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Reserve-based Lending

International Considerations

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RBL – International E&P Financing Tool

- Reserves Based Lending (RBL) began in onshore Texas in the 1970s
- RBL then developed in the UK North Sea in the 1970s and 1980s to finance large North Sea projects
- Enables Oil & Gas producers to Leverage their Balance Sheets to meet planned Capital Expenditures
- Lenders gain comfort and security over such assets as Proven Reserves and Production Facilities
- RBL is a hybrid of project finance, corporate finance and asset-backed finance
- Focus is on assets which are in Production or where Production is expected to commence shortly
- Typically, involves Non-Recourse Loans the amount of which is based on the expected present value of future production from the field(s) in question, taking into account factors such as:
 - Level of Reserves
 - Expected Oil Price
 - A Discount Rate
 - Assumptions for Opex
 - Forecast Capex
 - Taxes and Royalties
 - Any Price Hedging employed
- These elements are often quite variable so there are periodic Borrowing Base redeterminations which can see big swings (especially with large movements in oil & gas prices and supplier costs)
- Different RBL Models have emerged in the U.S.A., North Sea and Internationally with different Security packages to reflect local legislation and Operating environment risks



RBL Borrowing Base – Flexibility for All Parties

Lender:

For RBL Lender:

Risks associated with volatility in commodity prices/market values for O&G assets is mitigated by the flexibility of RBL

Lender may continually adjust loan parameters upwards or downwards to maintain adequate loan-to-value and cashflow coverage ratios to take into account Borrower's activity.

In practice, a Borrowing Base limit takes into account capital structure, debt service availability and access to capital to develop non-producing reserves

Borrower:

For oil and gas companies who are either in a development phase in which production is imminent or already producing oil and gas and need to fund expansion:

RBL provides an attractive and elastic financing tool in which amounts available are determined by expected production.

Revolving nature of RBL allows for prepayments without penalty, no interest carry and provides a permanent capital/liquidity source.

Facility can be easily upsized to accommodate additional acquisitions or increasing reserves and production.

Structuring an RBL Loan

In RBL transaction, lenders closely evaluate the borrower's oil and gas reserves and related assets to:

- 1. Determine the size of the RBL facility and the amounts the borrower can borrow from time to time.
- 2. Ensure the borrower can earn sufficient amounts from the sale of extracted oil and gas to repay the loans.
- **3.** Ensure the borrower has sufficient assets to secure the borrower's obligation under the facility.
- RBLs are typically structured as Revolving Loans to provide the maximum flexibility to Borrowers to manage their operations. Nothing prevents, however, the use of term loans.
- Borrower can draw down RBL facility to develop and drill new wells or fields. It repays all or some of these amounts from cash flows generated from sales of oil and gas produced.
- Once some or all amounts have been repaid, the borrower can draw down additional amounts to develop another well or field or to meet other costs.

Structuring an RBL Loan – cont.

Given that E&P companies need to keep finding and developing new wells to be profitable, revolving facilities are better suited to their operations than term loans.

The Borrower can repeat this described process:

- Until the maturity date of the RBL facility.
- Unless an event of default has occurred and is continuing.
- Until borrowing capacity under the facility is reduced.

In many cases, the RBL facility is only one part of the Borrower's capital structure and the loans are often supplemented with second lien loans, mezzanine loans and other types of third party financing.

RBL loans are secured by the assets constituting the **Borrowing Base** and other property of the borrower including deposit accounts, investment property and contractual rights.

Fluctuating facility amounts

The facility amounts is based on the borrower's working interest in one or more upstream assets and is generally equal to a discounted amount of the net present value of the borrower's future income from oil and gas developments in such assets.

Reserve Reports

- Size of the facility is periodically determined by valuation of the reserves (through Reserve Reports) made by technical consultants based on economic/financial criteria and in particular on well-established production performance derived from volumetric, comparison with similar reservoirs, a computer simulation of the new producing zones given the lesser weight, geologic conditions as sand continuity, reservoir energy and revised commodity pricing assumptions.
- Borrowers are typically required to deliver to the lenders, twice a year Reserve Reports prepared by independent petroleum engineers. These reports are reviewed by the Lenders, who normally engage their own experts to audit the reports.

Borrowing Base

- The Borrowing Base is the maximum amount the borrower can borrow under the RBL facility based on the
 value of its reserves the value is determined based on the reserve reports. The Borrowing Base is typically redetermined every six months during the term of the facility, but this may occur more frequently.
- The Borrowing Base is key to such valuations forecast and redetermination provisions are highly negotiated in RBL financings. The Borrower and Lenders are permitted to review and object to forecasts, with a decisionmaking procedure in place.

Fluctuating facility amounts – cont.

The **Borrowing Base**, however, is not static. The value of the borrower's assets changes over time as commodity prices, capex, opex and other assumptions underlying the RBL change.

The Borrowing Base is typically **re-evaluated and re-determined twice a year**, but a redetermination can occur more frequently at the request of either the administrative agent of the borrower – typically allows borrower and lenders to request one or two additional re-determinations during any 12-month period between the scheduled redeterminations.

Although the Borrowing Base may fluctuate in response to changes in value of the reserves, the lenders generally impose a maximum credit amount that can be withdrawn from the facility, regardless of the extent of the appreciation of the borrowing base.

In the event that the amount of the facility exceed the value of the assets:

There is a cancellation of the commitment in excess of the relevant value and a mandatory prepayment of outstandings in excess of value will be required, with any failure to make such prepayment potentially triggering an event of default.

If the value of assets exceeds amount of the facility:

The lenders may increase the available facility amount by such excess.

Typical Security for RBL

- **Pledge over the Shares** of the Borrower oil and gas entity holding an interest in the licence is considered as the security option of choice since it enables the lenders to take over such company upon the occurrence of an event of default and the enforcement of such pledge.
- Conditional Assignment of key Operating Contracts is also often part of any security package and includes an assignment of the borrower's rights, including any receivables due – including Offtake/Sales contracts and Equipment Charters/Leases.
- Security/pledge over the borrower entity bank accounts, in addition to a detailed bank accounts agreement, provides further comfort to the lenders in order to have adequate control over cash flows arising from the relevant borrowing base.
- Security Over Upstream Interests:
 - Mortgage in US
 - In other Jurisdictions often Right to Assign Licence, Concession or PSA (as in U.K.)
- Obstacles to creation of security present a limitation and challenge to RBL
- Regulator Consent often required to enforce Security generally has to be satisfied that Assignee is of good reputation and has requisite financial and technical capacity to fulfill obligations under the Licence/Concession/PSA
- Security over RBL project assets are more often important for strategic negotiation value for when things go wrong than their realizable liquidation value upon default.
- Key practical consideration can you change who is managing assets to improve operations or force a sale of assets?

RBL specific covenants

- RBL documentation typically includes several covenants to address specific lender concerns similar to those found in other financings, such as:
 - Financial covenants and restrictions
 - Specific cash waterfall provisions
 - prohibitions on additional indebtedness and distributions
 - borrowing base deficiency provisions. The borrowing base deficiency can be cured by the borrower adding additional oil and gas properties to the collateral base; alternatively, the lenders can agree to graduated reductions in available lending commitments.
- RBL documentation typically allows debt levels/amortisation to be either increased or decreased to levels that maintain loan-to-value and cash flow coverage ratios that take into consideration changes in cash-flows from acquisition, increase/decrease in production, operative costs or drilling activity since the last redetermination, any of which could impact the expected ultimate recoveries of reserves.
- Lenders will require Borrower to provide a number of specific Operational covenants to allow Lenders to have assurances over management and operations (including safety)

Three International RBL Approaches

- U.S.A. RBL Market (Gulf of Mexico Model) more than 45 year history
 - Reserve Ownership
 - Security on the Reserves and the assets (mortgage)
 - Normally secured lending (but may be unsecured for larger companies)
 - Proved Reserves only considered
 - Borrowing Base Only generally no development finance
- International OECD Market (North Sea Model- U.K and Norway) more than 40 year history
 - No Reserve Ownership but stable Licencing regime
 - Normally secured by Share Pledges and Debenture
 - No mortgage but may have Security Interest in Licence recognized by upstream regulator permitting a compulsory sale to a qualified Operator
 - Available for Borrowing Base and Development
 - Probable and Possible Reserves also considered
- International Non-OECD Market (African Model) 20 to 25 year history in Africa
 - Often No Security on Reserves Licences or Assets themselves
 - Security is focused on Share Pledge and Control over Accounts and Payment Flows
 - Available for Borrowing Base and Development Finance
 - Focus on Proved, and sometimes Probable

RBL in Latin America

- Very little RBL in Latin America only very small percentage (much less than 5%) of RBL globally – despite major oil & gas reserves and production!
- Currently, only limited RBL in Latin America mostly amongst TSX-listed E&P companies operating in Colombia
- RBL in Latin America mostly supported by European and Canadian banks with dedicated energy teams and commitment to the Region
- RBL is new for many Latin American banks, who may not yet have Oil & Gas technical staff to address technical lending requirements, revolving nature of RBL and ongoing technical and commercial re-assessments
- Challenges in Security perfection and lack of precedent for collateral perfection and step-in rights have limited development of RBL in Region
- General uncertainty regarding security ranking and ability to execute collateral in Brazil and other jurisdictions in Region
- Need for technical due diligence and appropriate disclosure of technical data limited transparency with NOCs

"Jabuticabas" in Brazil E&P Financing

- Brazil Insolvency regime:
 - greater rights to Equity holders vs. Creditors than in most jurisdictions
 - difficult for Creditors to change management and business plans
- Enforcing Share Pledges challenging in Brazil
 - legal and regulatory approvals often required for indirect changes of control e.g. Shell takeover of BG
- Unpredictable regulatory intervention in enforcement of security over assets e.g. ANP intervention in OSX 1 mortgage
- Challenges to enforcement of Foreign Mortgages over Assets in Judicial Proceedings – e.g. OSX 3
- These challenges make it challenging for Lenders to:
 - Change control of Borrower Board/management
 - Rely on foreign security, such as Share Pledges and Mortgages, to enforce
 - Rely on Brazil insolvency law remedies generally
- These challenges drive Lenders to want:
 - Specific Security enforceable over Assets outside of Insolvency Regime
 - Security recognized and pre-approved by Regulator(s) to avoid any regulatory interruption of enforcement

Challenges for RBL in Unconventionals

- RBL has come to be heavily used in Unconventionals such as Shale Gas and Shale Oil in the U.S.A.
- Unconventional Production poses its own challenges for RBL:
 - Geological Risk is Often Lower, BUT
 - Steeper Decline Rates for Wells less stable cash flows
 - Wells more Expensive
 - More Infrastructure May Be Needed
 - Larger Blocks of Concessions / Land more title and permitting risks
 - Less flexibility in Drilling Schedules in new Concessions requiring Drilling in Exploration and Appraisal Phases
 - Longer times between Drilling, Completion and Production risk of delayed cash flows
 - Fracturing and Re-fracturing mean continuing Capex steeper Decline rates require continued Capex
 - Regulatory Uncertainty upstream and environmental approvals for extensive Drillling and Fracking?
 - Local Community and Land-Owner Challenges
 - Public Interest Litigation

Operator Changes

- Operator or Operator management changes can be done simply and efficiently in jurisdictions with effective insolvency regimes that allow Creditors to install Receivers or take control of the Board – e.g. U.S or U.K.
- In other jurisdictions, such as Norway, multiple Parties are involved in each Licence/Concession and so there is typically a potential Operator ready to step-up
- In Brazil, where the Insolvency regime will not usually allow for rapid change in management and there may be 100% owners of Concessions, there may need to be some back-up plan – perhaps Emergency Operators – such as international Service Companies

Operator Changes – Example Gunvor

- Press release 8/04/2015 16:02
- Enforcement of RBL security by Gunvor Group
- PA Resources AB ("PA Resources" or the "Company") announces, further to the announcement of 7 April that its largest creditor and shareholder, Gunvor Group, has demanded repayment of amounts due under the Company's reserve based lending facility ("RBL"), that the Company has received notice that Gunvor has taken action to enforce its security under the RBL, being a pledge over the Company's shares in its wholly-owned subsidiary, Osborne Resources Limited ("Osborne").
- Osborne owns interests in Equatorial Guinea, namely the producing Aseng and Alen fields, and the Block I exploration interest. The
 effect of this enforcement action is that Osborne is no longer a subsidiary of the Company and has become a subsidiary of Gunvor
 Group.
- The Company has been informed that as a result of the enforcement action, the liabilities of all borrowers under the RBL have been discharged, other than certain liabilities owed by Osborne to Gunvor Group which remain in place after the transfer of the shares.
- The receivers appointed by Gunvor Group in connection with the enforcement action have taken a call option over the shares in Osborne such that, if a bona fide and fully funded offer is made by any person for the shares in Osborne which, broadly, matches the consideration, 67 MUSD, for the transfer of the shares to Gunvor Group, the receivers can call for the shares to be transferred to that person. This call option will expire on 7 May 2015.
- If the Company or any of its stakeholders were to make an offer for the shares in Osborne, such offer would also have to include a settlement of the outstanding amount, approximately 22 MUSD, owed by Osborne to Gunvor Group under the RBL.
- As a result of the transaction Osborne will be deconsolidated from the Company per the 7 April 2015 and the Company's debt and accrued interest under the RBL will be considered repaid in full.
- According to preliminary calculations the transaction will result in a net gain to the company of approximately 200 MSEK. A more
 precise calculation of the financial effects will be presented in conjunction with the report for the first guarter 2015.
- The board of the Company is considering the implications of these actions taken by Gunvor Group and will provide a further update in due course.
- Stockholm 8 April, 2015
- PA Resources AB (publ)