

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

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5001 SPRING VALLEY ROAD  
SUITE 800 EAST  
DALLAS, TEXAS 75244

**REPORT**  
**as of**  
**JANUARY 1, 2022**  
**on**  
**RESERVES and REVENUE**  
**and**  
**CONTINGENT RESOURCES and POTENTIAL REVENUE**  
**of the**  
**ALBACORA LESTE FIELD**  
**in**  
**BRAZIL**  
**for**  
**PETRORIO S.A.**

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**FOREWORD**

Scope of Investigation

This report presents estimates, as of January 1, 2022, of the extent of the proved, probable, and possible oil and gas reserves and estimates of the value of the proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves of the Albacora Leste field. This report also presents estimates of the extent and potential value of contingent resources associated with the evaluated field. PetroRio S.A. (PetroRio) has represented that it is in the process of acquiring an interest in this field. The evaluated working interest and the concession expiration date for the Albacora Leste field is shown in Table 1 of this report.

Estimates of reserves and contingent resources presented in this report have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers. The reserves definitions are discussed in detail in the Definition of Reserves section of this report. The contingent resources definitions are discussed in detail in the Definition of Contingent Resources section of this report.

PetroRio has represented that it is in the process of acquiring a 90-percent working interest in the Albacora Leste field from Petrobras. In addition, PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is zero percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent for Albacora Leste field.

Reserves estimated in this report are expressed as gross reserves and net reserves. Gross reserves are defined as the total estimated petroleum remaining to be produced from these properties after December 31, 2021. Net reserves are defined as that portion of the gross reserves attributable to the interests potentially held by PetroRio after deducting all interests held by others, including royalties paid in kind. PetroRio has represented that its government royalty obligations are paid in cash; therefore, net reserves have not been reduced in consideration of these royalty obligations.

This report presents values for proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves that were estimated using prices, expenses, and costs provided by PetroRio. Prices, expenses, and costs were provided in United States dollars (U.S.\$), and all monetary values in this report are expressed in U.S.\$. A detailed explanation of the forecast price, expense, and cost assumptions is included in the Valuation of Reserves section of this report.

Values for proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves in this report are expressed in terms of future gross revenue, future net revenue, and present worth. Future gross revenue is defined as that revenue which will accrue to the evaluated interests from the production and sale of the estimated net reserves. Future net revenue is calculated by deducting royalties paid in cash, operating expenses, capital costs, abandonment costs, and the special participation fee (SPF) from future gross revenue. Operating expenses include field operating expenses, transportation and processing expenses, and an allocation of overhead that directly relates to production activities. Capital costs include drilling and completion costs, facilities costs, and field maintenance costs. Abandonment costs are represented by PetroRio to be inclusive of those costs associated with the removal of equipment, plugging of wells, and reclamation and restoration costs associated with the abandonment. At the request of PetroRio, future Brazilian income taxes were not taken into account in the preparation of these estimates. Present worth is defined as future net revenue discounted at a

specified arbitrary discount rate compounded monthly over the expected period of realization. Present worth should not be construed as fair market value because no consideration was given to additional factors that influence the prices at which properties are bought and sold. In this report, present worth values using a nominal discount rate of 10 percent are reported in detail and values using nominal discount rates of 5, 15, and 20 percent are reported as totals. At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

Contingent resources estimated in this report are expressed as gross contingent resources and net contingent resources. Gross contingent resources are defined as the total estimated petroleum that is potentially recoverable from known accumulations after December 31, 2021. Net contingent resources are defined as that portion of the gross contingent resources attributable to the interests potentially held by PetroRio after deducting all interests held by others, including royalties paid in kind. PetroRio has represented that its government royalty obligations are paid in cash; therefore, net contingent resources have not been reduced in consideration of these royalty obligations.

The contingent resources estimated herein are those quantities of petroleum that are potentially recoverable from known accumulations but which are not currently considered to be commercially recoverable. Because of the uncertainty of commerciality, the contingent resources estimated herein cannot be classified as reserves. The contingent resources estimates in this report are provided as a means of comparison to other contingent resources and do not provide a means of direct comparison to reserves. A detailed explanation of the contingent resources estimated herein is included in the Estimation of Contingent Resources section of this report.

Contingent resources quantities should not be confused with those quantities that are associated with reserves due to the additional risks involved. The quantities that might actually be recovered should they be developed may differ significantly from the estimates presented herein. There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated herein.

This report presents potential values for contingent resources that were estimated using prices, expenses, and costs provided by PetroRio. Prices, expenses, and costs were provided in U.S.\$, and all monetary values in this report are expressed in U.S.\$\$. A detailed explanation of the forecast

price, expense, and cost assumptions is included in the Valuation of Contingent Resources section of this report.

Potential values for contingent resources in this report are expressed in terms of potential future gross revenue, potential future net revenue, and potential present worth. Potential future gross revenue is defined as that revenue which will accrue to the evaluated interests from the production and sale of the estimated net contingent resources. Potential future net revenue is calculated by deducting royalties paid in cash, operating expenses, capital costs, abandonment costs, and the SPF from potential future gross revenue. Operating expenses include field operating expenses, transportation and processing expenses, and an allocation of overhead that directly relates to production activities. Capital costs include drilling and completion costs, facilities costs, and field maintenance costs. Abandonment costs are represented by PetroRio to be inclusive of those costs associated with the removal of equipment, plugging of wells, and reclamation and restoration costs associated with the abandonment. At the request of PetroRio, future Brazilian income taxes were not taken into account in the preparation of these estimates. Potential present worth is defined as potential future net revenue discounted at a specified arbitrary rate compounded monthly over the expected period of realization. Potential present worth should not be construed as fair market value because no consideration was given to additional factors that influence the prices at which properties are bought and sold. In this report, potential present worth values using a nominal discount rate of 10 percent are reported in detail and values using nominal discount rates of 5, 15, and 20 percent are reported as totals. At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

Estimates of reserves and revenue and contingent resources and potential revenue should be regarded only as estimates that may change as further production history and additional information become available. Not only are such 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.

Authority

This report was authorized by  
Mr. Milton Rangel, CFO, PetroRio S.A.

Source of Information

Information used in the preparation of this report was obtained from PetroRio.

In the preparation of this report we have relied, without independent verification, upon information furnished by PetroRio with respect to the property interests being evaluated, 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. A field examination was not considered necessary for the purposes of this report.

## **GEOLOGY**

The Albacora Leste field is located offshore Brazil in the Campos Basin, approximately 100 kilometers east of the Cabo de São Tomé (Figure 1) peninsula, in water depths of approximately 500 to 2,000 meters. The producing reservoirs of the field is found in Miocene-, Oligocene-, and Albian-age turbiditic sandstones and in the Early Cretaceous, pre-salt Aptian-age formations of the Lagoa Feia Group.

The Albacora Leste field was discovered by Petrobras in 1986. The main reservoirs in this concession are the Miocene- and Oligocene-age turbiditic sandstones of Marlim, Albacora, and Caratinga Formations. These reservoirs can be described as sandstones channel deposits and turbiditic lobes where the deformation mechanism and the trap system can be associated with salt tectonic events and lateral lithologic changes. The average porosity was estimated to range from 18 to 29 percent and average permeability was estimated to be 1,500 millidarcys.

In addition, in the area evaluated herein, the pre-salt Macabú reservoir of the Lagoa Feia Group is present where the structures in this region are associated with the initial rifting phase of the separation of Africa from South America. The structural configuration of the Albacora Leste field is controlled by northeast/southwest-trending normal faults forming a series of half-grabens aligned with these faults.

The lowermost section, commonly referred to as basement, corresponds to the Cabiunas Formation that accumulated at the earliest stages of rifting. The formation is present regionally and is visible on seismic data from the Albacora Leste field. As rifting progressed, continental (lacustrine) sediments of the Atafona and Coqueiros Formations were deposited in the area. The Coqueiros sediments act as the hydrocarbon source rock for the pre-salt reservoirs. The Coqueiros Formation sediments fill half-grabens that resulted from the syndepositional rift faulting.

Near the top of the Lacustrine units is one of two major unconformities of the region. The equivalent of the Pre-Alagoas Unconformity in the Santos Basin separates the Coqueiros Formation and the overlying Macabú Formation. The post-rift sediments are typical of a transitional environment, from continental to shallow marine, as the incipient South Atlantic Ocean opened from south to north.

In the Arapuçá area, the Macabú Formation is made up primarily of microbial carbonates and is divided into different zones. The upper, post-rift sections of the Lagoa Feia Group are often referred to as sag sediments because of the slower, more uniform subsidence of the area related to crustal cooling that occurred as the more active rifting and sea-floor spreading areas moved further east. There is some faulting in these younger sediments, but without the fault-block rotation and with smaller displacements than are observed in faulting associated with the earlier phase of rifting. In certain nearby fields, a mound facies is sometimes found at the crest of the deeper more pronounced paleo-structure. When present, these are of very high reservoir quality.

At the end of the deposition of the Macabú carbonates, the region was the site of massively thick salt accumulation, likely associated with cyclic flooding and evaporation in a restricted marine environment. No further accumulation of microbial carbonates have been detected in this area of the Campos Basin after Lagoa Feia Group time.

## **DEFINITION of RESERVES**

Estimates of proved, probable, and possible reserves presented in this report have been prepared in accordance with the PRMS approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers. The petroleum reserves are defined as follows:

Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must satisfy four criteria: discovered, recoverable, commercial, and remaining (as of the evaluation's effective date) based on the development project(s) applied. Reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by development and production status.

*Proved Reserves* are those quantities of petroleum that, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable from a given date forward from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term "reasonable certainty" is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the estimate.

*Probable Reserves* are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability [P50] that the actual quantities recovered will equal or exceed the 2P estimate.

*Possible Reserves* are those additional reserves that analysis of geoscience and engineering data indicates are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high-estimate scenario. When probabilistic methods are used, there should be at least a 10% probability (P10) that the actual quantities recovered will equal or exceed the 3P estimate.

Once projects satisfy commercial maturity, the associated quantities are classified as Reserves. These quantities may be allocated to the following subdivisions based on the funding and operational status of wells and associated facilities within the reservoir development plan:

*Developed Reserves* are quantities expected to be recovered from existing wells and facilities. Reserves are considered developed only after the necessary equipment has been installed, or when the costs to do so are relatively minor compared to the cost of a well. Where required facilities become unavailable, it may be necessary to reclassify Developed Reserves as Undeveloped. Developed Reserves may be further sub-classified as Producing or Non-Producing.

*Developed Producing Reserves* are expected quantities to be recovered from completion intervals that are open and producing at the effective date of the estimate. Improved recovery Reserves are considered producing only after the improved recovery project is in operation.

*Developed Non-Producing Reserves* include shut-in and behind-pipe reserves. Shut-in Reserves are expected to be recovered from (1) completion intervals that are open at the time of the estimate but which have not yet started producing, (2) wells which were shut-in for market conditions or pipeline connections, or (3) wells not capable of production for mechanical reasons. Behind-pipe Reserves are expected to be recovered from zones in existing wells that will require additional completion work or future re-completion before start of production with minor cost to access these reserves. In all cases, production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.

*Undeveloped Reserves* are quantities expected to be recovered through future significant investments. Undeveloped Reserves are to be produced (1) from new wells on undrilled acreage in known accumulations, (2) from deepening existing wells to a different (but known) reservoir, (3) from infill wells that will increase recovery, or (4) where a relatively large expenditure (e.g., when compared to the cost of drilling a new well) is required to (a) recomplete an existing well or (b) install production or transportation facilities for primary or improved recovery projects.

The extent to which probable and possible reserves ultimately may be recategorized 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. Estimates of probable and possible reserves in this report have not been adjusted in consideration of these additional risks to make them comparable to estimates of proved reserves.

## **ESTIMATION of RESERVES**

Estimates of reserves were prepared by the use of appropriate geologic, petroleum engineering, and evaluation principles and techniques that are in accordance with practices generally recognized by the petroleum industry and in accordance with definitions established by the PRMS. The method or combination of methods used in the analysis of each reservoir was tempered by experience with similar reservoirs, stage of development, quality and completeness of basic data, and production history.

Based on the current stage of field development, production performance, the development plans provided by PetroRio, and analyses of areas offsetting existing wells with test or production data, reserves were categorized as proved, probable, or possible.

The undeveloped reserves estimates were based on opportunities identified in the plan of development provided by PetroRio. Developed non-producing reserves include those quantities associated with behind-pipe zones and include minor remaining capital expenditure as compared to the cost of a new well.

PetroRio has represented that its senior management is committed to the development plan provided by PetroRio and that PetroRio has the financial capability to execute the development plan, including the drilling and completion of wells and the installation of equipment and facilities.

When applicable, the volumetric method was used to estimate the original oil in place (OOIP). Structure maps were prepared to delineate each reservoir, and isopach maps were constructed 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 ultimate recovery were obtained after applying recovery factors to OOIP. These recovery factors were 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. When applicable, material balance and other engineering methods were used to estimate recovery factors based on an analysis of reservoir performance, including production rate, reservoir pressure, and reservoir fluid properties.

For depletion-type reservoirs or those whose performance disclosed a reliable decline in producing-rate trends or other diagnostic characteristics, reserves were estimated by the application of appropriate decline curves or other performance relationships. In the analyses of production-decline curves, reserves were estimated only to the limits of economic production as defined in the Definition of Reserves section of this report or the expiration of the concession, as appropriate.

In certain cases, reserves were estimated by incorporating elements of analogy with similar wells or reservoirs for which more complete data were available.

Data provided by PetroRio from wells drilled through December 31, 2021, and made available for this evaluation were used to prepare the reserves estimates herein. These reserves estimates were based on consideration of monthly production data available only through September 2021. Estimated cumulative production, as of December 31, 2021, was deducted from the estimated gross ultimate recovery to estimate gross reserves. This required that production be estimated for up to 3 months.

Oil reserves estimated herein are to be recovered by normal field separation and are expressed in thousands of barrels ( $10^3$ bbl). In these estimates, 1 barrel equals 42 United States gallons.

Gas quantities estimated herein are expressed as marketable gas and sales gas. Marketable gas is defined as the total gas produced from the reservoir after reduction for shrinkage resulting from field separation; processing, including removal of the nonhydrocarbon gas to meet pipeline specifications; and flare and other losses but not from fuel usage. Sales gas is defined as the total gas to be produced from the reservoirs, measured at the point of delivery, after reduction for fuel usage, flare, and shrinkage resulting from field separation and processing. Gas reserves estimated herein are reported as marketable gas and sales gas. Gas quantities are expressed at a temperature base of 20 degrees Celsius ( $^{\circ}$ C) and at a pressure base of 1 atmospheres (atm). Gas quantities included in this report are expressed in millions of cubic feet ( $10^6$ ft<sup>3</sup>).

Gas quantities are identified by the type of reservoir from which the gas will be produced. Nonassociated gas is gas at initial reservoir conditions with no oil present in the reservoir. Associated gas is both gas-cap gas and solution gas. Gas-cap gas is gas at initial reservoir conditions and is

in communication with an underlying oil zone. Solution gas is gas dissolved in oil at initial reservoir conditions. Gas quantities estimated herein include only associated gas in the form of solution gas.

PetroRio has represented that certain reservoirs that straddle different license areas are under the terms of a unitization agreement for joint development. Based on PetroRio's representation, certain reservoirs in the Albacora Leste field straddle the neighboring Albacora field (to the west) and Roncador field (to the north). The unitization factors provided by PetroRio were considered for the reserves estimated herein.

#### Albacora Leste Field

The Albacora Leste field was discovered by Petrobras in March 1986 with the drilling of the 1-RJS-342A exploratory well in the Albacora Sandstone reservoir. First oil was achieved in June 1998 using an early connection of the RJS-477 well, drilled in 1993, to the P-25 production platform in the neighboring Albacora field. The well produced for more than 4 years until September 2002, when it was shut in. The field began continual operations in 2006 through the operation of the P-50 FPSO. In February 2007, the field reached peak oil production at a rate of approximately 172,000 barrels of oil per day. In 2014, oil was discovered in the Macabú Carbonate pre-salt reservoir through the drilling of the ABL-85-RJS exploratory well. A total of 17 production and 15 water injection wells are currently tied-in to the P-50 FPSO.

As represented by PetroRio, the concession expiration date for the Albacora Leste field is August 6, 2025. However, PetroRio has advised that if it does acquire the working interest in the Albacora Leste field evaluated herein, it has reasonable certainty that the extension of the concession will be obtained. In Brazil, a 27-year concession extension is granted as determined by the Agência Nacional do Petróleo, Gás Natural e Biocombustíveis (ANP) if certain conditions are met by the company operating the concession. PetroRio has represented that it will meet the conditions required by the ANP to obtain the concession extension. Based on PetroRio's representations, reserves presented herein for the Albacora Leste field were estimated to the economic limit as defined in the Definition of Reserves section of this report and with a 27-year license extension (August 6, 2052).

PetroRio provided a plan of development for the Albacora Leste field. This development plan included a total of six proved undeveloped production wells and one proved undeveloped injection well in the

Albacora-140 reservoir, five proved undeveloped production wells and three proved undeveloped injection wells in the Albacora-210 reservoir, one proved undeveloped production well in Caratinga reservoir, and two proved undeveloped production wells and one proved undeveloped injection well in the Macabú pre-salt reservoir. In addition, three proved undeveloped completion and tie-in activities were considered for the existing ABL-68 (AB-210 reservoir), ABL-60 (AB-140), and ABL-85 (Macabú) wells. Proved undeveloped reserves were also estimated associated with a project to improve the efficiency of the P-50 FPSO. Proved developed non-producing reserves were estimated for the tie-in of the AB-134 well to the manifold connection at the P-50 FPSO. Reserves for the field evaluated herein were based on PetroRio's representation of planned future activity.

Probable and possible reserves were also estimated for the Albacora Leste field for wells, as applicable, associated with incremental recovery above quantities estimated for proved and probable reserves, respectively.

Table 2 presents a summary of the gross and net reserves for the Albacora Leste field evaluated herein. Table 3 presents projections of the gross production forecast of the proved developed producing, proved developed, total proved, proved-plus-probable and proved-plus-probable-plus-possible reserves for the Albacora Leste field evaluated herein.

## **VALUATION of RESERVES**

Revenue values in this report were estimated using forecast prices, expenses, and costs provided by PetroRio.

In this report, values for proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves were based on projections of estimated future production and revenue prepared for these properties with no risk adjustment applied to the probable or possible reserves. Probable and possible reserves involve substantially higher risk than proved reserves. Revenue values associated with proved-plus-probable and proved-plus-probable-plus-possible reserves have not been adjusted to account for such risks; this adjustment would be necessary in order to make values associated with probable and possible reserves comparable to values associated with proved reserves.

Future net revenue was estimated in accordance with the government of Brazil's Petroleum Law n° 9,478, the Petroleum Law of 1997. The fiscal terms outlined in the Petroleum Law of 1997 and assessable to PetroRio as well as other economic assumptions used in this evaluation are presented as follows:

### *Brazilian Fiscal Terms*

The Petroleum Law of 1997 affords the Brazilian government three elements of government take: 1) petroleum levies consisting of royalties, a special participation fee, and surface rentals; 2) direct taxes, which are levied through the financial transaction tax, the corporate income tax, and two social contribution taxes; and 3) indirect taxes, which are levies on equipment and services used by companies engaged in exploration and production activities. Indirect tax levies for which PetroRio may be responsible were not included in the estimates of operating expenses and capital costs. Certain indirect levies are eligible for reimbursement from sales of refined products. The reimbursement of the indirect levies from refined product sales was not accounted for in this evaluation.

### *Royalties*

The federal royalty rate in Brazil varies by field between 5 and 10 percent. PetroRio provided federal royalty rates of 10 percent for the Albacora Leste field. PetroRio has represented that these royalties are paid in cash.

Oil royalties are assessed on a valuation as determined by the Agência Nacional do Petróleo, Gás Natural e Biocombustíveis (ANP). Gas royalties are levied on a valuation, as determined by the ANP, of the total gas production less gas injected.

### *Special Participation Fee*

The SPF is a tax assessed at the field level on a sliding-scale basis that varies depending on the location of the field (onshore or offshore), water depth, level of production, and number of years on production. The tax basis for the SPF is similar to the tax basis for corporation income tax (CIT) with some exceptions. The depreciation methods are different for the SPF and the CIT. An annual provision for abandonment costs is also deductible for the SPF. At the request of PetroRio, the potential up-front payment for the acquisition of the assets was considered in the depreciation calculation. In years in which the SPF is paid, an additional 1-percent research and development fee is assessed.

### *Surface Rental Fees*

Rental fees are payable to the ANP and vary by field, depending on stage of activity (exploration or development), geological characteristics, and the location of the sedimentary basin. The surface rental fees are included herein in the estimates of field operating expenses.

### *Corporate Income Tax*

At the request of PetroRio, Brazilian income taxes were not considered in this evaluation.

### *Social Contribution Taxes*

Two social contribution taxes are levied on the market value of oil and gas sales. The Contribution for the Worker's Social Integration Program (PIS) is assessed at a rate of 1.65 percent and the Contribution for Social Security Funding (COFINS) is levied at a 7.6-percent rate. At the Request of PetroRio, these taxes were not considered in the estimates of future net revenue included herein.

### *Product Prices*

The oil price provided by PetroRio was U.S.\$60.00 per barrel for the Albacora Leste field. This price was held constant for the producing life of the field and was not escalated for inflation.

For the Albacora Leste field, PetroRio provided the following sales gas price forecasts, expressed in United States dollars per thousand cubic feet (U.S.\$/10<sup>3</sup>ft<sup>3</sup>):

<u>Year</u>	<u>Sales Gas (U.S.\$/10<sup>3</sup>ft<sup>3</sup>)</u>
2022	1.89
2023	1.82
2024	1.74
2025	1.67
2026	1.64
2027 Forward	1.62

### *Operating Expenses, Capital Costs, and Abandonment Costs*

Operating expenses for the field evaluated herein were provided by PetroRio and were represented to include all costs associated with the operation and maintenance of the equipment and personnel and included surface rental fees. PetroRio has represented that the provided operating expenses are lower than the historical operating expenses of the Albacora Leste field and has identified several areas of cost savings in the existing Petrobras budget, including logistics and general and administrative expenses. These savings are based on PetroRio's experience as operator of the nearby Polvo, Frade,

and Tubarao Martelo fields. The operating expenses estimated herein were based on PetroRio's representation that it will be able to phase in the forecast cost reductions and have them fully implemented by 2023. Abandonment costs, which are those costs associated with the removal of equipment, plugging of wells, and reclamation and restoration associated with the abandonment, were based on information provided by PetroRio. As represented by PetroRio, the abandonment costs for the Albacora Leste field FPSO were included in the year following cessation of production of each unit. Estimates of operating expenses, capital costs, and abandonment costs were considered, as appropriate, in determining the economic viability of the developed non-producing and undeveloped reserves estimated herein.

#### *Exchange Rate*

Prices, expenses, costs, and revenue included herein were estimated in U.S.\$ . Certain operating costs paid in Brazilian reais were converted to U.S.\$ by PetroRio.

Projections of future net revenue for the proved developed producing, proved developed, total proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves are presented in Tables 4 through 8.

## **DEFINITION of CONTINGENT RESOURCES**

Estimates of contingent resources presented in this report have been prepared in accordance with the PRMS approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers. Because of the lack of commerciality or sufficient development drilling, the contingent resources estimated herein cannot be classified as reserves. The petroleum contingent resources are classified as follows:

*Contingent Resources* are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects, but which are not currently considered to be commercially recoverable owing to one or more contingencies.

Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by the economic status.

*Economically Viable Contingent Resources* are those quantities associated with technically feasible projects where cash flows are positive under reasonably forecast conditions but are not Reserves because it does not meet the other commercial criteria.

*Economically Not Viable Contingent Resources* are those quantities for which development projects are not expected to yield positive cash flows under reasonable forecast conditions. May also be subject to additional unsatisfied contingencies.

Where evaluations are incomplete and it is premature to clearly define the associated cash flows, it is acceptable to note that the project economic status is “undetermined.”

The estimation of petroleum resources is subject to both technical and commercial uncertainties and, in general, may be quoted as a range. The range of uncertainty reflects a reasonable range of estimated

potentially recoverable quantities. In all cases, the range of uncertainty is dependent on the amount and quality of both technical and commercial data that are available and may change as more data become available.

*1C (Low), 2C (Best), and 3C (High) Estimates* – Estimates of contingent resources in this report are expressed using the terms 1C (low) estimate, 2C (best) estimate, and 3C (high) estimate to reflect the range of uncertainty.

## **ESTIMATION of CONTINGENT RESOURCES**

Estimates of contingent resources were prepared by the use of appropriate geologic, petroleum engineering, and evaluation principles and techniques that are in accordance with practices generally recognized by the petroleum industry and in accordance with definitions established by the PRMS. The method or combination of methods used in the analysis of each reservoir was tempered by experience with similar reservoirs, stage of development, quality and completeness of basic data, and production history.

Based on the current stage of field development, production performance, the development plans provided by PetroRio, and analyses of areas offsetting existing wells with test or production data, contingent resources were categorized as 1C, 2C, or 3C.

The volumetric method was used to estimate the OOIP. Structure maps were prepared to delineate each reservoir, and isopach maps were constructed 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 ultimate recovery were obtained after applying recovery factors to OOIP. These recovery factors were 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. When applicable, numerical simulation and other engineering methods were used to estimate recovery factors based on an analysis of reservoir performance, including production rate, reservoir pressure, and reservoir fluid properties.

Data provided by PetroRio from wells drilled through December 31, 2021, and made available for this evaluation were used to prepare the contingent resources estimates herein. The development status represents the status applicable on December 31, 2021.

Oil contingent resources estimated herein are to be recovered by normal field separation and are expressed in thousands of barrels ( $10^3$ bbl). In these estimates, 1 barrel equals 42 United States gallons.

Gas quantities associated with contingent resources estimated herein are expressed as marketable gas and sales gas contingent

resources. Marketable gas is defined as the total gas produced from the reservoir after reduction for shrinkage resulting from field separation; processing, including removal of the nonhydrocarbon gas to meet pipeline specifications; and flare and other losses but not from fuel usage. Sales gas is defined as the total gas to be produced from the reservoirs, measured at the point of delivery, after reduction for fuel usage, flare, and shrinkage resulting from field separation and processing. Gas quantities are expressed at a temperature base of 20 °C and at a pressure base of 1 atm. Gas quantities included in this report are expressed in thousands of cubic feet ( $10^3\text{ft}^3$ ).

Gas quantities are identified by the type of reservoir from which the gas will be produced. Nonassociated gas is gas at initial reservoir conditions with no oil present in the reservoir. Associated gas is both gas-cap gas and solution gas. Gas-cap gas is gas at initial reservoir conditions and is in communication with an underlying oil zone. Solution gas is gas dissolved in oil at initial reservoir conditions. Gas quantities associated with contingent resources estimated herein are associated gas.

PetroRio has represented that certain reservoirs that straddle different license areas are held under the terms of a unitization agreement for joint development. Based on PetroRio's representation, certain reservoirs in the Albacora Leste field straddle the neighboring Albacora field (to the west) and Roncador field (to the north). The unitization factors provided by PetroRio were considered for the contingent resources estimated herein.

No contingent resources projects were evaluated for the Albacora Leste field.

Table 9 presents a summary of the gross and net reserves contingent resources for the Albacora Leste field evaluated herein. Table 10 presents projections of the gross production forecast of the 1C, 2C, and 3C contingent resources for the Albacora Leste field evaluated herein.

**VALUATION of CONTINGENT RESOURCES**

Potential revenue values in this report were estimated using forecast prices, expenses, and costs provided by PetroRio.

The estimated potential present worth of the contingent resources evaluated in this report is to be used for comparison and ranking of these contingent resources against other contingent resources only. The estimated potential present worth for the contingent resources cannot be compared directly to, equated with, or aggregated with the present worth estimates that could be realized from reserves, nor are these potential present worth estimates an assessment of the fair market value of the properties evaluated herein.

Based on information provided by PetroRio, the economic assumptions described in the Valuation of Reserves section of this report were used to estimate the potential future net revenue of contingent resources.

At the request of PetroRio, projections of the estimated potential future net revenue from the net reserves plus net contingent resources are presented for the Albacora Leste field in Tables 11 through 13.

## SUMMARY and CONCLUSIONS

PetroRio has represented that it is in the process of acquiring certain interests in the Albacora Leste field in Brazil evaluated herein. The estimated gross and net proved, probable, and possible reserves, as of January 1, 2022, of the properties evaluated herein are summarized as follows, expressed in thousands of barrels ( $10^3$ bbl) and millions of cubic feet ( $10^6$ ft<sup>3</sup>):

	Gross Reserves		
	Oil and Condensate ( $10^3$ bbl)	Marketable Gas ( $10^6$ ft <sup>3</sup> )	Sales Gas ( $10^6$ ft <sup>3</sup> )
Proved			
Developed Producing	78,776	54,535	4,916
Developed Non-Producing	6,603	3,708	2,426
<b>Total Proved Developed</b>	<b>85,379</b>	<b>58,243</b>	<b>7,342</b>
Undeveloped	193,388	111,418	58,017
<b>Total Proved</b>	<b>278,767</b>	<b>169,661</b>	<b>65,359</b>
Probable	124,347	71,285	46,681
<b>Proved plus Probable</b>	<b>403,114</b>	<b>240,946</b>	<b>112,040</b>
Possible	116,297	66,608	46,455
<b>Proved plus Probable plus Possible</b>	<b>519,411</b>	<b>307,554</b>	<b>158,495</b>

Notes:

1. Probable and possible reserves have not been risk adjusted to make them comparable to proved reserves.
2. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest will be 90 percent.

	Net Reserves		
	Oil and Condensate ( $10^3$ bbl)	Marketable Gas ( $10^6$ ft <sup>3</sup> )	Sales Gas ( $10^6$ ft <sup>3</sup> )
Proved			
Developed Producing	64,042	44,446	3,212
Developed Non-Producing	5,428	3,049	1,924
<b>Total Proved Developed</b>	<b>69,470</b>	<b>47,495</b>	<b>5,136</b>
Undeveloped	174,052	100,274	52,213
<b>Total Proved</b>	<b>243,522</b>	<b>147,769</b>	<b>57,349</b>
Probable	111,314	63,791	41,681
<b>Proved plus Probable</b>	<b>354,836</b>	<b>211,560</b>	<b>99,030</b>
Possible	104,038	59,570	41,475
<b>Proved plus Probable plus Possible</b>	<b>458,874</b>	<b>271,130</b>	<b>140,505</b>

Notes:

1. Probable and possible reserves have not been risk adjusted to make them comparable to proved reserves.
2. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest will be 90 percent.

DEGOLYER AND MACNAUGHTON

The estimated future revenue attributable to the evaluated interest in the proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves, as of January 1, 2022, of the properties evaluated under the economic assumptions described herein is summarized as follows, expressed in thousands of United States dollars (10<sup>3</sup>U.S.\$):

	<b>Proved Developed Producing (10<sup>3</sup>U.S.\$)</b>	<b>Proved Developed (10<sup>3</sup>U.S.\$)</b>	<b>Total Proved (10<sup>3</sup>U.S.\$)</b>	<b>Proved plus Probable (10<sup>3</sup>U.S.\$)</b>	<b>Proved plus Probable plus Possible (10<sup>3</sup>U.S.\$)</b>
Future Gross Revenue	3,848,302	4,177,359	14,705,608	21,452,551	27,762,486
Royalties Paid in Cash	344,471	373,570	1,306,197	1,902,625	2,460,055
Operating Expenses	1,010,158	1,008,827	2,238,995	2,213,517	2,274,594
Capital Costs	372,567	379,316	1,996,234	1,996,234	1,996,234
Abandonment Costs	540,257	540,257	838,148	838,148	838,148
SPF	0	9,019	354,403	884,914	1,620,593
Future Net Revenue	1,580,849	1,866,370	7,971,631	13,617,113	18,572,862
Present Worth at 10 Percent	1,206,617	1,403,177	4,093,414	6,107,083	7,890,779
Closing Date Present Worth at 10 Percent	1,296,823	1,508,588	4,407,454	6,578,839	8,498,512

## Notes:

1. Values for probable and possible reserves have not been risk adjusted to make them comparable to values for proved reserves.
2. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest will be 90 percent.
3. At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

DEGOLYER AND MACNAUGHTON

The estimated gross and net 1C, 2C, and 3C contingent resources, as of January 1, 2022, properties evaluated herein are summarized as follows, expressed in thousands of barrels ( $10^3\text{bbl}$ ) and millions of cubic feet ( $10^6\text{ft}^3$ ):

	Gross Contingent Resources			Net Contingent Resources		
	Oil ( $10^3\text{bbl}$ )	Marketable Gas ( $10^6\text{ft}^3$ )	Sales Gas ( $10^6\text{ft}^3$ )	Oil ( $10^3\text{bbl}$ )	Marketable Gas ( $10^6\text{ft}^3$ )	Sales Gas ( $10^6\text{ft}^3$ )
1C	0	0	0	0	0	0
2C	0	0	0	0	0	0
3C	0	0	0	0	0	0

## Notes:

1. Application of any risk factor to contingent resources quantities does not equate contingent resources with reserves.
2. There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated herein.
3. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest will be 90 percent.

DEGOLYER AND MACNAUGHTON

The estimated potential future net revenue and potential present worth attributable to the evaluated interest in the Economically Viable gross contingent resources, as of January 1, 2022, of the properties evaluated under the economic assumptions described herein are summarized as follows, expressed in thousands of United States dollars (10<sup>3</sup>U.S.\$):

	<b>Potential Future Net Revenue (10<sup>3</sup>U.S.\$)</b>	<b>Potential Present Worth at 10 percent (10<sup>3</sup>U.S.\$)</b>	<b>Closing Date Potential Present Worth at 10 percent (10<sup>3</sup>U.S.\$)</b>
1C	0	0	0
2C	0	0	0
3C	0	0	0

## Notes:

1. Application of any risk factor to contingent resources quantities does not equate contingent resources with reserves.
2. There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated herein.
3. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the the evaluated working interest is 90 percent.
4. At the request of Petrorio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

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 reserves, we are not aware of any such governmental actions which would restrict the recovery of the January 1, 2022, estimated reserves.

DEGOLYER AND MACNAUGHTON

DeGolyer and MacNaughton is an independent petroleum engineering consulting firm that has been providing petroleum consulting services throughout the world since 1936. Our fees were not contingent on the results of our evaluation. This report has been prepared at the request of PetroRio. DeGolyer and MacNaughton has used all assumptions, procedures, data, and methods that it considers necessary to prepare this report.

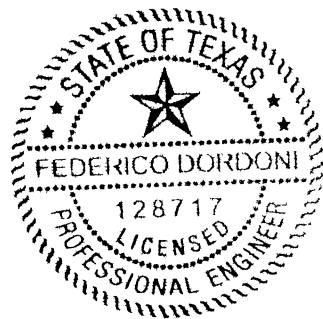
Submitted,

*DeGolyer and MacNaughton*

DeGOLYER and MacNAUGHTON

Texas Registered Engineering Firm F-716

SIGNED: April 1, 2022

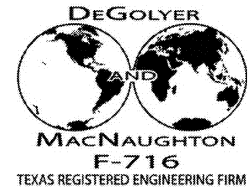


*Federico Dordoni*

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Federico Dordoni, P.E.  
Senior Vice President  
DeGolyer and MacNaughton

**TABLE 1**  
**LIST OF FIELDS EVALUATED**  
as of  
**JANUARY 1, 2022**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



<b>Basin Field</b>	<b>Evaluated Interest (%)</b>	<b>Concession Expiration Date</b>	<b>Extension of the Concession Expiration Date</b>
Campos Albacora Leste	90.00	August 6, 2025	August 6, 2052

1. PetroRio holds no interests in the evaluated property as of the date of this report and has represented that it plans to acquire the working interest as represented in this table.
2. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interests is 90 percent.
3. Reserves were estimated only to the limits of economic production as defined in the Definition of Reserves section of this report, or at the end of the concession extension date as advised by PetroRio, whichever comes first.
4. Projected forecasts and estimated economic limits occur beyond the expiration of the concession agreement. PetroRio has represented that it will meet the conditions required by the National Petroleum Agency (ANP) to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves evaluated herein consider the potential concession extension.

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 2**  
**SUMMARY of GROSS and NET RESERVES**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



<b>Reserves Category</b>	<b>Gross Reserves</b>		
	<b>Oil (10<sup>3</sup>bbl)</b>	<b>Marketable Gas (10<sup>6</sup>ft<sup>3</sup>)</b>	<b>Sales Gas (10<sup>6</sup>ft<sup>3</sup>)</b>
Proved Developed Producing	78,776	54,535	4,916
Proved Developed Non-Producing	6,603	3,708	2,426
<b>Proved Developed</b>	<b>85,379</b>	<b>58,243</b>	<b>7,342</b>
Proved Undeveloped	193,388	111,418	58,017
<b>Total Proved</b>	<b>278,767</b>	<b>169,661</b>	<b>65,359</b>
Probable	124,347	71,285	46,681
<b>Proved plus Probable</b>	<b>403,114</b>	<b>240,946</b>	<b>112,040</b>
Possible	116,297	66,608	46,455
<b>Proved plus Probable plus Possible</b>	<b>519,411</b>	<b>307,554</b>	<b>158,495</b>
<b>Reserves Category</b>	<b>Net Reserves</b>		
	<b>Oil (10<sup>3</sup>bbl)</b>	<b>Marketable Gas (10<sup>6</sup>ft<sup>3</sup>)</b>	<b>Sales Gas (10<sup>6</sup>ft<sup>3</sup>)</b>
Proved Developed Producing	64,042	44,446	3,212
Proved Developed Non-Producing	5,428	3,049	1,924
<b>Proved Developed</b>	<b>69,470</b>	<b>47,495</b>	<b>5,136</b>
Proved Undeveloped	174,052	100,274	52,213
<b>Total Proved</b>	<b>243,522</b>	<b>147,769</b>	<b>57,349</b>
Probable	111,314	63,791	41,681
<b>Proved plus Probable</b>	<b>354,836</b>	<b>211,560</b>	<b>99,030</b>
Possible	104,038	59,570	41,475
<b>Proved plus Probable plus Possible</b>	<b>458,874</b>	<b>271,130</b>	<b>140,505</b>

Notes:

1. Probable and possible reserves have not been risk adjusted to make them comparable to proved reserves.
2. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 3**  
**PROJECTION of GROSS RESERVES**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Proved Developed Producing			Proved Developed			Total Proved			Proved plus Probable			Proved plus Probable plus Possible		
	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )
2022	10,156	6,866	1,796	10,919	7,294	2,182	10,919	7,294	2,182	11,806	7,843	2,676	12,735	8,400	3,177
2023	9,729	6,750	1,692	10,920	7,419	2,294	10,920	7,419	2,294	12,229	8,242	3,035	13,623	9,069	3,779
2024	8,646	5,997	1,015	9,938	6,723	1,668	16,204	10,347	4,930	20,422	12,945	7,268	23,457	14,740	8,883
2025	7,678	5,328	413	8,723	5,915	941	19,852	12,436	6,810	25,528	15,852	9,884	29,803	18,323	12,108
2026	6,767	4,705	0	7,570	5,156	257	21,546	13,305	7,592	27,964	17,076	10,986	33,233	20,030	13,644
2027	6,048	4,202	0	6,555	4,487	0	22,810	14,001	8,219	29,741	18,049	11,862	35,506	21,263	14,754
2028	5,412	3,758	0	5,801	3,976	0	24,270	14,224	8,419	33,636	19,296	12,984	42,803	24,019	17,235
2029	4,848	3,365	0	5,160	3,540	0	23,437	13,643	7,896	33,523	19,052	12,765	44,022	24,564	17,725
2030	4,307	2,989	0	4,540	3,120	0	20,218	11,890	6,318	29,299	16,811	10,748	38,685	21,868	15,298
2031	3,790	2,633	0	3,858	2,671	0	16,788	9,927	4,552	24,831	14,282	8,471	32,585	18,485	12,254
2032	3,343	2,330	0	3,343	2,330	0	13,887	8,248	3,041	21,034	12,156	6,558	27,340	15,605	9,662
2033	3,018	2,102	0	3,018	2,102	0	11,772	7,025	1,940	18,045	10,470	5,041	23,433	13,454	7,726
2034	2,669	1,859	0	2,669	1,859	0	10,062	6,028	1,042	15,605	9,092	3,800	20,296	11,731	6,175
2035	2,365	1,651	0	2,365	1,651	0	8,321	5,007	124	13,247	7,752	2,594	17,704	10,305	4,892
2036	0	0	0	0	0	0	6,920	4,179	0	11,541	6,789	1,727	15,536	9,108	3,815
2037	0	0	0	0	0	0	5,955	3,601	0	10,166	6,002	1,019	13,407	7,914	2,740
2038	0	0	0	0	0	0	4,895	2,946	0	9,253	5,494	562	12,050	7,160	2,062
2039	0	0	0	0	0	0	3,906	2,351	0	8,267	4,936	60	10,750	6,432	1,406
2040	0	0	0	0	0	0	3,114	1,915	0	7,052	4,219	0	9,705	5,852	884
2041	0	0	0	0	0	0	2,755	1,721	0	5,881	3,553	0	8,519	5,177	276
2042	0	0	0	0	0	0	2,550	1,597	0	4,758	2,899	0	7,515	4,596	0
2043	0	0	0	0	0	0	2,354	1,477	0	4,281	2,626	0	6,429	3,954	0
2044	0	0	0	0	0	0	2,246	1,393	0	3,904	2,398	0	5,904	3,648	0
2045	0	0	0	0	0	0	2,134	1,292	0	3,805	2,342	0	5,510	3,433	0
2046	0	0	0	0	0	0	2,034	1,194	0	3,585	2,245	0	5,420	3,381	0
2047	0	0	0	0	0	0	1,942	1,135	0	3,261	2,070	0	4,884	3,099	0
2048	0	0	0	0	0	0	1,860	1,087	0	2,893	1,796	0	4,478	2,874	0
2049	0	0	0	0	0	0	1,774	1,037	0	2,688	1,661	0	4,234	2,723	0
2050	0	0	0	0	0	0	1,697	992	0	2,492	1,535	0	3,957	2,551	0
2051	0	0	0	0	0	0	1,625	950	0	2,377	1,463	0	3,646	2,347	0
2052	0	0	0	0	0	0	0	0	0	0	0	0	2,242	1,449	0
2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>78,776</b>	<b>54,535</b>	<b>4,916</b>	<b>85,379</b>	<b>58,243</b>	<b>7,342</b>	<b>278,767</b>	<b>169,661</b>	<b>65,359</b>	<b>403,114</b>	<b>240,946</b>	<b>112,040</b>	<b>519,411</b>	<b>307,554</b>	<b>158,495</b>

Notes:

1. Probable and possible reserves have not been risk adjusted to make them comparable to proved reserves.
2. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 4**  
**PROJECTION of PROVED DEVELOPED PRODUCING RESERVES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	10,156	1,796	2,285	404	60.00	1.89	137,865	12,314	18,587	17,941	0	0	89,023	84,383	87,560
2023	9,729	1,692	8,756	1,523	60.00	1.82	528,128	47,176	74,347	33,957	11,700	0	360,948	309,704	333,721
2024	8,646	1,015	7,781	914	60.00	1.74	468,452	41,880	74,347	12,870	11,700	0	327,655	254,488	274,224
2025	7,678	413	6,910	371	60.00	1.67	415,226	37,166	74,347	9,180	23,400	0	271,133	190,628	205,411
2026	6,767	0	6,091	0	60.00	-	365,436	32,745	74,565	67,500	0	0	190,626	121,321	130,729
2027	6,048	0	5,443	0	60.00	-	326,587	29,258	75,223	72,900	11,700	0	137,506	79,218	85,361
2028	5,412	0	4,870	0	60.00	-	292,228	26,179	75,804	67,500	11,700	0	111,045	57,910	62,401
2029	4,848	0	4,364	0	60.00	-	261,817	23,455	76,321	5,400	0	0	156,641	73,945	79,680
2030	4,307	0	3,877	0	60.00	-	232,594	20,837	76,815	0	0	0	134,942	57,664	62,136
2031	3,790	0	3,411	0	60.00	-	204,641	18,333	77,282	74,519	0	0	34,507	13,348	14,383
2032	3,343	0	3,008	0	60.00	-	180,507	16,172	77,678	0	0	0	86,657	30,343	32,696
2033	3,018	0	2,716	0	60.00	-	162,988	14,602	77,977	5,400	0	0	65,009	22,605	22,203
2034	2,669	0	2,402	0	60.00	-	144,144	12,914	78,296	0	0	0	52,934	15,188	16,366
2035	2,365	0	2,128	0	60.00	-	127,689	11,440	78,569	5,400	0	0	32,280	8,384	9,034
2036	0	0	0	0	-	-	0	0	0	0	470,057	0	-470,057	-110,512	-119,082
2037	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2038	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2039	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2040	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2041	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2042	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2043	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2044	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2045	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2046	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2047	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2048	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2049	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>78,776</b>	<b>4,916</b>	<b>64,042</b>	<b>3,212</b>			<b>3,848,302</b>	<b>344,471</b>	<b>1,010,158</b>	<b>372,567</b>	<b>540,257</b>	<b>0</b>	<b>1,580,849</b>	<b>1,206,617</b>	<b>1,296,823</b>

Notes:

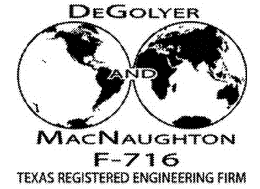
1. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.

2. At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)
5 Percent	1,395,276	1,446,803
15 Percent	1,038,359	1,156,116
20 Percent	895,773	1,032,660

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 5**  
**PROJECTION of PROVED DEVELOPED RESERVES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	10,919	2,182	2,457	491	60.00	1.89	148,336	13,237	18,587	24,690	0	1,880	89,942	85,255	88,465
2023	10,920	2,294	9,828	2,065	60.00	1.82	593,447	52,929	74,347	33,957	11,700	7,139	413,375	354,687	382,192
2024	9,938	1,668	8,944	1,501	60.00	1.74	539,264	48,117	74,347	12,870	11,700	0	392,230	304,644	328,269
2025	8,723	941	7,851	847	60.00	1.67	472,466	42,207	74,347	9,180	23,400	0	323,332	227,327	244,956
2026	7,570	257	6,813	232	60.00	1.64	409,158	36,615	74,347	67,500	0	0	230,696	146,823	158,209
2027	6,555	0	5,900	0	60.00	-	353,996	31,705	74,849	72,900	11,700	0	162,842	93,815	101,090
2028	5,801	0	5,221	0	60.00	-	313,244	28,055	75,517	67,500	11,700	0	130,472	68,041	73,317
2029	5,160	0	4,644	0	60.00	-	278,613	24,954	76,092	5,400	0	0	172,167	81,275	87,577
2030	4,540	0	4,086	0	60.00	-	245,184	21,961	76,643	0	0	0	146,580	62,637	67,494
2031	3,858	0	3,472	0	60.00	-	208,323	18,662	77,231	74,519	0	0	37,911	14,665	15,802
2032	3,343	0	3,008	0	60.00	-	180,507	16,172	77,678	0	0	0	86,657	30,343	32,696
2033	3,018	0	2,716	0	60.00	-	162,988	14,602	77,977	5,400	0	0	65,009	22,203	22,203
2034	2,669	0	2,402	0	60.00	-	144,144	12,914	78,296	0	0	0	52,934	15,188	16,366
2035	2,365	0	2,128	0	60.00	-	127,689	11,440	78,569	5,400	0	0	32,280	8,384	9,034
2036	0	0	0	0	-	-	0	0	0	0	470,057	0	-470,057	-110,512	-119,082
2037	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2038	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2039	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2040	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2041	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2042	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2043	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2044	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2045	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2046	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2047	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2048	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2049	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>85,379</b>	<b>7,342</b>	<b>69,470</b>	<b>5,136</b>			<b>4,177,359</b>	<b>373,570</b>	<b>1,008,827</b>	<b>379,316</b>	<b>540,257</b>	<b>9,019</b>	<b>1,866,370</b>	<b>1,403,177</b>	<b>1,508,588</b>

Notes:

- PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.
- At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)
5 Percent	1,630,916	1,691,411
15 Percent	1,203,920	1,341,209
20 Percent	1,036,459	1,195,842

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 6**  
**PROJECTION of TOTAL PROVED RESERVES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	10,919	2,182	2,457	491	60.00	1.89	148,336	13,237	18,587	24,690	0	1,890	89,932	85,245	88,455
2023	10,920	2,294	9,828	2,065	60.00	1.82	593,447	52,929	74,347	47,907	11,700	7,489	399,075	342,417	368,971
2024	16,204	4,930	14,583	4,437	60.00	1.74	882,690	78,366	74,347	301,752	11,700	27,782	388,743	301,935	325,350
2025	19,852	6,810	17,867	6,129	60.00	1.67	1,082,266	95,915	74,347	329,067	23,400	40,350	519,187	365,029	393,336
2026	21,546	7,592	19,391	6,832	60.00	1.64	1,174,650	104,032	74,347	214,079	0	47,196	734,996	467,777	504,052
2027	22,810	8,219	20,529	7,397	60.00	1.62	1,243,699	110,105	74,347	284,462	11,700	52,192	710,893	409,551	441,311
2028	24,270	8,419	21,843	7,577	60.00	1.62	1,322,828	117,063	74,347	320,164	11,700	56,238	743,316	387,639	417,700
2029	23,437	7,896	21,094	7,106	60.00	1.62	1,277,128	113,038	74,347	123,969	0	48,521	917,253	433,006	466,586
2030	20,218	6,318	18,196	5,686	60.00	1.62	1,100,956	97,524	74,347	0	0	31,713	897,372	383,467	413,204
2031	16,788	4,552	15,110	4,097	60.00	1.62	913,210	80,990	74,347	127,619	0	20,599	609,655	235,825	254,113
2032	13,887	3,041	12,498	2,737	60.00	1.62	754,335	66,999	74,347	53,325	0	12,719	546,945	191,514	206,366
2033	11,772	1,940	10,595	1,746	60.00	1.62	638,503	56,797	74,347	58,500	0	7,714	441,145	139,826	150,669
2034	10,062	1,042	9,055	938	60.00	1.62	544,846	48,549	74,347	0	0	0	421,950	121,065	130,453
2035	8,321	124	7,489	111	60.00	1.62	449,532	40,155	74,347	5,400	0	0	329,630	85,612	92,251
2036	6,920	0	6,228	0	60.00	-	373,674	33,394	75,254	67,500	0	0	197,526	46,439	50,040
2037	5,955	0	5,359	0	60.00	-	321,566	28,738	76,012	5,400	0	0	211,416	44,993	48,483
2038	4,895	0	4,405	0	60.00	-	264,305	23,619	76,871	0	0	0	163,815	31,558	34,006
2039	3,906	0	3,515	0	60.00	-	210,911	18,848	77,651	5,400	0	0	109,012	19,010	20,484
2040	3,114	0	2,803	0	60.00	-	168,158	15,032	78,223	0	0	0	74,903	11,824	12,741
2041	2,755	0	2,480	0	60.00	-	148,792	13,305	78,477	5,400	0	0	51,610	7,375	7,947
2042	2,550	0	2,295	0	60.00	-	137,683	12,312	78,640	0	0	0	46,731	6,045	6,513
2043	2,354	0	2,119	0	60.00	-	127,136	11,369	78,798	5,400	0	0	31,569	3,696	3,983
2044	2,246	0	2,022	0	60.00	-	121,307	10,846	78,907	0	0	0	31,554	3,344	3,604
2045	2,134	0	1,921	0	60.00	-	115,240	10,299	79,040	5,400	0	0	20,501	1,967	2,119
2046	2,034	0	1,831	0	60.00	-	109,861	9,813	79,169	0	0	0	20,879	1,813	1,954
2047	1,942	0	1,748	0	60.00	-	104,881	9,368	79,246	5,400	0	0	10,867	854	921
2048	1,860	0	1,674	0	60.00	-	100,427	8,970	79,310	0	0	0	12,147	864	931
2049	1,774	0	1,597	0	60.00	-	95,822	8,559	79,375	5,400	0	0	2,488	160	173
2050	1,697	0	1,527	0	60.00	-	91,649	8,186	79,434	0	0	0	4,029	235	253
2051	1,625	0	1,463	0	60.00	-	87,770	7,840	79,490	0	0	0	440	23	25
2052	0	0	0	0	-	-	0	0	0	0	767,948	0	-767,948	-36,694	-39,540
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>278,767</b>	<b>65,359</b>	<b>243,522</b>	<b>57,349</b>			<b>14,705,608</b>	<b>1,306,197</b>	<b>2,238,995</b>	<b>1,996,234</b>	<b>838,148</b>	<b>354,403</b>	<b>7,971,631</b>	<b>4,093,414</b>	<b>4,407,454</b>

Notes:

- PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.
- At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)
5 Percent	5,705,797	5,921,672
15 Percent	3,008,895	3,359,699
20 Percent	2,274,454	2,632,411

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 7**  
**PROJECTION of PROVED-plus-PROBABLE RESERVES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	11,806	2,676	2,656	602	60.00	1.89	160,525	14,311	18,587	24,690	0	2,816	100,121	46,203	47,942
2023	12,229	3,035	11,006	2,732	60.00	1.82	665,356	59,265	74,347	47,907	11,700	12,852	459,285	394,080	424,640
2024	20,422	7,268	18,380	6,542	60.00	1.74	1,114,151	98,756	74,347	301,752	11,700	46,644	580,952	451,224	486,216
2025	25,528	9,884	22,976	8,895	60.00	1.67	1,393,415	123,321	74,347	329,067	23,400	83,419	759,861	534,240	575,670
2026	27,964	10,986	25,168	9,887	60.00	1.64	1,526,246	134,998	74,347	214,079	0	99,114	1,003,708	638,794	688,332
2027	29,741	11,862	26,767	10,676	60.00	1.62	1,623,318	143,538	74,347	284,462	11,700	108,087	1,001,184	576,790	621,520
2028	33,636	12,984	30,272	11,685	60.00	1.62	1,835,227	162,183	74,347	320,164	11,700	137,081	1,129,752	589,165	634,855
2029	33,523	12,765	30,171	11,488	60.00	1.62	1,828,858	161,620	74,347	123,969	0	131,406	1,337,516	631,399	680,363
2030	29,299	10,748	26,370	9,673	60.00	1.62	1,597,838	141,278	74,347	0	0	94,532	1,287,681	550,255	592,926
2031	24,831	8,471	22,348	7,624	60.00	1.62	1,353,216	119,736	74,347	127,619	0	62,846	968,668	374,698	403,755
2032	21,034	6,558	18,930	5,902	60.00	1.62	1,145,371	101,433	74,347	53,325	0	38,466	877,800	307,363	331,199
2033	18,045	5,041	16,240	4,537	60.00	1.62	981,768	87,025	74,347	58,500	0	27,481	734,415	232,782	250,834
2034	15,605	3,800	14,045	3,420	60.00	1.62	848,229	75,265	74,347	0	0	19,696	678,921	194,794	209,901
2035	13,247	2,594	11,922	2,335	60.00	1.62	719,102	63,894	74,347	5,400	0	12,642	562,819	146,176	157,512
2036	11,541	1,727	10,387	1,555	60.00	1.62	625,726	55,671	74,347	67,500	0	7,832	420,376	98,832	106,496
2037	10,166	1,019	9,149	917	60.00	1.62	550,426	49,039	74,347	5,400	0	0	421,640	89,733	96,691
2038	9,253	562	8,328	506	60.00	1.62	500,482	44,641	74,347	0	0	0	381,494	73,493	79,192
2039	8,267	60	7,441	54	60.00	1.62	446,528	39,890	74,347	5,400	0	0	326,891	57,005	61,426
2040	7,052	0	6,347	0	60.00	-	380,812	34,027	75,201	0	0	0	271,584	42,871	46,196
2041	5,881	0	5,293	0	60.00	-	317,559	28,380	76,074	5,400	0	0	207,705	29,680	31,981
2042	4,758	0	4,282	0	60.00	-	256,930	22,964	76,932	0	0	0	157,034	20,312	21,887
2043	4,281	0	3,853	0	60.00	-	231,176	20,665	77,291	5,400	0	0	127,820	14,966	16,127
2044	3,904	0	3,514	0	60.00	-	210,828	18,846	77,590	0	0	0	114,392	12,124	13,065
2045	3,805	0	3,424	0	60.00	-	205,453	18,367	77,663	5,400	0	0	104,023	9,980	10,754
2046	3,585	0	3,226	0	60.00	-	193,573	17,310	77,790	0	0	0	98,473	8,552	9,216
2047	3,261	0	2,935	0	60.00	-	176,104	15,751	78,019	5,400	0	0	76,934	6,048	6,517
2048	2,893	0	2,604	0	60.00	-	156,223	13,968	78,379	0	0	0	63,876	4,546	4,898
2049	2,688	0	2,420	0	60.00	-	145,172	12,978	78,556	5,400	0	0	48,238	3,107	3,348
2050	2,492	0	2,243	0	60.00	-	134,574	12,030	78,721	0	0	0	43,823	2,555	2,754
2051	2,377	0	2,139	0	60.00	-	128,365	11,475	78,815	0	0	0	38,075	2,010	2,166
2052	0	0	0	0	-	-	0	0	0	0	767,948	0	-767,948	-36,694	-39,540
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>403,114</b>	<b>112,040</b>	<b>354,836</b>	<b>99,030</b>			<b>21,452,551</b>	<b>1,902,625</b>	<b>2,213,517</b>	<b>1,996,234</b>	<b>838,148</b>	<b>884,914</b>	<b>13,617,113</b>	<b>6,107,083</b>	<b>6,578,839</b>

Notes:

- Probable reserves and the values associated with probable reserves have not been risk adjusted to make them comparable to proved reserves and the values associated with proved reserves.
- PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.
- At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)		Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)	
5 Percent	8,926,487	5 Percent	9,265,946	
15 Percent	4,349,242	15 Percent	4,860,946	
20 Percent	3,209,767	20 Percent	3,720,890	

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 8**  
**PROJECTION of PROVED-plus-PROBABLE-plus-POSSIBLE RESERVES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	12,735	3,177	2,865	715	60.00	1.89	173,275	15,434	18,587	24,690	0	3,804	110,760	104,987	108,940
2023	13,623	3,779	12,261	3,402	60.00	1.82	741,864	66,005	74,347	47,907	11,700	18,772	523,133	448,863	483,672
2024	23,457	8,883	21,111	7,995	60.00	1.74	1,280,552	113,413	74,347	301,752	11,700	71,112	708,228	550,080	592,738
2025	29,803	12,108	26,823	10,897	60.00	1.67	1,627,590	143,946	74,347	329,067	23,400	120,135	936,695	658,569	709,640
2026	33,233	13,644	29,910	12,280	60.00	1.64	1,814,668	160,397	74,347	214,079	0	151,986	1,213,859	772,541	832,451
2027	35,506	14,754	31,956	13,279	60.00	1.62	1,938,857	171,325	74,347	284,462	11,700	173,082	1,223,941	705,122	759,804
2028	42,803	17,235	38,523	15,512	60.00	1.62	2,336,464	206,317	74,347	320,164	11,700	247,704	1,476,232	769,855	829,557
2029	44,022	17,725	39,620	15,953	60.00	1.62	2,403,006	212,176	74,347	123,969	0	257,059	1,735,455	819,254	882,786
2030	38,685	15,298	34,816	13,768	60.00	1.62	2,111,284	186,491	74,347	0	0	193,744	1,656,702	707,946	762,846
2031	32,585	12,254	29,326	11,029	60.00	1.62	1,777,429	157,091	74,347	127,619	0	126,201	1,292,171	499,834	538,596
2032	27,340	9,662	24,606	8,695	60.00	1.62	1,490,418	131,817	74,347	53,325	0	84,083	1,146,846	401,570	432,711
2033	23,433	7,726	21,089	6,954	60.00	1.62	1,276,629	112,991	74,347	58,500	0	56,689	974,102	308,753	332,697
2034	20,296	6,175	18,266	5,558	60.00	1.62	1,104,986	97,876	74,347	0	0	37,645	895,118	256,825	276,742
2035	17,704	4,892	15,933	4,403	60.00	1.62	963,133	85,385	74,347	5,400	0	28,385	769,616	199,886	215,387
2036	15,536	3,815	13,983	3,433	60.00	1.62	844,531	74,940	74,347	67,500	0	20,667	607,077	142,726	153,794
2037	13,407	2,740	12,066	2,466	60.00	1.62	727,966	64,675	74,347	5,400	0	13,832	569,712	121,245	130,647
2038	12,050	2,062	10,845	1,855	60.00	1.62	653,727	58,138	74,347	0	0	9,702	511,540	98,546	106,188
2039	10,750	1,406	9,675	1,266	60.00	1.62	582,538	51,869	74,347	5,400	0	5,991	444,931	77,589	83,607
2040	9,705	884	8,735	796	60.00	1.62	525,364	46,834	74,347	0	0	0	404,183	63,803	68,751
2041	8,519	276	7,667	249	60.00	1.62	460,413	41,114	74,347	5,400	0	0	339,552	48,520	52,282
2042	7,515	0	6,764	0	60.00	-	405,826	36,275	74,706	0	0	0	294,845	38,138	41,095
2043	6,429	0	5,786	0	60.00	-	347,144	31,033	75,548	5,400	0	0	235,163	27,535	29,670
2044	5,904	0	5,313	0	60.00	-	318,790	28,500	75,950	0	0	0	214,340	22,718	24,480
2045	5,510	0	4,959	0	60.00	-	297,520	26,602	76,232	5,400	0	0	189,286	18,161	19,569
2046	5,420	0	4,878	0	60.00	-	292,675	26,170	76,299	0	0	0	190,206	16,519	17,800
2047	4,884	0	4,396	0	60.00	-	263,737	23,589	76,670	5,400	0	0	158,078	12,428	13,391
2048	4,478	0	4,030	0	60.00	-	241,807	21,632	76,965	0	0	0	143,210	10,191	10,982
2049	4,234	0	3,811	0	60.00	-	228,651	20,456	77,164	5,400	0	0	125,631	8,093	8,721
2050	3,957	0	3,562	0	60.00	-	213,700	19,119	77,389	0	0	0	117,192	6,834	7,364
2051	3,646	0	3,281	0	60.00	-	196,888	17,614	77,657	0	0	0	101,617	5,364	5,780
2052	2,242	0	2,018	0	60.00	-	121,054	10,831	78,834	0	0	0	31,389	1,500	1,616
2053	0	0	0	0	-	-	0	0	0	0	767,948	0	-767,948	-33,216	-35,792
<b>Total</b>	<b>519,411</b>	<b>158,495</b>	<b>458,874</b>	<b>140,505</b>			<b>27,762,486</b>	<b>2,460,055</b>	<b>2,274,594</b>	<b>1,996,234</b>	<b>838,148</b>	<b>1,620,593</b>	<b>18,572,862</b>	<b>7,890,779</b>	<b>8,498,512</b>

Notes:

1. Probable and possible reserves and the values associated with probable and possible reserves have not been risk adjusted to make them comparable to proved reserves and the values associated with proved reserves.
2. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.
3. At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)		Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)	
5 Percent	11,772,158	5 Percent	12,218,958	
15 Percent	5,553,068	15 Percent	6,203,641	
20 Percent	4,068,302	20 Percent	4,712,400	

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 9**  
**SUMMARY of GROSS CONTINGENT RESOURCES by FIELD**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



<b>Field Category</b>	<b>Gross</b>		
	<b>Oil (10<sup>3</sup> bbl)</b>	<b>Marketable Gas (10<sup>6</sup> ft<sup>3</sup>)</b>	<b>Sales Gas (10<sup>6</sup> ft<sup>3</sup>)</b>
Albacora Leste			
1C	0	0	0
2C	0	0	0
3C	0	0	0

<b>Field Category</b>	<b>Net</b>		
	<b>Oil (10<sup>3</sup> bbl)</b>	<b>Marketable Gas (10<sup>6</sup> ft<sup>3</sup>)</b>	<b>Sales Gas (10<sup>6</sup> ft<sup>3</sup>)</b>
Albacora Leste			
1C	0	0	0
2C	0	0	0
3C	0	0	0

Notes:

1. Application of any risk factor to contingent resources quantities does not equate contingent resources with reserves.
2. There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated.
3. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.

**TABLE 10**  
**PROJECTION of GROSS CONTINGENT RESOURCES**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	1C			2C			3C		
	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Marketable Gas (10 <sup>6</sup> ft <sup>3</sup> )	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )
2022	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0	0	0
2037	0	0	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0	0	0
2039	0	0	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0	0	0
2041	0	0	0	0	0	0	0	0	0
2042	0	0	0	0	0	0	0	0	0
2043	0	0	0	0	0	0	0	0	0
2044	0	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Notes:

1. Application of any risk factor to contingent resources quantities does not equate contingent resources with reserves.
2. There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated.
3. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 11**  
**PROJECTION of TOTAL PROVED RESERVES plus 1C CONTINGENT RESOURCES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	10,919	2,182	2,457	491	60.00	1.89	148,336	13,237	18,587	24,690	0	1,890	89,932	85,245	88,455
2023	10,920	2,294	9,828	2,065	60.00	1.82	593,447	52,929	74,347	47,907	11,700	7,489	399,075	342,417	368,971
2024	16,204	4,930	14,583	4,437	60.00	1.74	882,690	78,366	74,347	301,752	11,700	27,782	388,743	301,935	325,350
2025	19,852	6,810	17,867	6,129	60.00	1.67	1,082,266	95,915	74,347	329,067	23,400	40,350	519,187	365,029	393,336
2026	21,546	7,592	19,391	6,832	60.00	1.64	1,174,650	104,032	74,347	214,079	0	47,196	734,996	467,777	504,052
2027	22,810	8,219	20,529	7,397	60.00	1.62	1,243,699	110,105	74,347	284,462	11,700	52,192	710,893	409,551	441,311
2028	24,270	8,419	21,843	7,577	60.00	1.62	1,322,828	117,063	74,347	320,164	11,700	56,238	743,316	387,639	417,700
2029	23,437	7,896	21,094	7,106	60.00	1.62	1,277,128	113,038	74,347	123,969	0	48,521	917,253	433,006	466,586
2030	20,218	6,318	18,196	5,686	60.00	1.62	1,100,956	97,524	74,347	0	0	31,713	897,372	383,467	413,204
2031	16,788	4,552	15,110	4,097	60.00	1.62	913,210	80,990	74,347	127,619	0	20,599	609,655	235,825	254,113
2032	13,887	3,041	12,498	2,737	60.00	1.62	754,335	66,999	74,347	53,325	0	12,719	546,945	191,514	206,366
2033	11,772	1,940	10,595	1,746	60.00	1.62	638,503	56,797	74,347	58,500	0	7,714	441,145	139,826	150,669
2034	10,062	1,042	9,055	938	60.00	1.62	544,846	48,549	74,347	0	0	0	421,950	121,065	130,453
2035	8,321	124	7,489	111	60.00	1.62	449,532	40,155	74,347	5,400	0	0	329,630	85,612	92,251
2036	6,920	0	6,228	0	60.00	-	373,674	33,394	75,254	67,500	0	0	197,526	46,439	50,040
2037	5,955	0	5,359	0	60.00	-	321,566	28,738	76,012	5,400	0	0	211,416	44,993	48,483
2038	4,895	0	4,405	0	60.00	-	264,305	23,619	76,871	0	0	0	163,815	31,558	34,006
2039	3,906	0	3,515	0	60.00	-	210,911	18,848	77,651	5,400	0	0	109,012	19,010	20,484
2040	3,114	0	2,803	0	60.00	-	168,158	15,032	78,223	0	0	0	74,903	11,824	12,741
2041	2,755	0	2,480	0	60.00	-	148,792	13,305	78,477	5,400	0	0	51,610	7,375	7,947
2042	2,550	0	2,295	0	60.00	-	137,683	12,312	78,640	0	0	0	46,731	6,045	6,513
2043	2,354	0	2,119	0	60.00	-	127,136	11,369	78,798	5,400	0	0	31,569	3,696	3,983
2044	2,246	0	2,022	0	60.00	-	121,307	10,846	78,907	0	0	0	31,554	3,344	3,604
2045	2,134	0	1,921	0	60.00	-	115,240	10,299	79,040	5,400	0	0	20,501	1,967	2,119
2046	2,034	0	1,831	0	60.00	-	109,861	9,813	79,169	0	0	0	20,879	1,813	1,954
2047	1,942	0	1,748	0	60.00	-	104,881	9,368	79,246	5,400	0	0	10,867	854	921
2048	1,860	0	1,674	0	60.00	-	100,427	8,970	79,310	0	0	0	12,147	864	931
2049	1,774	0	1,597	0	60.00	-	95,822	8,559	79,375	5,400	0	0	2,488	160	173
2050	1,697	0	1,527	0	60.00	-	91,649	8,186	79,434	0	0	0	4,029	235	253
2051	1,625	0	1,463	0	60.00	-	87,770	7,840	79,490	0	0	0	440	23	25
2052	0	0	0	0	-	-	0	0	0	0	767,948	0	-767,948	-36,694	-39,540
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>278,767</b>	<b>65,359</b>	<b>243,522</b>	<b>57,349</b>			<b>14,705,608</b>	<b>1,306,197</b>	<b>2,238,995</b>	<b>1,996,234</b>	<b>838,148</b>	<b>354,403</b>	<b>7,971,631</b>	<b>4,093,414</b>	<b>4,407,454</b>

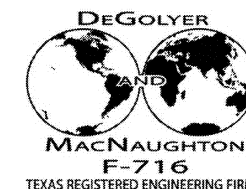
Notes:

- Application of any risk factor to contingent resources quantities does not equate contingent resources with reserves.
- There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated.
- PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.
- At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)
5 Percent	5,705,797	5,921,672
15 Percent	3,008,895	3,359,699
20 Percent	2,274,454	2,632,411

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 12**  
**PROJECTION of PROVED-plus-PROBABLE RESERVES plus 2C CONTINGENT RESOURCES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	11,806	2,676	2,656	602	60.00	1.89	160,525	14,311	18,587	24,690	0	2,816	100,121	46,203	47,942
2023	12,229	3,035	11,006	2,732	60.00	1.82	665,356	59,265	74,347	47,907	11,700	12,852	459,285	394,080	424,640
2024	20,422	7,268	18,380	6,542	60.00	1.74	1,114,151	98,756	74,347	301,752	11,700	46,644	580,952	451,224	486,216
2025	25,528	9,884	22,976	8,895	60.00	1.67	1,393,415	123,321	74,347	329,067	23,400	83,419	759,861	534,240	575,670
2026	27,964	10,986	25,168	9,887	60.00	1.64	1,526,246	134,998	74,347	214,079	0	99,114	1,003,708	638,794	688,332
2027	29,741	11,862	26,767	10,676	60.00	1.62	1,623,318	143,538	74,347	284,462	11,700	108,087	1,001,184	576,790	621,520
2028	33,636	12,984	30,272	11,685	60.00	1.62	1,835,227	162,183	74,347	320,164	11,700	137,081	1,129,752	589,165	634,855
2029	33,523	12,765	30,171	11,488	60.00	1.62	1,828,858	161,620	74,347	123,969	0	131,406	1,337,516	631,399	680,363
2030	29,299	10,748	26,370	9,673	60.00	1.62	1,597,838	141,278	74,347	0	0	94,532	1,287,681	550,255	592,926
2031	24,831	8,471	22,348	7,624	60.00	1.62	1,353,216	119,736	74,347	127,619	0	62,846	968,668	374,698	403,755
2032	21,034	6,558	18,930	5,902	60.00	1.62	1,145,371	101,433	74,347	53,325	0	38,466	877,800	307,363	331,199
2033	18,045	5,041	16,240	4,537	60.00	1.62	981,768	87,025	74,347	58,500	0	27,481	734,415	232,782	250,834
2034	15,605	3,800	14,045	3,420	60.00	1.62	848,229	75,265	74,347	0	0	19,696	678,921	194,794	209,901
2035	13,247	2,594	11,922	2,335	60.00	1.62	719,102	63,894	74,347	5,400	0	12,642	562,819	146,176	157,512
2036	11,541	1,727	10,387	1,555	60.00	1.62	625,726	55,671	74,347	67,500	0	7,832	420,376	98,832	106,496
2037	10,166	1,019	9,149	917	60.00	1.62	550,426	49,039	74,347	5,400	0	0	421,640	89,733	96,691
2038	9,253	562	8,328	506	60.00	1.62	500,482	44,641	74,347	0	0	0	381,494	73,493	79,192
2039	8,267	60	7,441	54	60.00	1.62	446,528	39,890	74,347	5,400	0	0	326,891	57,005	61,426
2040	7,052	0	6,347	0	60.00	-	380,812	34,027	75,201	0	0	0	271,584	42,871	46,196
2041	5,881	0	5,293	0	60.00	-	317,559	28,380	76,074	5,400	0	0	207,705	29,680	31,981
2042	4,758	0	4,282	0	60.00	-	256,930	22,964	76,932	0	0	0	157,034	20,312	21,887
2043	4,281	0	3,853	0	60.00	-	231,176	20,665	77,291	5,400	0	0	127,820	14,966	16,127
2044	3,904	0	3,514	0	60.00	-	210,828	18,846	77,590	0	0	0	114,392	12,124	13,065
2045	3,805	0	3,424	0	60.00	-	205,453	18,367	77,663	5,400	0	0	104,023	9,980	10,754
2046	3,585	0	3,226	0	60.00	-	193,573	17,310	77,790	0	0	0	98,473	8,552	9,216
2047	3,261	0	2,935	0	60.00	-	176,104	15,751	78,019	5,400	0	0	76,934	6,048	6,517
2048	2,893	0	2,604	0	60.00	-	156,223	13,968	78,379	0	0	0	63,876	4,546	4,898
2049	2,688	0	2,420	0	60.00	-	145,172	12,978	78,556	5,400	0	0	48,238	3,107	3,348
2050	2,492	0	2,243	0	60.00	-	134,574	12,030	78,721	0	0	0	43,823	2,555	2,754
2051	2,377	0	2,139	0	60.00	-	128,365	11,475	78,815	0	0	0	38,075	2,010	2,166
2052	0	0	0	0	-	-	0	0	0	0	767,948	0	-767,948	-36,694	-39,540
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>403,114</b>	<b>112,040</b>	<b>354,836</b>	<b>99,030</b>			<b>21,452,551</b>	<b>1,902,625</b>	<b>2,213,517</b>	<b>1,996,234</b>	<b>838,148</b>	<b>884,914</b>	<b>13,617,113</b>	<b>6,107,083</b>	<b>6,578,839</b>

Notes:

1. Probable reserves and the values associated with probable reserves have not been risk adjusted to make them comparable to proved reserves and the values associated with proved reserves.
2. Application of any risk factor to contingent resources quantities does not equate contingent resources with reserves.
3. There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated.
4. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Lest field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.
5. At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)
5 Percent	8,926,487	5 Percent 9,265,946
15 Percent	4,349,242	15 Percent 4,860,946
20 Percent	3,209,767	20 Percent 3,720,890

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.

**TABLE 13**  
**PROJECTION of PROVED-plus-PROBABLE-plus-POSSIBLE RESERVES plus 3C CONTINGENT RESOURCES and FUTURE NET REVENUE**  
as of  
**JANUARY 1, 2022**  
for the  
**ALBACORA LESTE FIELD**  
in  
**BRAZIL**  
for  
**PETRORIO S.A.**



Year	Gross		Net		Oil Price (U.S.\$/bbl)	Sales Gas Price (U.S.\$/10 <sup>3</sup> ft <sup>3</sup> )	Future Gross Revenue (10 <sup>3</sup> U.S.\$)	Royalties Paid in Cash (10 <sup>3</sup> U.S.\$)	Operating Expenses (10 <sup>3</sup> U.S.\$)	Capital Costs (10 <sup>3</sup> U.S.\$)	Abandonment Costs (10 <sup>3</sup> U.S.\$)	SPF (10 <sup>3</sup> U.S.\$)	Future Net Revenue (10 <sup>3</sup> U.S.\$)	Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at 10 Percent (10 <sup>3</sup> U.S.\$)
	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )	Oil (10 <sup>3</sup> bbl)	Sales Gas (10 <sup>6</sup> ft <sup>3</sup> )											
2022	12,735	3,177	2,865	715	60.00	1.89	173,275	15,434	18,587	24,690	0	3,804	110,760	104,987	108,940
2023	13,623	3,779	12,261	3,402	60.00	1.82	741,864	66,005	74,347	47,907	11,700	18,772	523,133	448,863	483,672
2024	23,457	8,883	21,111	7,995	60.00	1.74	1,280,552	113,413	74,347	301,752	11,700	71,112	708,228	550,080	592,738
2025	29,803	12,108	26,823	10,897	60.00	1.67	1,627,590	143,946	74,347	329,067	23,400	120,135	936,695	658,569	709,640
2026	33,233	13,644	29,910	12,280	60.00	1.64	1,814,668	160,397	74,347	214,079	0	151,986	1,213,859	772,541	832,451
2027	35,506	14,754	31,956	13,279	60.00	1.62	1,938,857	171,325	74,347	284,462	11,700	173,082	1,223,941	705,122	759,804
2028	42,803	17,235	38,523	15,512	60.00	1.62	2,336,464	206,317	74,347	320,164	11,700	247,704	1,476,232	769,855	829,557
2029	44,022	17,725	39,620	15,953	60.00	1.62	2,403,006	212,176	74,347	123,969	0	257,059	1,735,455	819,254	882,786
2030	38,685	15,298	34,816	13,768	60.00	1.62	2,111,284	186,491	74,347	0	0	193,744	1,656,702	707,946	762,846
2031	32,585	12,254	29,326	11,029	60.00	1.62	1,777,429	157,091	74,347	127,619	0	126,201	1,292,171	499,834	538,596
2032	27,340	9,662	24,606	8,695	60.00	1.62	1,490,418	131,817	74,347	53,325	0	84,083	1,146,846	401,570	432,711
2033	23,433	7,726	21,089	6,954	60.00	1.62	1,276,629	112,991	74,347	58,500	0	56,689	974,102	308,753	332,697
2034	20,296	6,175	18,266	5,558	60.00	1.62	1,104,986	97,876	74,347	0	0	37,645	895,118	256,825	276,742
2035	17,704	4,892	15,933	4,403	60.00	1.62	963,133	85,385	74,347	5,400	0	28,385	769,616	199,886	215,387
2036	15,536	3,815	13,983	3,433	60.00	1.62	844,531	74,940	74,347	67,500	0	20,667	607,077	142,726	153,794
2037	13,407	2,740	12,066	2,466	60.00	1.62	727,966	64,675	74,347	5,400	0	13,832	569,712	121,245	130,647
2038	12,050	2,062	10,845	1,855	60.00	1.62	653,727	58,138	74,347	0	0	9,702	511,540	98,546	106,188
2039	10,750	1,406	9,675	1,266	60.00	1.62	582,538	51,869	74,347	5,400	0	5,991	444,931	77,589	83,607
2040	9,705	884	8,735	796	60.00	1.62	525,364	46,834	74,347	0	0	0	404,183	63,803	68,751
2041	8,519	276	7,667	249	60.00	1.62	460,413	41,114	74,347	5,400	0	0	339,552	48,520	52,282
2042	7,515	0	6,764	0	60.00	-	405,826	36,275	74,706	0	0	0	294,845	38,138	41,095
2043	6,429	0	5,786	0	60.00	-	347,144	31,033	75,548	5,400	0	0	235,163	27,535	29,670
2044	5,904	0	5,313	0	60.00	-	318,790	28,500	75,950	0	0	0	214,340	22,718	24,480
2045	5,510	0	4,959	0	60.00	-	297,520	26,602	76,232	5,400	0	0	189,286	18,161	19,569
2046	5,420	0	4,878	0	60.00	-	292,675	26,170	76,299	0	0	0	190,206	16,519	17,800
2047	4,884	0	4,396	0	60.00	-	263,737	23,589	76,670	5,400	0	0	158,078	12,428	13,391
2048	4,478	0	4,030	0	60.00	-	241,807	21,632	76,965	0	0	0	143,210	10,191	10,982
2049	4,234	0	3,811	0	60.00	-	228,651	20,456	77,164	5,400	0	0	125,631	8,093	8,721
2050	3,957	0	3,562	0	60.00	-	213,700	19,119	77,389	0	0	0	117,192	6,834	7,364
2051	3,646	0	3,281	0	60.00	-	196,888	17,614	77,657	0	0	0	101,617	5,364	5,780
2052	2,242	0	2,018	0	60.00	-	121,054	10,831	78,834	0	0	0	31,389	1,500	1,616
2053	0	0	0	0	-	-	0	0	0	0	767,948	0	-767,948	-33,216	-35,792
<b>Total</b>	<b>519,411</b>	<b>158,495</b>	<b>458,874</b>	<b>140,505</b>			<b>27,762,486</b>	<b>2,460,055</b>	<b>2,274,594</b>	<b>1,996,234</b>	<b>838,148</b>	<b>1,620,593</b>	<b>18,572,862</b>	<b>7,890,779</b>	<b>8,498,512</b>

Notes:

1. Probable and possible reserves and the values associated with probable and possible reserves have not been risk adjusted to make them comparable to proved reserves and the values associated with proved reserves.
2. Application of any risk factor to contingent resources quantities does not equate contingent resources with reserves.
3. There is no certainty that it will be commercially viable to produce any portion of the contingent resources evaluated.
4. PetroRio has represented that the expected effective date of the potential acquisition is October 1, 2022. For the purposes of this report and at the request of PetroRio, the evaluated working interest for the Albacora Leste field is 0 percent until September 30, 2022. Beginning October 1, 2022, the evaluated working interest is 90 percent.
5. At the request of PetroRio, present worth values discounted at October 1, 2022 are also presented herein, and are referred to as "Closing Date Present Worth".

	Present Worth at (10 <sup>3</sup> U.S.\$)	Closing Date Present Worth at (10 <sup>3</sup> U.S.\$)
5 Percent	11,772,158	12,218,958
15 Percent	5,553,068	6,203,641
20 Percent	4,068,302	4,712,400

These data accompany the report of DeGolyer and MacNaughton and are subject to its specific conditions.