Article Title: ARCHIVE | Criteria | Corporates | Industrials: Volumetric Production Payments (VPPs) For U.S. Oil And Gas Exploration And Production Companies Data: (EDITOR'S NOTE: — This criteria article is no longer current. It has been superseded by the article titled, "Key Credit Factors For The Oil And Gas Exploration And Production Industry," published on Dec. 12, 2013.) A volumetric production payment (VPP) is an arrangement in which an oil and gas exploration and production (E&P;) company agrees to deliver a specified quantity of hydrocarbons from specific properties (or fields) to a counterparty in return for a fixed amount of cash received at the beginning of the transaction. The seller often bears all of the production and development costs associated with delivering the agreed upon volumes. The buyer receives a non-operating interest in the oil and gas properties that produce the required volumes. The security is a real interest in the producing properties that the parties expect to survive bankruptcy of the E&P; company that sold the VPP. After delivery of the total requisite volumes, the production payment arrangement terminates and the conveyed interest reverts back to the seller. Standard & Poor's Ratings Services views VPPs structured with a high level of investor protection--in terms of production coverage--as debt-like obligations, and we adjust financial and operating analysis accordingly. The retention of risk in VPPs is central to our treatment of such deals as largely debt-like. Under U.S. generally accepted accounting principles (GAAP), the accounting for VPPs affects the seller's financial statements and operating statistics in several ways. The VPP volumes (i.e., the amount of oil and natural gas to be delivered under the agreement) are removed from the seller's reserves, and the proceeds the seller receives for the VPP increase its cash balances. If using the successful-efforts accounting method, the seller books a deferred revenue liability to reflect the obligation under the agreement. If instead the seller uses the full cost accounting method, the VPP transaction is effectively accounted for as a sale. In all cases, the seller's income statement includes the costs of producing the VPP volumes as and when the oil and gas is produced. Operating statistics calculated on a per barrel of oil equivalent (boe) basis will be overstated because they do not factor in the volumes related to the VPP but do include the associated costs. For example, in the case of per unit lifting costs (the operating costs associated with the extraction of the oil and gas divided by the number of boe extracted), the cost of producing the VPP volumes continues to be captured in the numerator but the associated barrels are not in the denominator. For those companies using the successful-efforts method, the same holds true for revenue because the income statement includes the amortization of deferred revenue. When the necessary data are available, we adjust the reported results to minimize these distortions. The required volumes are returned to reserves, and the oil and gas volumes produced to meet the VPP requirements are added to the E&P; company's production when calculating per boe operating statistics. Finally, we consider the obligation to deliver the VPP volumes to be debt-like (the calculation is described below). This treatment reflects our view that VPPs are conceptually similar to secured debt, rather than asset sales. In typical deals, there is substantial overcollateralization with total field reserves significantly exceeding the volumes the seller promises under the VPP contract. The seller is obliged to deliver the agreed upon volumes and incurs all associated operating and capital costs. If the seller does not meet the obligation, it would risk losing all its reserves in the field. We would view a VPP structured with minimal overcollateralization to be closer to an asset sale, since the transfer of risk would be more substantial. However, even in this case, the VPP has some debt-like qualities, because the company must pay the operating expenses associated with the VPP until delivery of the final volumes. Since the VPP represents an obligation to deliver hydrocarbons (and not cash), the requisite debt adjustment is not obvious. Until now, we used the cash proceeds the seller receives at the closing of the transaction as the initial debt amount. As time passes, the VPP debt would decrease as the company delivers the hydrocarbons. This adjustment is analogous to viewing deferred revenue as debt for companies using the successful-efforts method. We recently reviewed our methodology, and changed how we calculate the debt adjustment. We now utilize more of a fair market value approach, and use the New York Mercantile Exchange (NYMEX) futures curve to calculate the expected value of the barrels to be delivered, which we consider to be debt. If hydrocarbon prices increase, so would the debt adjustment and vice versa. This approach is analogous to using the fluctuating value of foreign-currency-denominated debt. Standard & Poor's regularly publishes hydrocarbon pricing assumptions, which we use when projecting credit ratios in the oil and gas sector. For the purposes of these forward-looking ratios only, we use these same pricing

assumptions to calculate the VPP value, in order to ensure analytical consistency. Adjustment Procedures Data requirements Schedule of oil and natural gas volumes yet to be delivered under the VPP; Oil and natural gas volumes produced during the year from the VPPs; NYMEX futures curve for oil and natural gas prices as of period end, and Pricing differentials (related to quality differences and geographic location) for the VPP volumes relative to NYMEX. The oil and gas volume data generally come from the company. The NYMEX futures curves for crude oil and natural gas prices are readily accessible from various sources, such as Bloomberg. Calculations Adjustment to debt: We multiply the oil and natural gas volumes to be delivered in each year of the contract by the futures price (adjusted for quality and location differentials) in that year. We then calculate the present value of this revenue stream using a discount rate commensurate with the company's secured borrowing rate; Adjustment to interest expense: We impute interest expense on the adjustment to debt using the company's secured borrowing rate. The rate is applied to the average of the calculated VPP obligation at current and previous period end; Debt to reserves: We add the hydrocarbon volumes the seller hasn't yet delivered under the VPP back to reported reserves, which is relevant for debt-to-reserve calculations; Selling and lifting costs: Similarly, we add the oil and gas volumes produced to meet the VPP requirements in calculating per unit selling prices and lifting costs, and Adjustment to operating cash flow: We reclassify cash proceeds from VPPs as financing cash flows.