CONFIDENTIAL

Date: 23 June 2010

TO: AAAA

FROM: Dr. Robert K. Merrill, Ammonite Resources

RE: Analysis of XYZ Energy Partners Texas, Louisiana and Offshore Gulf of Mexico Prospect Portfolio

Recommendation: XYZ Energy Partners (XYZ) has built a significant portfolio of opportunities in Texas, Louisiana and offshore Gulf of Mexico. The prospect uncertainty (**Pg**) of individual prospects ranges from 15% to 60%, but 98% of the prospects have a Pg over 30%. This compares with XYZ's historical success rate using the same technical approach of about 70%. These prospects are generally developed using regional, merged seismic volumes that have been migrated using Prestack Time Migration and generally Prestack Depth Migration. Their regional database used to create the current portfolio also allows XYZ to quickly evaluate new opportunities without having to purchase and process new seismic data. Consequently, they have a direct comparison of new opportunities to prospects they have drilled. The majority of the prospects are independent; consequently failure in one does not increase the geologic risk for nearby prospects. Ammonite feels that the portfolio is sufficiently robust given the modest prospect uncertainty and recommends participation.

Summary: June 14th and 15th, 2010, Ammonite's Dr. Robert Merrill visited the offices of XYZ Energy Partners in New Orleans to review the company's prospect portfolio and exploration methodology. Present at the meeting were _____, XYZ Vice President of Exploration, senior geologists, _____, and _____, senior geophysicist _____, and _____ Vice-President of Engineering. The technical presentations were thorough, and all supporting documentation was available for review as requested.

XYZ is focused on exploration and production in Texas, South Louisiana and the Gulf of Mexico continental shelf. Since 2003 they have drilled over 128 wells with an overall success ratio of about 70%. The XYZ Portfolio is about 95% gas focused. The company has accumulated over 512,000 acres of leases in Texas, Southern Louisiana and offshore.

To implement this focused strategy, XYZ has assembled over 38,000 mi^2 of 3D seismic through purchases and trades, additionally they have a substantial library card to draw on for 3D seismic, to map new opportunities as they become available. XYZ generally merges and reprocesses the seismic they acquire, so most of their seismic data are pre-stack depth migrated volumes. This reprocessing allows them to use the CDP gathers for AVO analysis of amplitudes prior to

drilling. The prospects presented to Ammonite were generally Class III or Class II AVO anomalies. Class III AVO anomalies coincide with the typical "bright spot" or DHI where reservoir sands (porosity commonly greater than 25%) are encased in higher impedance shales. The reflection amplitude with respect to the background increases slightly with increasing offset distance or angle. Gas and high GOR oils are bright spots on both the stacked section and the angle stacks as seen in the shotpoint gathers. Class II AVO anomalies are generated within reservoirs that are moderately compacted (sandstone porosity 15 – 25%) and the acoustic impedance of the sand is about the same as the encasing shale. The AVO anomaly is strongly more negative with increasing offset distance or angle.

XYZ's geologic and geophysical risk assessment is rigorous with structural control detailed by 3D seismic and reservoir presence supported by seismic amplitudes with associated AVO anomalies. Almost 85% of their prospects are structural and most are fault traps with analogous traps, proven analogs, either upthrown or downthrown, on trend. About 15% of XYZ's portfolio consists of stratigraphic traps, supported by AVO. The prospects are all mapped with 3D seismic, so there is excellent control on the structural components of the trap. Almost 70% of their prospects are amplitude supported, and over 60% of the prospects are indicated to have either Class II or Class III AVO anomalies associated with them indicating a high probability for trapped hydrocarbons. XYZ considers several factors when evaluating amplitude supported prospects, including, 1) local change in amplitude, 2) edge effects and 3) rock physics. Most of the prospects have single objectives with excellent technical support.

Portfolio Model: Ammonite built Monte Carlo models for each individual prospect using ranges provided by XYZ for prospect area, net pay and recovery per acre-ft. Prospect maps provided by XYZ provided a check on prospect area and type of structure or stratigraphic trap. The Monte Carlo model for the portfolio was built using the procedure below:

1. From maps and risk assumptions provided by XYZ, an estimate was made of prospect risk or **Pg**. These assumptions included trap, pay, and were influenced by the presence or absence of seismic amplitudes or AVO anomalies.
2. From maps and net pay estimates provided by XYZ an assumption was developed for the geometric factor or wedge factor which is a function of structural dip and pay thickness.
3. Using volumetric parameters provided by XYZ for assumptions for net pay, area and recovery per acre-ft were created; forecasts for unrisked resource and risked resource were calculated.
4. The unrisked and risked resource estimates were tabulated in summary tables where the mean and standard deviation was used to create prospect resource assumptions that were summed for total offshore and onshore gas and oil resource estimates and the P90, P10 and Mean resource totals
5. XYZ resource assumptions were summed for a forecast of total XYZ resource estimate.

Portfolio: XYZ has assembled a significant portfolio of opportunities. The total unrisked mean resource is 2,200 BCF and 16 MMBO (689 BCF + 7 MMBO, risked mean resource) which compares to the unrisked mean resource estimated by XYZ of 3,269 BCF and 23.5 MMBO (978

BCF + 11 MMBO risked mean resource) (Table 1). On an unrisked basis, about 47% of the portfolio is represented by the EI 61/74 Wilcox prospect that is analogous and on trend about 12 miles from the McMoran Davy Jones discovery. The **Pg** for this prospect is assessed at 15%, so the impact on the risked portfolio is much smaller. Without this deep, expensive, Wilcox prospect, the mean unrisked resource is estimated by Ammonite to be 990 BCF.

Table 1. Resource Potential of the XYZ Portfolio as estimated by Ammonite and XYZ.

Prospects within the portfolio are independent for the most part. In other words, failure at one does not preclude drilling another in the same trend. The petroleum system is known to work within each play and XYZ's technical due diligence in similar plays has shown to be accurate about 70% of the time since 2003.

Table 2 lists the individual prospects and their unrisked resources as estimated by Ammonite and XYZ. The P10/P90 ratio is generally an indicator for risk, with higher ratios typical of higher prospect risk. A higher risk prospect, i.e. lower **Pg**, has a greater range of uncertainty, thus the higher P10/P90 ratio. For example, close in or deeper objectives have a P10/P90 ratio of between 2 and 25. Prospects that are on trend with previous discoveries typically have a P10/P90 ratio between 10 and 50. The fact that XYZ's estimates are generally between 3 and 10 reflect their 3D seismic database and the amplitude, AVO and spectral anomaly work done routinely to better define area and net pay. The principal reason for the difference between the XYZ and Ammonite resource estimates is the inclusion of the geometric or wedge factor in Ammonite's volumetric analysis.

Risked resource estimates for the XYZ Portfolio are shown in Table 3. Pg and P10/P90 ratio are not included in this table.

FIGURE DELETED

Table 2. Unrisked resource for prospects in the XYZ Portfolio.

FIGURE DELETED

Table 3. Risked Resource estimates for the XYZ Portfolio.