

DEGOLYER AND MACNAUGHTON
5001 SPRING VALLEY ROAD
SUITE 800 EAST
DALLAS, TEXAS 75244

August 24, 2011

Evolution Petroleum Corporation
2500 CityWest Blvd, Suite 1300
Houston, Texas 77042

Ladies and Gentlemen:

Pursuant to your request, we have prepared estimates of the extent and value of the net proved and probable oil reserves, as of June 30, 2011, of certain properties owned by Evolution Petroleum Corporation (Evolution). The properties appraised consist of working and royalty interests located in the Delhi field in Louisiana. Evolution has represented that these properties account for 79 percent of its proved reserves and 93 percent of its probable reserves as of June 30, 2011. This report was completed on August 24, 2011, and prepared in accordance with the guidelines specified in Item 1202 (a)(8) of Regulation S-K, and is to be used for inclusion in certain United States Securities and Exchange Commission (SEC) filings by Evolution. The net proved reserves estimates prepared by us have been prepared in accordance with the reserves definitions of Rules 4-10(a) (1)-(32) of Regulation S-X of the SEC.

Reserves included herein are expressed as gross and net reserves. Gross reserves are defined as the total estimated petroleum to be produced from these properties after June 30, 2011. Net reserves are defined as that portion of the gross reserves attributable to the interests owned by Evolution after deducting all royalties and interests owned by others. Gas volumes are zero, since all gas produced with the oil is re-injected or used in lease operations.

Values of proved and probable reserves shown herein are expressed in terms of estimated future gross revenue, future net revenue, and present worth of future net revenue. Future gross revenue is that revenue which will accrue to the appraised interests from the production and sale of the estimated net reserves. Future net revenue is calculated by deducting estimated production taxes, ad

valorem taxes, and operating expenses, and capital costs from the future gross revenue. Operating expenses include field operating expenses, transportation expenses, compression charges, and an allocation of overhead that directly relates to production activities. Future income tax expenses were not taken into account in the preparation of these estimates. Present worth is defined as future net revenue discounted at 10 percent compounded monthly over the expected period of realization.

Estimates of oil reserves and future net revenue should be regarded only as estimates that may change as further production history and additional information become available. Not only are such reserves estimates based on that information which is currently available, but such estimates are also subject to the uncertainties inherent in the application of judgmental factors in interpreting such information.

Data used in this report were obtained from Evolution, from records on file with the appropriate regulatory agencies, and from public sources. In the preparation of this report we have relied, without independent verification, upon such information furnished by Evolution with respect to property interests appraised, production from such properties, current costs of operation and development, current prices for production, agreements relating to current and future operations and sale of production, and various other information and data that were accepted as represented. It was not considered necessary to make a field examination of the physical condition and operation of the properties.

Methodology and Procedures

Estimates of reserves were prepared by the use of appropriate geologic, petroleum engineering, and evaluation principals and techniques that are in accordance with practices generally recognized by the petroleum industry as presented in the publication of the Society of Petroleum Engineers entitled "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information (Revision as of February 19, 2007)." The method or combination of methods used in the analysis was tempered by experience with similar reservoirs, stage of development, quality and completeness of basic data, and production history.

The proved reserves estimated for the appraised interests are located in the Holt-Bryant reservoir. This reservoir was originally discovered in 1944, produced

under primary means until unitized for water injection in 1953, and was purchased by Denbury Resources in 2006 in order to initiate a carbon dioxide injection program. Average depth is 3,235 feet subsea, and the unit area is about 6,189 acres. Denbury began carbon dioxide injection in three patterns in November 2009 and has since expanded to eight patterns. Evolution owns a royalty interest in the unit, which is converted to a working interest after certain payout provisions are reached.

The volumetric method was used to estimate the original oil in place (OOIP). Structure maps were utilized to delineate each reservoir, and isopach maps were utilized to estimate reservoir volume. Electrical logs, radioactivity logs, core analyses, and other available data were used to prepare these maps as well as to estimate representative values for porosity and water saturation. Estimates of OOIP were prepared during unitization and later refined during waterflood operations. Cumulative recovery is about 192 million barrels. Estimates of ultimate recovery to result from carbon dioxide injection in the Holt-Bryant reservoir were obtained after applying a recovery factor to an estimated OOIP of 357 million barrels. This recovery factor is based on consideration of the type of energy inherent in the reservoirs, analyses of the petroleum, the structural positions of the properties, and the production histories. Oil production response to the carbon dioxide was observed in March 2010. Based on the production response from a number of producers, and noting the amount of carbon dioxide injection to date, it is estimated that the recovery of proved reserves will be about 13 percent of OOIP and probable reserves about 4 percent of OOIP.

In addition, Evolution has noted that four additional reservoirs exist that are suitable for carbon dioxide injection. These are identified as the Baughman, May Equivalent, and May Libby reservoirs. The estimated OOIP of these reservoirs is about 51.8 million barrels. After the pattern area that could be developed was estimated, the oil recovery from these reservoirs was estimated to be 7.767 million barrels. These reservoirs are classified as probable undeveloped and are subject to Denbury expanding its flood program to these reservoirs after Evolution backs into a working interest.

Definition of Reserves

Petroleum reserves included in this report are classified by degree of proof as proved or probable. Only proved and probable reserves have been evaluated for this report. Reserves classifications used in this report are in accordance with the

reserves definitions of Rules 4-10(a) (1)-(32) of Regulation S-X of the SEC. Reserves are judged to be economically producible in future years from known reservoirs under existing economic and operating conditions and assuming continuation of current regulatory practices using conventional production methods and equipment. In the analyses of production-decline curves, reserves were estimated only to the limit of economic rates of production under existing economic and operating conditions using prices and costs consistent with the effective date of this report, including consideration of changes in existing prices provided only by contractual arrangements but not including escalations based upon future conditions. The petroleum reserves are classified as follows:

Proved oil and gas reserves – Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible—from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations—prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time.

(i) The area of the reservoir considered as proved includes:

(A) The area identified by drilling and limited by fluid contacts, if any, and (B) Adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data.

(ii) In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons (LKH) as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology establishes a lower contact with reasonable certainty.

(iii) Where direct observation from well penetrations has defined a highest known oil (HKO) elevation and the potential

exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering, or performance data and reliable technology establish the higher contact with reasonable certainty.

(iv) Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when:

(A) Successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and (B) The project has been approved for development by all necessary parties and entities, including governmental entities.

(v) Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.

Probable reserves – Probable reserves are those additional reserves that are less certain to be recovered than proved reserves but which, together with proved reserves, are as likely as not to be recovered.

(i) When deterministic methods are used, it is as likely as not that actual remaining quantities recovered will exceed the sum of estimated proved plus probable reserves. When probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the proved plus probable reserves estimates.

(ii) Probable reserves may be assigned to areas of a reservoir adjacent to proved reserves where data control or interpretations of available data are less certain, even if the interpreted reservoir continuity of structure or productivity does not meet the reasonable certainty criterion. Probable reserves may be assigned to areas that are structurally higher than the proved area if these areas are in communication with the proved reservoir.

(iii) Probable reserves estimates also include potential incremental quantities associated with a greater percentage recovery of the hydrocarbons in place than assumed for proved reserves.

(iv) See also guidelines in paragraphs (iv) and (vi) of the definition of possible reserves.

Possible reserves – Possible reserves are those additional reserves that are less certain to be recovered than probable reserves.

(i) When deterministic methods are used, the total quantities ultimately recovered from a project have a low probability of exceeding proved plus probable plus possible reserves. When probabilistic methods are used, there should be at least a 10% probability that the total quantities ultimately recovered will equal or exceed the proved plus probable plus possible reserves estimates.

(ii) Possible reserves may be assigned to areas of a reservoir adjacent to probable reserves where data control and interpretations of available data are progressively less certain. Frequently, this will be in areas where geoscience and engineering data are unable to define clearly the area and vertical limits of commercial production from the reservoir by a defined project.

(iii) Possible reserves also include incremental quantities associated with a greater percentage recovery of the

hydrocarbons in place than the recovery quantities assumed for probable reserves.

(iv) The proved plus probable and proved plus probable plus possible reserves estimates must be based on reasonable alternative technical and commercial interpretations within the reservoir or subject project that are clearly documented, including comparisons to results in successful similar projects.

(v) Possible reserves may be assigned where geoscience and engineering data identify directly adjacent portions of a reservoir within the same accumulation that may be separated from proved areas by faults with displacement less than formation thickness or other geological discontinuities and that have not been penetrated by a wellbore, and the registrant believes that such adjacent portions are in communication with the known (proved) reservoir. Possible reserves may be assigned to areas that are structurally higher or lower than the proved area if these areas are in communication with the proved reservoir.

(vi) Pursuant to paragraph (iii) of the proved oil and gas reserves definition, where direct observation has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves should be assigned in the structurally higher portions of the reservoir above the HKO only if the higher contact can be established with reasonable certainty through reliable technology. Portions of the reservoir that do not meet this reasonable certainty criterion may be assigned as probable and possible oil or gas based on reservoir fluid properties and pressure gradient interpretations.

Developed oil and gas reserves – Developed oil and gas reserves are reserves of any category that can be expected to be recovered:

(i) Through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and

- (ii) Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

Undeveloped oil and gas reserves – Undeveloped oil and gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.

- (i) Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.

- (ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances justify a longer time.

- (iii) Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir, as defined in [section 210.4–10 (a) Definitions], or by other evidence using reliable technology establishing reasonable certainty.

The extent to which probable and possible reserves ultimately may be reclassified as proved reserves is dependent upon future drilling, testing, and well performance. The degree of risk to be applied in evaluating probable and possible reserves is influenced by economic and technological factors as well as the time element. Probable reserves in this report have not been adjusted in consideration of these additional risks and therefore are not comparable with proved reserves. No possible reserves have been evaluated for this report.

The development status shown herein represents the status applicable on June 30, 2011. In the preparation of this study, data available from wells drilled on

the appraised properties through June 30, 2011, were used in estimating gross ultimate recovery. Gross production estimated to June 30, 2011, was deducted from gross ultimate recovery to arrive at the estimates of gross reserves as of June 30, 2011. Production data through May 2011 were available.

Primary Economic Assumptions

Revenue values in this report were estimated using the initial prices and costs specified by Evolution. Future prices were estimated using guidelines established by the SEC and the Financial Accounting Standards Board (FASB). The prices used in this report are based on SEC guidelines. The assumptions used for estimating future prices and expenses are as follows:

Oil Prices

An oil price differential was calculated from data provided by Evolution. The prices used for this appraisal were calculated by applying this differential to a WTI price of \$89.90 per barrel and was then held constant for the life of the property. The WTI price of \$89.90 is the 12-month average price calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to June 30, 2011. The weighted average effective price attributable to the estimated proved reserves over the life of the property was \$94.81 per barrel.

Operating Expenses and Capital Costs

Estimates of operating expenses and capital costs based on current costs were used for the lives of the properties with no increases in the future based on inflation. Future expenditures are estimated to be much higher than current levels due to the carbon dioxide injection program, which will continue to be expanded through 2014. Future capital expenditures were estimated using 2011 values and were not adjusted for inflation. Evolution is expected to pay \$1.15 per thousand cubic feet (Mcf) of carbon dioxide, based on a rate of 1 percent of oil price plus transportation charges of 20 cents per Mcf.

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Summary and Conclusions

The estimates of net proved and probable reserves attributable to Evolution from the properties appraised, as of June 30, 2011, are summarized as follows, expressed in thousands of barrels (Mbbbl):

	Net Oil Reserves (Mbbbl)
Proved	
Developed Producing	4,899
Undeveloped	<u>6,039</u>
Total Proved	10,938
Probable*	5,838

* Probable reserves have not been risk adjusted to make them comparable to proved reserves.

The estimated future revenue to be derived from the production and sale of the net proved and probable reserves, as of June 30, 2011, of the properties appraised is summarized as follows, expressed in thousands of dollars (M\$):

	Developed Producing	Undeveloped	Total Proved	Probable*
Future Gross Revenue, M\$	464,450	572,512	1,036,962	553,536
Production Taxes, M\$	31,689	56,976	88,665	59,421
Ad Valorem Taxes, M\$	1,737	2,337	4,074	2,269
Operating Expenses, M\$	102,161	153,938	256,099	188,534
Capital Costs, M\$	0	12,675	12,675	12,915
Abandonment Costs, M\$	1,044	28	1,072	12
Future Net Revenue**, M\$	327,819	346,558	674,377	290,385
Present Worth at 10 Percent**, M\$	192,506	141,113	333,619	72,846

* Values for probable reserves have not been risk adjusted to make them comparable to values for proved reserves.

** Future income taxes have not been taken into account in the preparation of these estimates.

While the oil and gas industry may be subject to regulatory changes from time to time that could affect an industry participant's ability to recover its oil and gas reserves, we are not aware of any such governmental actions which would

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restrict the recovery of the June 30, 2011, estimated oil volumes. The reserves estimated in this report can be produced under current regulatory guidelines.

In our opinion, the information relating to estimated proved and probable reserves, estimated future net revenue from proved and probable reserves, and present worth of estimated future net revenue from proved and probable reserves of oil, condensate, natural gas liquids, and gas contained in this report has been prepared in accordance with Paragraphs 932-235-50-4 through 932-235-50-7, 932-235-50-9, 932-235-50-30, and 932-235-50-31(a), (b), and (e) of the Accounting Standards Update 932-235-50, *Extractive Industries – Oil and Gas (Topic 932): Oil and Gas Reserve Estimation and Disclosures* (January 2010) of the Financial Accounting Standards Board and Rules 4-10(a) (1)-(32) of Regulation S-X and Rules 302(b), 1201, and 1202(a) (1), (2), (3), (4), (5), (8) of Regulation S-K of the Securities and Exchange Commission; provided, however, future income tax expenses have not been taken into account in estimating the future net revenue and present worth values set forth herein.

To the extent the above-enumerated rules, regulations, and statements require determinations of an accounting or legal nature, we, as engineers, are necessarily unable to express an opinion as to whether the above-described information is in accordance therewith or sufficient therefor.

DeGolyer and MacNaughton is an independent petroleum engineering consulting firm that has been providing petroleum consulting services throughout the world since 1936. DeGolyer and MacNaughton does not have any financial interest, including stock ownership, in Evolution. Our fees were not contingent on the results of our evaluation. This letter report has been prepared at the request of Evolution. DeGolyer and MacNaughton has used all assumptions, data, procedures, and methods that it considers necessary and appropriate to prepare this report.

Submitted,

DeGolyer and MacNaughton
 DeGOLYER and MacNAUGHTON
 Texas Registered Engineering Firm F-716



Paul J. Szatkowski PE
 Paul J. Szatkowski, P.E.
 Senior Vice President
 DeGolyer and MacNaughton

CERTIFICATE of QUALIFICATION

I, Paul J. Szatkowski, Petroleum Engineer with DeGolyer and MacNaughton, 5001 Spring Valley Road, Suite 800 East, Dallas, Texas, 75244 U.S.A., hereby certify:

1. That I am a Senior Vice President with DeGolyer and MacNaughton, which company did prepare the letter report addressed to Evolution Petroleum Corporation dated August 24, 2011, and that I, as Senior Vice President, was responsible for the preparation of this letter.
2. That I attended Texas A&M University, and that I graduated with a Bachelor of Science degree in Petroleum Engineering in the year 1974; that I am a Registered Professional Engineer in the State of Texas; that I am a member of the International Society of Petroleum Engineers and the American Association of Petroleum Geologists; and that I have in excess of 37 years of experience in oil and gas reservoir studies and reserves evaluations.

Signed: August 24, 2011



Paul J. Szatkowski PE

Paul J. Szatkowski, P.E.
Senior Vice President
DeGolyer and MacNaughton

