved reserves.

   - If Oil/gas reserves are found, the tangible drilling costs will be capitalized even the well has not been completed for production and the management does not decided to impaired its whole costs. If the management does not use inventory joint account, the unused remaining material and equipments will be immaterial, and can be capitalized too.

   - If the oil/gas reserves are not found or the management decided to impaired the previous wells, the tangible drilling costs shall be expensed. If the management does not use inventory joint account, the unused materials and equipments will be immaterial and can be expensed too.

b. The tangible drilling costs of development well will be capitalized, either the result is dry or success. if the company does use inventory joint account, the unused drilling materials will be capitalized too.

c. If the total unused drilling materials is significant for each well, the unsued drilling materials should be treated as inventory under current assets rather than well costs. If the Company start using the direct charge to well cost method and then it discovered the unused drilling materials is significant, management shall credit the well cost by evaluated unused items and charge the inventory account, it is necessary to do that because the management may decided to transfer some materials to another property/block/lease.

d. Maintaining inventory account in joint venture accounts and bill it as inventory in JIB to other partners and in Statement of Expenditures and Receipts to the host government is required in many Joint Operation Agreement and Production Sharing Agreements as long as the remaining unused materials inventory is not recoverable by cost oil. If those materials inventory is recoverable, it is preferred to charge them to well costs.

e. Capitalized tangible drilling costs of development wells will be depleted over the economic life of well.

2- Tangible property, plant and equipments that are expected to be served more than one year and for several activities or blocks such as

i. drilling rig,
ii. vehicles,
iii. trucks,
iv. building,
v. tanks and storage
vi. servers
vii. Engine, electric motor
viii. Pumping unit and surface pump
ix. Linepipe
x. Separator, Heater, Treater
xi. Meter Run
xii. Seismic equipment

are supposed to be considered as property, plant and equipments or Service equipment and facilities (Fixed Assets) until they are used for specific wells or seismic campaign, or activities and their depreciation will be calculated and allocated to several activities or blocks based on its needs charges basis such as rig operating hours, passage of time, miles, acreage or/and working labor hours basis. The depreciation costs will be charged to intangible drilling cost, seismic cost or operating/production costs. How those equipments should be charged? Should they fully charged to well cost or seismic costs or operating costs or to fixed assets account that is depreciated over its economic life to the well costs, seismic costs or production costs based on the usage basis?

If those equipments are brought for specific well and will not be charged to any other well or can not be used in another block/property/lease, they should be charged to tangible cost of well, but

- at the end of the well if no proved reserves were found, those equipments should be expensed at salvage value with the remaining cost of wells because there will be no future economic benefit flow to entity from this well.

- If proved reserves have been discovered, those costs should be capitalized and reclassify them to Services equipment and facilities or other property, plant and equipment account as long as even the well was not completed for production because there would be future economic benefit flow to entity from the well from the well.

b. If those equipments are brought for several activities or several blocks/properties/leases, they should be charged to service equipment and facilities/property, plant and equipments that is classified as separate caption in financial statements by net value,

- If the management decided to relinquish/abandon the license or sell the license to third party and no need to keep those assets, those items should not be expensed as long as those licenses are hold-for-sale and when relinquishment or abandonment or sell is happened the cost of property, equipments and plant should be expensed by net carrying amount along with the remaining pending cost in E&E, development assets, oil and gas assets and acquisition costs because there would be no more future economic benefit flow to entity from the licenses.

c. Services equipment and facilities/property, plant and equipments are charged to intangible development or exploration costs or operating costs by depreciation method.

d. Tax regulations can provide guidance for capitalizing such costs. In some country's taxation, company is required to disclose and record for depreciating assets that exceed the amount of $300, $500 or $1000. Therefore, some companies intend to establish capitalization policy to categorizes the assets either to property, plant, and equipments/service equipment and facilities or to well costs or be expensed.

e. Also, the allowable charges that are required by PSC, Most of PSCs ask contractor to apply Generally Accepted Accounting Practices to recover the cost when the assets are purchased or on usage of such assets, the assets shall be recognized even if the title of assets have been transferred to host government as long as a) the PSC provides the contractor a right to use and transfer those materials to another block/property/lease within the same country; b) the government cannot dispose those assets without having prior notice of contractor's consent c) the contractor is able to restrict other contractors the benefit obtained from those assets, d) and those assets have not been handed over or submitted to host government, but if those criteria were not met, the company should derecognize the assets and stop computing the depreciation and amortization, it shall recognize the impairment of the abandoned assets.

Intangible Cost

3- Intangible assets are assets that expect to generate future economic benefit to the company and be reliably measured. But such costs can be attributed to different activities as follow

a. The below costs will be considered as intangible costs that are presented in financial statements under E&E assets and capitalized until the license is relinquished, sold or full impaired or it will be depleted and amortized based on depletion of reserves over the economic life of license

- Acquisition of rights to explore

b. The following costs will be considered as intangible costs that are presented in financial statements under E&E assets and expensed in the same period which is incurred if the company apply successful efforts method or to be capitalized if the company apply full cost method.

- G&G studies for identifying the reservoirs or stratigraphic traps of petroleum

- G&A/Overhead that is related to exploration activities

c. The following costs will be considered as intangible drilling costs for exploratory or development wells (Development wells drilled after discovered the commercial oil reserves area).

i. Acquisition of drilling rights
ii. G&G costs for identifying the well site location
iii. Cementing and Cementing services
iv. Electronic logging
v. Mud logging, chemicals and mud log services
vi. Perforating
vii. Acidizing, Fracturing, Swabbing
viii. Plugging and abandoning costs
ix. Sampling of rocks or liquid driven out from well
x. Drilling rig rate

xi. Labor and materials used or consumed for drilling the well
xii. Depreciation of equipments used for drilling wells
xiii. Drill stem testing
xiv. Drilling bits
xv. Fuel, Water, Power and lubricants
xvi. Preparation of well site location
xvii. Rigging up
xviii. Removal of drilling rig
xix. Restoration of land and damages paid to surface owner
xx. Cost of activity in relation to evaluating the technical feasibility and commercial viability of oil/gas.

xxi. Intangible costs of drilling water supply or injection well if the water to be used for drilling exploration or development well or for injection.
xxii. Any other drilling costs that are classified under tangible drilling costs.

Those costs will be temporarily capitalized under exploratory drilling costs which is presented under E&E assets as intangible assets and

- if the proved reserves has not been found, those costs are immediately expensed and closed in the income statement

- If the proved reserves has been found, those costs will be capitalized even the well has not been completed for production until the management decided either to close the well and impair the costs, therefore, the cost will be expensed or the reservoir will be developed and classify the intangible drilling costs from E&E intangible asset to development intangible assets which will be depleted or amortized over the economic life of well.

- All the intangible drilling costs of development wells will be capitalized, and depleted or amortized over the economic life of the well.

Materials Transfers

4- For materials and equipments transfers between venture and joint venture or between joint ventures and another joint venture, those materials are transferred at either fair value or carrying cost with considering the local regulations, production sharing contract and joint operation contracts.

a. Transfers from venture to joint venture

- If the drilling materials or equipments are received by transferee at fair price which is higher or lower than carrying cost, Company shall recognize only the gain that is attributed to other venture as long as the risk and ownership was significantly delivered to joint venture and recognize the full loss. (e.g. If operator transfer or sell a drilling materials by fair price of $10 and it is recorded in operator's inventory at cost of $8. Also, vehicle was sold to joint venture by amount of $20 and its historical costs is $40 and accumulated depr is $10. And operator's portion of joint account is 40% and the current purchases of joint venture inventory is $50 and current purchases of assets $100 and accum. Depr is $10), the following entry will be as follow.

- If the company have joint accounts ledgers that are separate from corporate ledgers and cutback entry is made manually.

Dr. Joint Venture inventory	$10	
Or Dr. Joint well cost $10		
Dr. Joint Venture property, plant and equipment	$20	
Dr. Corporate-accumulated depreci and amortiza	$10	
Dr. recognized loss from sold assets	$10	
Cr. Corporate-Inventory		($ 8.0)
Cr. Corporate-property, plant and equipment		($40.0)
Cr. Corp Interco Inv adj gain		($ 0.8)
Cr. Corp-recognized gain from sold materials		($ 1.2)

To record the asset and materials transfers to joint venture

Dr. Corporate Inventory	$24.0
Dr. A/R – Non operator	$36.0

Dr. JV-accumulated depreci and amortiza			$10.0
Dr. Corporate – PP&E			$48.0
Cr. Joint Venture inventory, or			($ 60.0)
Cr. Joint well cost		(60.0)	
Cr. JV PP&E			($120)
Cr. Corp-accumulated depreci and amortize			($ 4.0)
To record cutback entry			

- If the drilling materials or equipments are received by joint venture at carrying cost and materials or equipment considered as condition A materials/equipment as it is required by JOA or PSC, there is no gain or loss shall be recognized by venture.

b. Equipment or materials purchased from joint venture by operator or non-operator

- If the drilling materials or equipments are received by operator at fair price which is higher than carrying cost gain shall be unrecognized by operator until it is resold to independent party. And the purchasing cost that should be recorded in operator's own account at fair price minus deferred gain of operator's portion (Carrying cost plus gain attributed to other owners). If we took the previous example for materials and assume the transfer from joint venture to venture, the accounting entry will be

Dr. Corporate Inventory			9.2
Dr. Deferred gain of sold materials			0.8
Cr. Joint Venture inventory, or			(8)
Cr. Joint venture well cost		(10)	
Cr. Recognized gain from sold materials or assets			(2)
To record the materials transfer to operator/non-operator			

Dr. Corporate Inventory			16.8
Dr. A/R – Non operator			25.2
Dr. Deferred gain of sold materials			4.0
Dr. Recognized gain from sold materials			2.0
Cr. Joint Venture inventory, or			(42.0)
Cr. Joint well cost		(40.0)	
Cr. Deferred gain of sold materials			(0.8)
To record cutback entry			

- If the drilling materials or equipments are received by operator at fair price which is lower than carrying cost loss shall be recognized by operator. Joint venture should recognize the loss, operator and nonoperator shall record their portion of fair priced items and their share of loss too in their own accounts.

- If the drilling materials or equipments are received by venture at carrying cost and materials or equipment considered as condition A materials/equipment, there is no gain or loss shall be recognized by venture.

c. Transfers from joint venture to another joint venture

- If one joint venture sell the drilling materials or assets to another at price higher than its cost and gain profit. The profit shall be recognized in the transferor's book, and the purchases at fair price is recorded in transferee's book. The difference between fair price and costs of PP&E is recorded in accumulated depreciation and amortization in transferee's books and for drilling materials, it is recorded in deferred gain.

- If one joint venture sell the drilling materials or assets to another at price lower than cost, the loss shall be recognized in the transferor's book which is shared by partners based on pro rata basis, and the transferee shall recognize the assets at the fair price.

d. Transfers from joint venture to independent third party

Any gain or loss from selling assets or drilling materials to independent party, the gain or loss shall be recognized in joint venture accounts and each partner of joint venture shall recognize their gain or loss based on pro rata basis.

If the Company apply proportionate consolidation method, it is required to make cutback entries and the venturer records its share of each assets, liabilities, expenses and revenues into Corporate accounts by preparing cutback entries. And no need to gross up the assets or liabilities for preparing the consolidated financial statements and no need to eliminate the intercompany transactions for materials and equipment transfers and eliminate any unrecognized gain and loss because based on the above entries, venturer's corporate accounts and financial statements will reflect the actual results.

Lease Assets and consignment

Most of Oil and gas exploration and production companies entered into consignment PO such as supplying drilling bits or contract and Lease Agreement for lease a vehicles, the consignment is not recorded in consignee's book until the materials have been used/consumed, therefore, it is charged directly to well costs. Consignee maintain a separate records or register for the consignment or control account for consignment. Consignment are supposed either to used, transferred to other blocks or re-exported or returned back to consignor. For the leased assed, many of oil and gas companies entered into operating lease agreement with other subcontractors to lease an assets such as vehicle and the operating lease (rental charges) is expensed.

References

- IFRS 6
- IAS Framework
- IAS 1
- IAS 2
- IAS 16
- IAS 38
- IAS 31
- SFAS 19
- Yemen PSC
- Kurdistan PSC
- Libya PSC
- IRS regulations.