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REPORT
as of
JANUARY 1, 2023
on
RESERVES and REVENUE
of
CERTAIN FIELDS
in
BRAZIL
for
PETRORIO S.A.

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FOREWORD

Scope of Investigation

This report presents estimates, as of January 1, 2023, of the extent of the proved, probable, and possible oil and gas reserves and the value of the proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves of the Albacora Leste, Frade, Polvo, Tubarão Martelo, and Wahoo fields in which PetroRio S.A. (PetroRio) has represented it holds an interest. PetroRio's working interest, the concession expiration date, and the extension of the expiration date for each field are shown in Table 1 of this report.

Estimates of reserves 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. These reserves definitions are discussed in detail in the Definition of Reserves section of this report.

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, 2022. Net reserves are defined as that portion of the gross reserves

attributable to the evaluated interests 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 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 discount rate of 10 percent are reported in detail and values using discount rates of 5, 15, and 20 percent are reported as totals.

Authority

This report was authorized by Mr. Milton Rangel, Chief Financial Officer, 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

Albacora Leste Field

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 are 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 the 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 collected 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.

Frade Field

The Frade field is located offshore Brazil in the northern part of the Campos Basin about 370 kilometers northeast of the city of Rio de Janeiro (Figure 1). The field was discovered in 1986 by Petróleo Brasileiro S.A. (Petrobras) in water depths of about 1,200 meters.

Over a period of 80 million years, extending from the Lower Cretaceous through the Miocene, rivers from mainland Brazil flooded the Campos Basin region with clastic sediments, which accumulated above a thick layer of Lower Cretaceous salt. Subsequent deposition of younger sediment masses activated salt movement in many areas of the basin. In the area of the Frade field, this salt movement uplifted and deformed Oligocene-Miocene turbidite sandstones and shales and created structures that later became the hydrocarbon traps in the field.

The producing reservoirs of the Frade field are in the Oligo-Miocene turbidite reservoirs of the Carapebus Formation. There are five reservoir compartments in the field separated by faulting. In the sandstone reservoirs, average porosity was estimated to be between 29 and 34 percent, average

permeability was estimated to be between 1.2 and 3.8 darcys, and oil gravity was estimated to range between 16 and 24 degrees API.

Polvo Field

The Polvo field is located offshore Brazil in the Campos Basin about 100 kilometers east of the city of Cabo Frio, Rio de Janeiro State (Figure 1).

In the Campos Basin, regional dip is toward the southeast, reflecting basinward dip caused by the opening of the Atlantic Ocean during the Early Cretaceous. This structural configuration is present in the Polvo field.

Basement rocks in the Campos Basin are Precambrian granites. As the basin began to open and fill, basalts of the Cabiúnas Formation flowed onto the granite basement. The earliest sediments in the basin are lacustrine shales and carbonates of the Lagoa Feia Formation, which is the primary hydrocarbon source formation for the basin. After the original rifting period, a massive sequence of continental and marine sediments accumulated in the basin. The lower part of this sequence is made up of conglomerates and carbonates, which are subsequently covered by a thick evaporite section, composed predominantly of salt and anhydrite. Above the evaporites are mudstones and oolitic grainstones, deposited during Albian time when a broad carbonate platform developed in the region. In the Polvo field, the Albian carbonates are the Quissamã members of the Macaé Formation. These carbonates accumulated in shallow water on northeast-trending local structural highs atop basement or salt uplifts.

As basin subsidence continued, coastal rivers flooded sands into the basin. These sands were deposited in environments ranging from deepwater turbidites to shallow-water deltaic and bay-lagoon settings. This style of sedimentation continued from the Cenomanian until the Miocene. In the Polvo field, the sandstones were deposited in coastal plain, lagoon, and bay deltaic environments.

The initial drilling campaign identified several areas of Quissamã carbonate accumulation. After further evaluation, three of these areas were targeted for additional development, as follows: the Devonian-7 (Dev-7) and Dev-4&5 shoal areas, in the western part of the field, and the Dev-3 shoal area, referred to herein as the East Quissamã. Six platform wells were drilled and completed as producers from the Quissamã accumulation.

The Turonian and Maastrichtian sandstones were found to be well developed and productive in separate accumulations east of the Quissamã wells. This part of the field was originally known as the Guarajuba field. Currently, five wells produce from the Maastrichtian reservoir, three wells produce from the Turonian reservoir, and one well produces from the Turonian East reservoir.

The Eocene-age reservoirs are the marine sandstones of the Embore Formation. These clastic reservoirs were originally associated with a variety of sub-environments, deepwater turbidities, and submarine fans deposited in a slope basin. This formation was affected by salt tectonics, which contributed to the generation of normal faults and, together with the top of the salt dome, work as seals for this field. The trap system is a combination of the structure and the stratigraphic, with lateral seals from the Oligocene canyon fill deposits.

These Eocene sandstone reservoirs were tested in six wells located at the edge of local horst-graben system. Five of the wells are located in the central part of the field, while the 1-Dev-6 well tested oil in the northern part of the field. The first production well began producing from the Eocene reservoir in March 2020.

Productive reservoir volumes were estimated using standard volumetric methods based on geological mapping that utilized seismic data and well logs. Structure maps were constructed for each reservoir. Isopach maps of the sandstone reservoirs were constructed using limits based on stratigraphy and structural oil/water contacts (OWC). In many of the sandstone reservoirs, the productive sands were often cut by overlying erosional unconformities that formed the northern, western, and eastern limits. The southern downdip limit was often an estimated OWC.

Tubarão Martelo Field

The Tubarão Martelo field is located offshore Brazil in the Campos Basin about 100 kilometers southeast of Rio de Janeiro (Figure 1).

The producing reservoirs of the Tubarão Martelo field are in the Albo-Cenomanian Imbetiba and Quissama Formations of the Macaé Group. The Imbetiba Formation is the uppermost section of the Macaé Group and can be described as a very clean limestone consisting of mainly oolitic/oncolitic packstones and grainstones, peloidal packstones, peloidal

wackestones, and peloidal/bioclastic mudstones. These high-energy shoal facies are typically deposited on structurally positive features, and are likely the result of salt movement and/or basement-involved faulting.

The high-energy shoals are the primary targets in the Imbetiba Formation in the Tubarão Martelo field. The reservoir features primary porosity, likely resulting from rapid deposition, low compaction, and a lack of calcite cement precipitated early in the burial process.

The Quissama Formation is the lowermost section of the Macaé Group and is predominantly below the OWC in the Tubarão Martelo field. The Quissama Formation is a secondary reservoir in the Tubarão Martelo field. Reservoir quality in the Quissama Formation is more variable than in the overlying Imbetiba Formation.

The structural configuration of the Tubarão Martelo field is a southward-dipping monocline with northeast-to-southwest, up-to-the-basin antithetic faults trending across the northern portion of the field and a down-to-the-basin normal fault forming the southern closure of the field. The down-to-the-basin normal fault on the southern flank of the field creates a local horst block. Structural dip in the Tubarão Martelo field creates a four-way closure.

Low, best, and high original oil in place (OOIP) quantities were estimated for the Tubarão Martelo field. The low OOIP estimate was areally limited to the crestal portions of the Tubarão Martelo field based on the reduction of the net-to-gross ratio seen in wells drilled on the flanks of the field. For volumetric estimation purposes, the Imbetiba and Quissama reservoir section was subdivided into four units to account for variations in petrophysical properties. The uppermost unit represents the Imbetiba Formation and is referred to as Zone 1. The unit underlying Zone 1 is referred to as Zone 2, which represents a low-porosity interval encountered in each of the non-horizontal wells. The unit underlying Zone 2 is referred to as Zone 3, which represents the upper portion of the Quissama Formation. The lowermost reservoir unit in the field is referred to as Zone 4, which represents the lower portion of the Quissama Formation. The majority of the oil in place in the Tubarão Martelo field is contained in Zone 1.

Wahoo Field

The Wahoo field is located offshore Brazil in the Campos Basin, approximately 100 kilometers due north of Rio de Janeiro (Figure 1), in water depths of approximately 1,000 to 1,500 meters.

The structure in this region is associated with the initial rifting phase of the separation of Africa from South America. The lowermost section of the syn-rift deposit is composed for the basalts of the Cabiúnas Formation, which accumulated at the earliest stages of rifting.

As rifting progressed, continental (lacustrine) sediments of the Lagoa Feia Group were deposited in the area. The Coqueiros sediments act as the hydrocarbon source rock for the pre-salt reservoirs. The Macaé Group sediments were deposited in the area, filling half grabens that resulted from the syn-depositional rift faulting. The lower section of the Macaé Group is made up of lacustrine sediments, but there is a transition to deeper water environments recorded in accumulations of carbonates in the upper part of the formation.

The producing reservoirs of the Wahoo field are the Early Cretaceous pre-salt Barremian-Aptian Macabú Formation. The Macabú Formation is made up primarily of microbial carbonates (stromatolites) and is divided into major zones denoted, from top to base, as the MA100, MA200, and MA300 zones. The upper, post-rift sections of the Macabú carbonates 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.

The Wahoo field can be described as a north-south structural high with multiple north-south transpressional trend faults. These structural highs are associated with carbonate buildups constructed by microbial activity generating closure on four sides. The field limits are formed by structural dip. Due to the tectonic stress and the fault interpretation, the Top Macabu reservoir in the Wahoo field could be compartmentalized in at least two segments (East and West). The OWC was identified in the discovery well at an estimated depth of 4,840 meters true vertical depth subsea (TVDSS). Additionally, a

pressure gradient plot from well data shows a potential OWC at an estimated depth of 4,850 meters TVDSS.

Five wells have been drilled in the Wahoo field. The Wahoo-1-APL-1-ESS discovery well was drilled in 2008, south of the structural high on the west flank of the field. This well found approximately 100 meters of gross thickness and 59 meters of net pay. In 2009, the APL-2DA-ESS and 1-APL-2-ESS wells were drilled on the north part of the structure to define the northern limit of the field. The drilling campaign was completed with the 3-APL-6-ESS and 3-APL-7-ESS wells, which are located in the central and northwest parts of the field, respectively.

A structural interpretation provided by PetroRio was accepted as the structural framework and used in the geocellular model constructed to estimate the OOIP. Effective porosity (PHIE) and water saturation (S_w) petrophysical properties were propagated in the three-dimensional (3-D) model. The net-to-gross properties were defined as ≥ 5 percent, ≥ 3 percent, and ≥ 2 percent PHIE for the proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves scenarios, respectively. The average PHIE ranges between 10 and 11 percent and the average S_w ranges between 17 and 20 percent for the estimated OOIP. The estimated OWC observed in the discovery well (4,840 meters TVDSS) was used for estimating the OOIP associated with the proved and proved-plus-probable categories, while the estimated OWC observed on the pressure gradient plot (4,850 meters TVDSS) was used for the proved-plus-probable-plus-possible category.

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 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.

For cases where history-matched dynamic models were available and applicable, model results were used to estimate recovery factors and reserves production forecasts.

Data provided by PetroRio from wells drilled through December 31, 2022, 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 through December 2022. Cumulative production, as of December 31, 2022, was deducted from the estimated gross ultimate recovery to estimate gross reserves.

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 sales gas. 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 sales gas. Gas quantities are expressed at a temperature base of 20 degrees Celsius ($^{\circ}\text{C}$) and at a pressure base of 1 atmosphere. Gas quantities included in this report are expressed in millions of cubic feet (10^6ft^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 estimated herein include only associated gas in the form of solution gas.

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. Oil production began 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 floating production, storage, and offloading vessel (FPSO). In February 2007, the field reached peak oil production at a rate of approximately 172,000 barrels per day of oil. 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 wells and 15 water injection wells are currently tied in to the P-50 FPSO.

As represented by PetroRio, the concession extension for the Albacora Leste field was granted in 2022 by the Agência Nacional do Petróleo, Gás Natural e Biocombustíveis (ANP) to Petrobras, the previous owner of the interests and operator of the field. PetroRio has further represented that the current concession expiration date is December 31, 2031. However, PetroRio has advised that it has reasonable certainty that an additional extension of the concession will be obtained to ensure that the Albacora Leste field can be produced to its economic limit based on PetroRio's represented development plan. In Brazil, a concession extension is granted as determined by the 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 based on the development plan provided to the economic limit as defined in the Definition of Reserves section of this report and with one additional concession extension until August 6, 2052.

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.

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 workover jobs of one production well and one injection well in the AB-210 reservoir, two production wells and two injection wells in the AB-140 reservoir, and one production well in the CRT-200 reservoir. 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.

Frade Field

The Frade field was discovered by Petrobras in 1986, and Chevron and its partners began development activities in 2008. Oil production began in June 2009 using a subsea gathering system connected to a FPSO. A total of 11 horizontal production wells and 5 vertical water injection wells have been drilled since 2008, as well as several pilot boreholes. Water injection started in July 2010, but was suspended in November 2011 due to a pressure kick that occurred when drilling one of the wells. Production was suspended in March 2012 due to oil seeps interpreted to be associated with fractures connecting to the sea floor that are believed to have been opened by localized higher pressures near the injection wells. Production was restarted in April 2013; 10 wells were on production and 2 water injection wells were operational at the end of December 2022.

As represented by PetroRio, the concession extension was granted by the ANP in 2016 contingent on the current drilling campaign which was approved by the ANP in 2021 and was started in 2022. PetroRio has further represented that the current concession expiration date for the Frade field is December 31, 2041. However, PetroRio has advised that it has reasonable certainty that an additional extension of the concession will be obtained once the Wahoo field is connected to the Frade field FPSO to ensure that the field

can be produced to its economic limit based on PetroRio's represented development plan. In Brazil, a concession extension is granted as determined by ANP if certain conditions are met by the company operating the concession. Based on PetroRio's representations, reserves presented herein for the Frade field were estimated based on the development plan provided to the economic limit as defined in the Definition of Reserves section of this report and with one additional concession extension until August 6, 2052.

Proved developed producing reserves were estimated for existing wells by the application of appropriate decline curves or other performance relationships, primarily the semi-logarithmic plots of oil rate versus time trends and the Cartesian plot of oil rate versus cumulative oil trends. Proved undeveloped reserves were estimated for three future production wells and one water injection well based on analogy with historical performance of nearby wells producing from the same reservoir and considering the estimated drainage areas.

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

Polvo Field

The Polvo field was discovered by Petrobras with the drilling of the 1-RJS-486A well. In 2000, during the Agência Nacional do Petróleo, Gás Natural e Biocombustíveis (ANP)'s second licensing round, concession block BM-C-8 containing the Polvo field was awarded to Devon Energy do Brasil Ltda. (Devon) and its partners. Devon continued field delineation drilling and development.

PetroRio has represented that the concession for the block BM-C-8 expires on December 31, 2033. However, PetroRio has advised that it has reasonable certainty that an extension of the concession will be obtained to ensure that the field can be produced to its economic limit based on PetroRio's represented development plan. In Brazil, a concession extension is granted as determined by ANP if certain conditions are met by the company operating the concession. Based on PetroRio's representations, reserves presented herein for the Polvo field were estimated based on the development plan provided to the economic limit as defined in the Definitions of Reserves section of this report and with one concession extension until July 1, 2059.

Production commenced from the Polvo field in August 2007. The average gravity of the oil produced from the Polvo field is 21 degrees API. The producing gas-oil ratio in the field is approximately 100 cubic feet per barrel, and all produced gas is either used as fuel or flared. Water depth in the Polvo field ranges from 90 to 250 meters. The field was developed with a drilling/production platform and was connected to the OSX-3 FPSO in the neighboring Tubarão Martelo field in 2021. All producing wells are horizontal/highly deviated and are completed with electric submersible pumps (ESP).

For the Polvo field, the volumetric method was used to estimate the OOIP. Proved developed producing reserves were estimated using performance-based methods, primarily decline-curve analysis of oil rate production versus time trends of individual wells. Proved developed non-producing reserves were estimated for a workover to the Pol-46 well in January 2023 and for the replacement of a new multi-phase pump in January 2023 between the Polvo field and OSX-3 FPSO. Proved undeveloped reserves were estimated for three future production wells (Pol-A, Pol-B, and Pol-C). Reserves associated with the future Pol-A, Pol-B, and Pol-C well locations that are planned to target an Eocene reservoir were estimated based on analogy and numerical simulation. A 3-D sector model was developed for the Eocene undeveloped well locations to run in a black-oil simulator to aid in estimating ultimate oil recovery, potential production profiles, and recovery factors. PetroRio has represented that production is scheduled to start from the Pol-C wells in 2023 and from the Pol-A and Pol-B wells in 2025.

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

No gas reserves were estimated for the Polvo field, since PetroRio has represented that there are no plans for gas sales.

Tubarão Martelo Field

The Tubarão Martelo field was discovered in 2010 by OGX Petróleo e Gás Participações S.A. (OGX) with the drilling of the 1-OGX-25-RJS well in concession block BM-C-39. Approval for the Tubarão Martelo development plan was granted by the ANP in July 2013 and initial oil production commenced in December 2013.

PetroRio has represented that in February 2020 it acquired the interest previously held by OGX in the Tubarão Martelo field

and that the concession for the block BM-C-39 expires on April 19, 2039. However, PetroRio has advised that it has reasonable certainty that an extension of the concession will be obtained to ensure that the Tubarão Martelo field can be produced to its economic limit based on PetroRio's represented development plan. In Brazil, a concession extension is granted as determined by ANP if certain conditions are met by the company operating the concession. Based on PetroRio's representations, reserves presented herein for the Tubarão Martelo field were estimated based on the development plan provided to the economic limit as defined in the Definitions of Reserves section of this report and with one concession extension until April 19, 2066.

For the Tubarão Martelo field, the volumetric method was used to estimate the OOIP. Proved developed producing reserves were estimated using performance-based methods, primarily decline-curve analysis of oil rate production versus time trends of individual wells. Proved developed non-producing and proved undeveloped reserves were estimated to be zero. Probable undeveloped reserves were estimated for two future well locations, Pepe and Joatinga, based on analogy with historical performance of nearby wells producing from the same reservoir and considering the estimated drainage areas.

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

No gas reserves were estimated for the Tubarão Martelo field, since PetroRio has represented that there are no plans for gas sales.

Wahoo Field

The Wahoo field was discovered by a group led by Anadarko in 2009 with the drilling of the 1-APL-1 well. The Wahoo field is located in concession block BM-C-30 at a water depth of approximately 1,400 meters.

PetroRio has represented that the exploitation license was granted in 2022. PetroRio has further represented that the current concession expiration date for the BM-C-30 block is December 12, 2048. However, PetroRio has advised that it has reasonable certainty that an extension of the concession will be obtained once the Wahoo field is connected to

Frade's FPSO to ensure that the field can be produced to its economic limit based on PetroRio's represented development plan. In Brazil, a concession extension is granted as determined by ANP if certain conditions are met by the company operating the concession. Based on PetroRio's representations, reserves presented herein for the Wahoo field were estimated based on the development plan provided and to the economic limit as defined in the Definition of Reserves section of this report or the expiration date of the extension of the concession, whichever occurs first. The development plan for the Wahoo field consists of subsea infrastructure with four producers and two water injectors tied back with a multi-phase pipeline to the Frade field FPSO located approximately 35 kilometers to the south.

For the Wahoo field, the volumetric method was used to estimate the OOIP. Proved undeveloped reserves were estimated for four vertical production wells at the crest of the structure and for two vertical water injection wells based on analogy and numerical simulation. A 3-D sector model was developed for the Wahoo field undeveloped well locations to run in a black-oil simulator to aid in estimating ultimate oil recovery, potential production profiles, and recovery factors.

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

Production forecasts of the proved developed producing, proved developed, total proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves were prepared by field. These forecasts were prepared using the development plan for each field, including, as appropriate, the drilling of additional wells and the installation of new production facilities and pipelines. The sales gas reserves estimated herein are those quantities of gas forecast to be produced after the fuel requirements for the FPSOs have been met.

Table 2 presents a summary of the gross and net reserves for the Albacora Leste, Frade, Polvo, Tubarão Martelo, and Wahoo fields 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 a federal royalty rate of 10 percent for the Frade and Wahoo fields. The federal royalty rates for the Polvo, Tubarão Martelo, and Albacora Leste fields were updated in 2021 and 2022, respectively, to incur a royalty rate of 10 percent on a portion of the oil production equal to or under a field baseline oil production forecast; any additional oil production volumes in the year will have a reduced royalty rate of 5 percent. PetroRio has represented that these royalties are paid in cash.

Oil royalties are assessed on a valuation as determined by the 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 special participation fee (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. 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.

Oil Price

PetroRio provided the oil price forecasts, based on a Brent reference price of U.S.\$62.00 per barrel, for the Albacora Leste, Frade, Polvo, Tubarão Martelo, and Wahoo fields as shown in the table below, expressed in United States dollars per barrel (U.S.\$/bbl):

Year	Albacora Leste	Frade Field	Polvo and Tubarão Martelo	Wahoo Field
	Field Oil Price (U.S.\$/bbl)	Field Oil Price (U.S.\$/bbl)	Fields Oil Price (U.S.\$/bbl)	Field Oil Price (U.S.\$/bbl)
2023	58.00	58.00	56.00	61.25
2024 Forward	60.00	60.00	58.00	61.25

Gas Price

PetroRio provided the gas price forecasts for the Frade and Albacora Leste fields as shown in the table below, expressed in United States dollars per thousand cubic feet (U.S.\$/10³ft³):

Year	Frade Field Sales Gas Price (U.S.\$/10³ft³)
2023 Forward	11.33

Year	Albacora Leste Field Sales Gas Price (U.S.\$/10³ft³)
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 fields 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 for the Albacora Leste field are lower than its historical operating expenses 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 Tubarão 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 2024. PetroRio has also represented that the provided capital expenditures for the drilling, completion, and subsea tie-in operations of the undeveloped production

and injection wells in the Albacora Leste field are lower than the historical capital expenditures of the wells in the field. PetroRio has identified cost savings based on its experience in drilling deepwater wells in the analogous Frade field and based on its recent acquisition of a drilling rig that will reduce the costs of drilling new wells. Future capital expenditures, provided by PetroRio, were estimated using 2022 values and were not adjusted for inflation. 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. Abandonment costs for the Albacora Leste, Frade, Polvo, Tubarão Martelo, and Wahoo fields were included in the year following cessation of production. As represented by PetroRio, the abandonment costs associated with the Polvo field reflect the remaining balance payable to the abandonment fund.

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.

Summaries 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 by field or group of fields in Tables 3 through 7. Projections of future net revenue for the Albacora Leste, Frade, Polvo, Tubarão Martelo and Wahoo fields are presented in Tables 8 through 22.

SUMMARY and CONCLUSIONS

PetroRio has represented that it holds an interest in certain fields in Brazil evaluated herein. The estimated gross and net proved, probable, and possible reserves, as of January 1, 2023, of the properties evaluated herein are summarized as follows, expressed in thousands of barrels (10^3 bbl) and millions of cubic feet (10^6 ft³):

	Gross Reserves		Net Reserves	
	Oil (10^3bbl)	Sales Gas (10^6ft³)	Oil (10^3bbl)	Sales Gas (10^6ft³)
Proved				
Developed Producing	171,293	6,788	163,388	6,361
Developed Non-Producing	38,166	5,846	35,913	5,268
Total Proved Developed	209,459	12,634	199,301	11,629
Undeveloped	416,600	200,141	347,977	155,444
Total Proved	626,059	212,775	547,278	167,073
Probable	225,978	102,946	200,168	79,398
Proved plus Probable	852,037	315,721	747,446	246,471
Possible	256,244	60,609	224,309	51,691
Proved plus Probable plus Possible	1,108,281	376,330	971,755	298,162

Note: Probable and possible reserves have not been risk adjusted to make them comparable to proved reserves.

DEGOLYER AND MACNAUGHTON

The estimated future revenue attributable to PetroRio's interest in the proved, proved-plus-probable, and proved-plus-probable-plus-possible reserves, as of January 1, 2023, of the properties evaluated under the economic assumptions described herein is summarized as follows, expressed in thousands of United States dollars (10³U.S.\$):

	Proved Developed Producing (10³U.S.\$)	Proved Developed (10³U.S.\$)	Total Proved (10³U.S.\$)	Proved plus Probable (10³U.S.\$)	Proved plus Probable plus Possible (10³U.S.\$)
Future Gross Revenue	9,733,697	11,879,661	33,940,901	46,461,969	60,137,359
Royalties Paid in Cash	936,101	1,113,131	2,902,551	3,929,187	5,133,135
Operating Expenses	2,814,207	3,089,639	4,907,207	5,537,421	6,957,669
Capital Costs	398,500	479,188	2,617,248	2,784,856	3,012,544
Abandonment Costs	811,873	811,873	1,180,494	1,180,494	1,180,494
SPF	14,922	37,144	786,775	1,419,655	2,098,631
Future Net Revenue	4,776,719	6,368,179	21,546,627	31,610,357	41,754,886
Present Worth at 10 Percent	3,724,466	4,710,578	11,897,576	16,267,661	19,735,182

Notes:

1. Values for probable and possible reserves have not been risk adjusted to make them comparable to values for proved reserves.
2. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.

While the oil and gas industry may be subject to regulatory changes from time to time that could affect an industry participant's ability to recover its reserves, we are not aware of any such governmental actions which would restrict the recovery of the January 1, 2023, 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 3, 2023



Federico Dordoni

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

TABLE 1
LIST OF FIELDS EVALUATED
as of
JANUARY 1, 2023
for
PETRORIO S.A.
in
BRAZIL



Field	Working Interest	Concession Expiration Date	Extension of the Concession Expiration Date
Albacora Leste	90.00%	December 31, 2031	August 6, 2052
Frade	100.00%	December 31, 2041	August 6, 2052
Polvo	100.00%	December 31, 2033	July 1, 2059
Tubarão Martelo	100.00%	April 19, 2039	April 19, 2066
Wahoo	64.30%	December 12, 2048	December 12, 2075

Note: In certain cases, the estimated economic limits occur after the expiration dates of the concession agreements for the Albacora Leste, Frade, Polvo, Tubarão Martelo, and Wahoo fields. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extensions. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extensions for those fields to produce to the economic limit.

TABLE 2
SUMMARY of GROSS and NET RESERVES
as of
JANUARY 1, 2023
for
CERTAIN ASSETS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



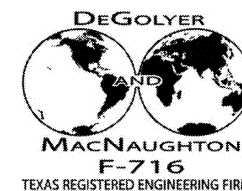
Gross Reserves												
Field	Proved Developed Producing		Proved Developed		Proved Undeveloped		Total Proved		Probable		Possible	
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)
Albacora Leste	79,044	4,277	101,576	10,051	236,271	74,826	337,847	84,877	108,350	41,487	89,306	36,760
Frade	65,266	2,511	74,235	2,583	45,838	21,075	120,073	23,658	47,201	7,121	54,810	9,162
Polvo	11,338	0	14,760	0	7,636	0	22,396	0	13,888	0	20,320	0
Tubarão Martelo	15,645	0	18,888	0	816	0	19,704	0	14,592	0	27,369	0
Wahoo	0	0	0	0	126,039	104,240	126,039	104,240	41,947	54,338	64,439	14,687
Total	171,293	6,788	209,459	12,634	416,600	200,141	626,059	212,775	225,978	102,946	256,244	60,609

Net Reserves												
Field	Proved Developed Producing		Proved Developed		Proved Undeveloped		Total Proved		Probable		Possible	
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)
Albacora Leste	71,139	3,850	91,418	9,046	212,644	67,343	304,062	76,389	97,515	37,338	80,376	33,084
Frade	65,266	2,511	74,235	2,583	45,838	21,075	120,073	23,658	47,201	7,121	54,810	9,162
Polvo	11,338	0	14,760	0	7,636	0	22,396	0	13,888	0	20,320	0
Tubarão Martelo	15,645	0	18,888	0	816	0	19,704	0	14,592	0	27,369	0
Wahoo	0	0	0	0	81,043	67,026	81,043	67,026	26,972	34,939	41,434	9,445
Total	163,388	6,361	199,301	11,629	347,977	155,444	547,278	167,073	200,168	79,398	224,309	51,691

Note: Probable and possible reserves have not been risk adjusted to make them comparable to proved reserves.

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

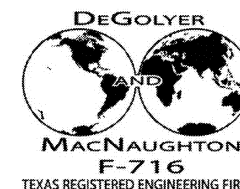
TABLE 3
SUMMARY of FUTURE NET REVENUE from PROVED DEVELOPED PRODUCING RESERVES
as of
JANUARY 1, 2023
for
CERTAIN ASSETS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Field	Future Gross Revenue (10³U.S.\$)	Royalties Paid in Cash (10³U.S.\$)	Operating Expenses (10³U.S.\$)	Capital Costs (10³U.S.\$)	Abandonment Cost (10³U.S.\$)	SPF (10³U.S.\$)	Future Net Revenue (10³U.S.\$)	Present Worth at 10 Percent (10³U.S.\$)
Albacora Leste	4,254,907	373,946	1,155,207	225,000	540,257	6,910	1,953,589	1,556,205
Frade and Wahoo	3,923,778	416,086	975,000	65,000	178,516	8,012	2,299,787	1,718,537
Polvo and Tubarão Martelo	1,555,012	146,069	684,000	108,500	93,100	0	523,343	449,724
Total	9,733,697	936,101	2,814,207	398,500	811,873	14,922	4,776,719	3,724,466
							Present Worth (10³U.S.\$) at:	
							5 Percent	4,228,953
							15 Percent	3,291,260
							20 Percent	2,928,749

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

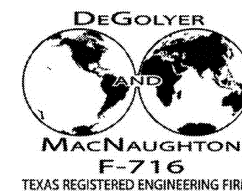
TABLE 4
SUMMARY of FUTURE NET REVENUE from PROVED DEVELOPED RESERVES
as of
JANUARY 1, 2023
for
CERTAIN ASSETS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Field	Future Gross Revenue (10³U.S.\$)	Royalties Paid in Cash (10³U.S.\$)	Operating Expenses (10³U.S.\$)	Capital Costs (10³U.S.\$)	Abandonment Cost (10³U.S.\$)	SPF (10³U.S.\$)	Future Net Revenue (10³U.S.\$)	Present Worth at 10 Percent (10³U.S.\$)
Albacora Leste	5,478,138	466,428	1,224,639	280,188	540,257	27,385	2,939,242	2,152,398
Frade and Wahoo	4,461,647	472,747	1,105,000	75,000	178,516	9,759	2,640,117	1,911,601
Polvo and Tubarão Martelo	1,939,876	173,956	760,000	124,000	93,100	0	788,820	646,579
Total	11,879,661	1,113,131	3,089,639	479,188	811,873	37,144	6,368,179	4,710,578
							Present Worth (10³U.S.\$) at:	
							5 Percent	5,469,755
							15 Percent	4,092,430
							20 Percent	3,593,640

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

TABLE 5
SUMMARY of FUTURE NET REVENUE from TOTAL PROVED RESERVES
as of
JANUARY 1, 2023
for
CERTAIN ASSETS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Field	Future Gross Revenue (10³U.S.\$)	Royalties Paid in Cash (10³U.S.\$)	Operating Expenses (10³U.S.\$)	Capital Costs (10³U.S.\$)	Abandonment Cost (10³U.S.\$)	SPF (10³U.S.\$)	Future Net Revenue (10³U.S.\$)	Present Worth at 10 Percent (10³U.S.\$)
Albacora Leste	18,346,189	1,315,736	2,266,179	1,583,512	838,148	631,044	11,711,571	5,998,389
Frade and Wahoo	13,165,210	1,385,092	1,805,028	834,236	249,246	155,731	8,735,877	5,057,548
Polvo and Tubarão Martelo	2,429,502	201,723	836,000	199,500	93,100	0	1,099,179	841,639
Total	33,940,901	2,902,551	4,907,207	2,617,248	1,180,494	786,775	21,546,627	11,897,576
							Present Worth (10³U.S.\$) at:	
							5 Percent	15,774,599
							15 Percent	9,270,608
							20 Percent	7,433,750

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

TABLE 6
SUMMARY of FUTURE NET REVENUE from PROVED-plus-PROBABLE RESERVES
as of
JANUARY 1, 2023
for
CERTAIN ASSETS
in
BRAZIL
with interests attributable to
PETRORIO S.A.

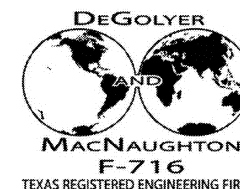


Field	Future Gross Revenue (10³U.S.\$)	Royalties Paid in Cash (10³U.S.\$)	Operating Expenses (10³U.S.\$)	Capital Costs (10³U.S.\$)	Abandonment Cost (10³U.S.\$)	SPF (10³U.S.\$)	Future Net Revenue (10³U.S.\$)	Present Worth at 10 Percent (10³U.S.\$)
Albacora Leste	24,257,266	1,720,245	2,243,139	1,583,512	838,148	1,220,159	16,652,064	7,810,613
Frade and Wahoo	18,124,075	1,884,080	2,002,282	840,844	249,246	199,496	12,948,127	7,116,279
Polvo and Tubarão Martelo	4,080,628	324,862	1,292,000	360,500	93,100	0	2,010,166	1,340,769
Total	46,461,969	3,929,187	5,537,421	2,784,856	1,180,494	1,419,655	31,610,357	16,267,661

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

Present Worth (10³U.S.\$) at:	
5 Percent	22,155,099
15 Percent	12,431,623
20 Percent	9,813,130

TABLE 7
SUMMARY of FUTURE NET REVENUE from PROVED-plus-PROBABLE-plus-POSSIBLE RESERVES
as of
JANUARY 1, 2023
for
CERTAIN ASSETS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Field	Future Gross Revenue (10³U.S.\$)	Royalties Paid in Cash (10³U.S.\$)	Operating Expenses (10³U.S.\$)	Capital Costs (10³U.S.\$)	Abandonment Cost (10³U.S.\$)	SPF (10³U.S.\$)	Future Net Revenue (10³U.S.\$)	Present Worth at 10 Percent (10³U.S.\$)
Albacora Leste	29,132,698	2,056,539	2,225,360	1,583,512	838,148	1,828,369	20,600,770	9,184,239
Frade and Wahoo	24,158,793	2,510,606	2,680,309	913,532	249,246	270,262	17,534,838	8,531,009
Polvo and Tubarão Martelo	6,845,868	565,990	2,052,000	515,500	93,100	0	3,619,278	2,019,934
Total	60,137,359	5,133,135	6,957,669	3,012,544	1,180,494	2,098,631	41,754,886	19,735,182

Note: Values for probable and possible reserves have not been risk adjusted to make them comparable to proved reserves and values for proved reserves.

Present Worth (10³U.S.\$) at:	
5 Percent	27,732,777
15 Percent	14,817,744
20 Percent	11,568,679

TABLE 8
PROJECTION of PROVED DEVELOPED PRODUCING RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
ALBACORA LESTE FIELD
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ³ ft ³)								
2023	11,271	2,259	10,144	2,033	58.00	1.82	592,066	51,127	81,000	22,500	11,700	6,910	418,829	396,998
2024	9,817	1,413	8,835	1,272	60.00	1.74	532,297	45,157	74,347	22,500	11,700	0	378,593	324,843
2025	8,417	605	7,575	545	60.00	1.67	455,444	39,427	74,347	18,000	23,400	0	300,270	233,220
2026	7,353	0	6,618	0	60.00	-	397,058	35,007	74,365	18,000	0	0	269,685	189,609
2027	6,440	0	5,797	0	60.00	-	347,791	31,024	75,139	18,000	11,700	0	211,929	134,879
2028	5,633	0	5,069	0	60.00	-	304,147	27,131	75,819	18,000	11,700	0	171,497	98,801
2029	4,986	0	4,487	0	60.00	-	269,249	24,019	76,378	18,000	0	0	150,851	78,669
2030	4,473	0	4,026	0	60.00	-	241,531	21,548	76,822	18,000	0	0	125,163	59,085
2031	4,018	0	3,616	0	60.00	-	216,977	19,356	77,216	18,000	0	0	102,404	43,760
2032	3,632	0	3,269	0	60.00	-	196,146	17,499	77,551	18,000	0	0	83,096	32,142
2033	3,268	0	2,941	0	60.00	-	176,439	15,741	77,869	18,000	0	0	64,829	22,700
2034	2,935	0	2,642	0	60.00	-	158,531	14,143	78,158	18,000	0	0	48,229	15,287
2035	2,507	0	2,256	0	60.00	-	135,374	12,079	78,521	0	0	0	44,774	12,847
2036	2,282	0	2,053	0	60.00	-	123,192	10,992	78,718	0	0	0	33,484	8,696
2037	2,012	0	1,811	0	60.00	-	108,665	9,696	78,957	0	0	0	20,012	4,705
2038	0	0	0	0	-	-	0	0	0	0	470,057	0	(470,056)	(100,036)
2039	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
2041	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
2043	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
2045	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
2047	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
2049	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
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	79,044	4,277	71,139	3,850			4,254,907	373,946	1,155,207	225,000	540,257	6,910	1,953,589	1,556,205

Notes:

1. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
2. SPF = SPECIAL PARTICIPATION FEE.
3. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
4. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³U.S.\$) at:

5 Percent	1,760,819
15 Percent	1,371,510
20 Percent	1,214,233

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

TABLE 9
PROJECTION of PROVED DEVELOPED RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
ALBACORA LESTE FIELD
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ³ ft ³)								
2023	12,546	3,022	11,292	2,720	58.00	1.82	659,871	55,743	81,000	55,962	11,700	10,483	444,983	421,788
2024	12,606	3,031	11,345	2,728	60.00	1.74	685,455	54,536	74,347	26,226	11,700	10,566	508,080	435,948
2025	10,912	2,056	9,821	1,850	60.00	1.67	592,345	48,439	74,347	18,000	23,400	6,336	421,823	327,629
2026	9,570	1,286	8,613	1,157	60.00	1.64	518,670	43,016	74,348	18,000	0	0	383,307	269,494
2027	8,429	624	7,586	562	60.00	1.62	456,063	38,381	74,347	18,000	11,700	0	313,634	199,608
2028	7,375	32	6,638	29	60.00	1.62	398,330	34,138	74,347	18,000	11,700	0	260,145	149,872
2029	6,539	0	5,884	0	60.00	-	353,081	30,675	75,019	18,000	0	0	229,387	119,625
2030	5,857	0	5,271	0	60.00	-	316,271	27,830	75,600	18,000	0	0	194,841	91,978
2031	5,244	0	4,720	0	60.00	-	283,174	25,265	76,118	18,000	0	0	163,791	69,992
2032	4,506	0	4,055	0	60.00	-	243,321	21,710	76,750	18,000	0	0	126,861	49,072
2033	4,045	0	3,641	0	60.00	-	218,449	19,491	77,156	18,000	0	0	103,803	36,346
2034	3,632	0	3,269	0	60.00	-	196,131	17,500	77,521	18,000	0	0	83,109	26,343
2035	3,130	0	2,817	0	60.00	-	168,987	15,080	77,952	18,000	0	0	57,956	16,628
2036	2,777	0	2,499	0	60.00	-	149,964	13,382	78,264	0	0	0	58,318	15,147
2037	2,392	0	2,153	0	60.00	-	129,191	11,529	78,598	0	0	0	39,064	9,184
2038	2,016	0	1,814	0	60.00	-	108,835	9,713	78,925	0	0	0	20,196	4,298
2039	0	0	0	0	-	-	0	0	0	0	470,057	0	(470,056)	(90,554)
2040	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
2042	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
2044	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
2046	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
2048	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
2050	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
2052	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
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	101,576	10,051	91,418	9,046			5,478,138	466,428	1,224,639	280,188	540,257	27,385	2,939,242	2,152,398

Notes:

- Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
- SPF = SPECIAL PARTICIPATION FEE.
- Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
- The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³U.S.\$) at:

5 Percent	2,520,011
15 Percent	1,849,946
20 Percent	1,606,228

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

TABLE 10
PROJECTION of TOTAL PROVED RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
ALBACORA LESTE FIELD
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	12,546	3,022	11,292	2,720	58.00	1.82	659,871	55,743	81,000	78,462	11,700	13,040	419,926	398,038
2024	13,949	3,741	12,553	3,367	60.00	1.74	759,057	57,763	74,347	189,540	11,700	18,241	407,465	349,617
2025	18,473	6,177	16,626	5,559	60.00	1.67	1,006,841	66,985	74,347	185,717	23,400	35,427	620,965	482,302
2026	22,675	8,135	20,408	7,321	60.00	1.64	1,236,457	75,638	74,348	196,883	0	57,430	832,160	585,073
2027	26,416	10,188	23,774	9,170	60.00	1.62	1,441,303	83,357	74,347	202,650	11,700	82,755	986,493	627,837
2028	28,765	10,831	25,889	9,748	60.00	1.62	1,569,104	87,855	74,347	212,289	11,700	96,525	1,086,389	625,878
2029	30,938	11,181	27,843	10,063	60.00	1.62	1,686,903	91,916	74,347	157,971	0	108,566	1,254,101	654,014
2030	27,156	9,229	24,441	8,305	60.00	1.61	1,479,917	81,872	74,348	18,000	0	81,953	1,223,744	577,691
2031	23,063	7,225	20,757	6,503	60.00	1.62	1,255,898	71,163	74,347	18,000	0	54,172	1,038,217	443,653
2032	19,464	5,441	17,518	4,897	60.00	1.62	1,059,025	93,538	74,347	18,000	0	33,272	839,868	324,875
2033	16,619	4,035	14,957	3,631	60.00	1.62	903,302	79,867	74,347	18,000	0	23,763	707,325	247,671
2034	14,166	2,810	12,749	2,529	60.00	1.62	769,073	68,081	74,347	18,000	0	15,914	592,730	187,873
2035	12,209	1,842	10,988	1,658	60.00	1.62	661,921	58,674	74,348	18,000	0	9,986	500,913	143,721
2036	10,407	941	9,367	847	60.00	1.62	563,398	50,025	74,347	18,000	0	0	421,027	109,350
2037	8,712	79	7,840	71	60.00	1.62	470,526	41,870	74,347	18,000	0	0	336,308	79,067
2038	7,402	0	6,662	0	60.00	-	399,746	35,581	75,204	18,000	0	0	270,961	57,665
2039	6,335	0	5,701	0	60.00	-	342,058	30,444	76,032	18,000	0	0	217,582	41,917
2040	5,196	0	4,677	0	60.00	-	280,580	24,971	76,890	18,000	0	0	160,719	28,027
2041	4,641	0	4,177	0	60.00	-	250,609	22,306	77,276	18,000	0	0	133,027	20,999
2042	4,198	0	3,778	0	60.00	-	226,707	20,181	77,581	18,000	0	0	110,946	15,853
2043	3,747	0	3,373	0	60.00	-	202,353	18,014	77,897	18,000	0	0	88,441	11,440
2044	3,406	0	3,065	0	60.00	-	183,910	16,375	78,127	18,000	0	0	71,408	8,361
2045	3,070	0	2,763	0	60.00	-	165,782	14,764	78,359	18,000	0	0	54,659	5,793
2046	2,776	0	2,498	0	60.00	-	149,915	13,351	78,568	18,000	0	0	39,997	3,838
2047	2,336	0	2,103	0	60.00	-	126,150	11,239	78,871	18,000	0	0	18,039	1,566
2048	2,142	0	1,927	0	60.00	-	115,636	10,300	79,045	18,000	0	0	8,291	652
2049	2,037	0	1,833	0	60.00	-	109,999	9,799	79,126	18,000	0	0	3,074	219
2050	1,945	0	1,751	0	60.00	-	105,041	9,356	79,199	0	0	0	16,486	1,062
2051	1,860	0	1,674	0	60.00	-	100,414	8,945	79,266	0	0	0	12,203	712
2052	1,198	0	1,078	0	60.00	-	64,693	5,763	52,877	0	0	0	6,054	319
2053	0	0	0	0	-	-	0	0	0	0	767,948	0	(767,947)	(36,694)
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	337,847	84,877	304,062	76,389			18,346,189	1,315,736	2,266,179	1,583,512	838,148	631,044	11,711,571	5,998,389

Notes:

- Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
- SPF = SPECIAL PARTICIPATION FEE.
- Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
- The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³U.S.\$) at:

5 Percent	8,299,830
15 Percent	4,471,001
20 Percent	3,436,738

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

TABLE 11
PROJECTION OF PROVED-plus-PROBABLE RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
ALBACORA LESTE FIELD
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ³ ft ³)								
2023	12,859	3,198	11,573	2,878	58.00	1.82	676,479	56,868	81,000	78,462	11,700	14,566	433,884	411,268
2024	15,221	4,444	13,699	4,000	60.00	1.74	828,891	60,827	74,347	189,540	11,700	23,960	468,516	402,000
2025	22,017	8,115	19,815	7,304	60.00	1.67	1,201,125	75,510	74,347	185,717	23,400	56,499	785,651	610,214
2026	28,320	11,135	25,488	10,021	60.00	1.64	1,545,685	89,210	74,348	196,883	0	104,437	1,080,809	759,892
2027	33,075	13,773	29,767	12,395	60.00	1.62	1,806,097	99,369	74,347	202,650	11,700	146,646	1,271,385	809,153
2028	36,479	14,794	32,832	13,315	60.00	1.62	1,991,430	106,392	74,347	212,289	11,700	181,058	1,405,643	809,802
2029	39,739	15,485	35,765	13,936	60.00	1.62	2,168,455	113,054	74,347	157,971	0	213,036	1,610,047	839,640
2030	35,031	13,082	31,528	11,774	60.00	1.61	1,910,769	100,785	74,348	18,000	0	160,119	1,557,517	735,255
2031	29,869	10,566	26,882	9,510	60.00	1.62	1,628,308	87,510	74,347	18,000	0	108,515	1,339,937	572,584
2032	25,307	8,357	22,776	7,521	60.00	1.62	1,378,762	121,609	74,347	18,000	0	71,187	1,093,617	423,030
2033	21,733	6,619	19,560	5,958	60.00	1.62	1,183,243	104,444	74,347	18,000	0	46,750	939,702	329,039
2034	18,808	5,196	16,928	4,675	60.00	1.62	1,023,225	90,395	74,347	18,000	0	33,417	807,066	255,809
2035	16,382	4,006	14,743	3,606	60.00	1.62	890,443	78,737	74,348	18,000	0	24,696	694,663	199,311
2036	14,225	2,950	12,803	2,655	60.00	1.62	772,475	68,380	74,347	18,000	0	17,216	594,532	154,413
2037	12,309	1,994	11,078	1,795	60.00	1.62	667,565	59,169	74,347	18,000	0	10,864	505,185	118,770
2038	11,142	1,437	10,027	1,293	60.00	1.62	603,749	53,566	74,347	18,000	0	7,193	450,642	95,905
2039	10,066	915	9,059	823	60.00	1.62	544,890	48,399	74,347	18,000	0	0	404,144	77,857
2040	8,838	298	7,955	268	60.00	1.62	477,704	42,500	74,348	18,000	0	0	342,857	59,789
2041	7,784	0	7,005	0	60.00	-	420,331	37,433	74,691	18,000	0	0	290,207	45,811
2042	6,541	0	5,887	0	60.00	-	353,197	31,456	75,639	18,000	0	0	228,102	32,594
2043	5,481	0	4,934	0	60.00	-	296,011	26,366	76,417	18,000	0	0	175,228	22,666
2044	5,065	0	4,558	0	60.00	-	273,506	24,365	76,711	18,000	0	0	154,429	18,082
2045	4,923	0	4,430	0	60.00	-	265,830	23,682	76,815	18,000	0	0	147,333	15,615
2046	4,501	0	4,052	0	60.00	-	243,086	21,657	77,137	18,000	0	0	126,292	12,117
2047	4,361	0	3,925	0	60.00	-	235,475	20,980	77,237	18,000	0	0	119,258	10,358
2048	4,047	0	3,642	0	60.00	-	218,525	19,474	77,437	18,000	0	0	103,614	8,145
2049	3,563	0	3,207	0	60.00	-	192,432	17,151	77,814	18,000	0	0	79,468	5,656
2050	3,357	0	3,021	0	60.00	-	181,244	16,152	77,990	0	0	0	87,102	5,611
2051	3,132	0	2,818	0	60.00	-	169,112	15,071	78,177	0	0	0	75,864	4,424
2052	2,022	0	1,820	0	60.00	-	109,222	9,734	52,171	0	0	0	47,317	2,497
2053	0	0	0	0	-	-	0	0	0	0	767,948	0	(767,947)	(36,694)
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	446,197	126,364	401,577	113,727			24,257,266	1,720,245	2,243,139	1,583,512	838,148	1,220,159	16,652,064	7,810,613

Notes:

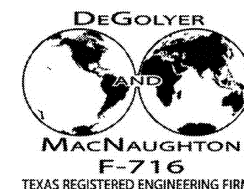
1. Probable reserves and values for probable reserves have not been risk adjusted to make them comparable to proved reserves and values for proved reserves.
2. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
3. SPF = SPECIAL PARTICIPATION FEE.
4. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
5. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³ U.S.\$) at:

5 Percent	11,147,465
15 Percent	5,709,777
20 Percent	4,328,093

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

TABLE 12
PROJECTION of PROVED-plus-PROBABLE-plus-POSSIBLE RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
ALBACORA LESTE FIELD
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	13,333	3,465	12,000	3,119	58.00	1.82	701,696	58,011	81,000	78,462	11,700	16,654	455,869	432,107
2024	16,313	5,036	14,681	4,532	60.00	1.74	889,742	63,453	74,347	189,540	11,700	28,931	520,770	446,836
2025	24,392	9,417	21,953	8,475	60.00	1.67	1,331,339	81,225	74,347	185,717	23,400	76,830	889,821	691,122
2026	32,173	13,179	28,956	11,861	60.00	1.64	1,756,753	98,474	74,348	196,883	0	142,469	1,244,580	875,036
2027	38,837	16,946	34,953	15,252	60.00	1.62	2,121,889	113,231	74,347	202,650	11,700	219,470	1,500,491	954,963
2028	42,957	18,199	38,662	16,379	60.00	1.62	2,346,190	121,965	74,347	212,289	11,700	265,936	1,659,952	956,312
2029	46,935	19,085	42,241	17,177	60.00	1.62	2,562,291	130,343	74,347	157,971	0	314,470	1,885,160	983,112
2030	41,318	16,244	37,186	14,619	60.00	1.61	2,254,840	115,889	74,348	18,000	0	238,889	1,807,715	853,364
2031	35,187	13,279	31,669	11,951	60.00	1.62	1,919,481	100,292	74,347	18,000	0	167,945	1,558,896	666,151
2032	29,882	10,728	26,893	9,655	60.00	1.62	1,629,252	143,601	74,347	18,000	0	107,387	1,285,917	497,416
2033	25,735	8,724	23,162	7,852	60.00	1.62	1,402,428	123,687	74,347	18,000	0	77,126	1,109,267	388,412
2034	22,247	7,040	20,022	6,336	60.00	1.62	1,211,562	106,929	74,347	18,000	0	52,240	960,046	304,298
2035	19,587	5,760	17,628	5,184	60.00	1.62	1,066,117	94,160	74,348	18,000	0	37,643	841,967	241,575
2036	17,180	4,580	15,462	4,122	60.00	1.62	934,391	82,595	74,347	18,000	0	28,583	730,866	189,821
2037	15,157	3,588	13,642	3,229	60.00	1.62	823,710	72,877	74,347	18,000	0	21,170	637,316	149,835
2038	13,412	2,730	12,071	2,457	60.00	1.62	728,247	64,496	74,347	18,000	0	14,985	556,418	118,416
2039	12,128	2,105	10,914	1,894	60.00	1.62	657,941	58,324	74,347	18,000	0	10,597	496,674	95,683
2040	11,039	1,573	9,936	1,416	60.00	1.62	598,419	53,097	74,348	18,000	0	7,044	445,930	77,763
2041	9,872	984	8,885	886	60.00	1.62	534,545	47,490	74,347	18,000	0	0	394,707	62,307
2042	8,846	462	7,961	415	60.00	1.62	478,318	42,553	74,347	18,000	0	0	343,418	49,072
2043	7,821	0	7,039	0	60.00	-	422,368	37,633	74,446	18,000	0	0	292,290	37,807
2044	6,898	0	6,208	0	60.00	-	372,456	33,189	75,150	18,000	0	0	246,117	28,818
2045	6,848	0	6,164	0	60.00	-	369,827	32,956	75,170	18,000	0	0	243,701	25,829
2046	6,469	0	5,821	0	60.00	-	349,312	31,132	75,431	18,000	0	0	224,749	21,563
2047	6,279	0	5,652	0	60.00	-	339,073	30,222	75,564	18,000	0	0	215,287	18,698
2048	5,892	0	5,302	0	60.00	-	318,157	28,362	75,819	18,000	0	0	195,975	15,407
2049	5,475	0	4,928	0	60.00	-	295,636	26,359	76,122	18,000	0	0	175,156	12,465
2050	5,220	0	4,697	0	60.00	-	281,868	25,132	76,327	0	0	0	180,409	11,621
2051	4,907	0	4,417	0	60.00	-	264,993	23,628	76,586	0	0	0	164,778	9,609
2052	3,164	0	2,848	0	60.00	-	170,857	15,234	51,148	0	0	0	104,475	5,515
2053	0	0	0	0	-	-	0	0	0	0	767,948	0	(767,947)	(36,694)
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	535,503	163,124	481,953	146,811			29,132,698	2,056,539	2,225,360	1,583,512	838,148	1,828,369	20,600,770	9,184,239

Notes:

1. Probable and possible reserves and values for probable and possible reserves have not been risk adjusted to make them comparable to proved reserves and values for proved reserves.
2. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
3. SPF = SPECIAL PARTICIPATION FEE.
4. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
5. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³ U.S.\$) at:

5 Percent	13,342,736
15 Percent	6,643,339
20 Percent	4,999,561

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

TABLE 13
PROJECTION of PROVED DEVELOPED PRODUCING RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
FRADE AND WAHOO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ³ ft ³)								
2023	10,346	1,452	10,346	1,452	58.00	11.33	616,519	64,573	65,000	5,000	0	8,012	492,557	466,883
2024	8,791	805	8,791	805	60.00	11.33	536,641	56,585	65,000	5,000	0	0	410,056	351,840
2025	7,459	254	7,459	254	60.00	11.33	450,358	47,957	65,000	5,000	0	0	332,401	258,175
2026	6,370	0	6,370	0	60.00	-	382,200	40,921	65,000	5,000	0	0	271,279	190,730
2027	5,461	0	5,461	0	60.00	-	327,720	35,053	65,000	5,000	0	0	222,667	141,713
2028	4,713	0	4,713	0	60.00	-	282,780	30,215	65,000	5,000	0	0	182,565	105,177
2029	4,060	0	4,060	0	60.00	-	243,600	26,001	65,000	5,000	0	0	147,599	76,973
2030	3,522	0	3,522	0	60.00	-	211,320	22,530	65,000	5,000	0	0	118,790	56,077
2031	2,967	0	2,967	0	60.00	-	178,020	18,975	65,000	5,000	0	0	89,045	38,051
2032	2,597	0	2,597	0	60.00	-	155,820	16,589	65,000	5,000	0	0	69,231	26,780
2033	2,270	0	2,270	0	60.00	-	136,200	14,483	65,000	5,000	0	0	51,717	18,109
2034	1,996	0	1,996	0	60.00	-	119,760	12,719	65,000	5,000	0	0	37,041	11,741
2035	1,762	0	1,762	0	60.00	-	105,720	11,214	65,000	5,000	0	0	24,506	7,031
2036	1,565	0	1,565	0	60.00	-	93,900	9,949	65,000	5,000	0	0	18,951	4,922
2037	1,387	0	1,387	0	60.00	-	83,220	8,322	65,000	5,000	0	0	9,898	2,327
2038	0	0	0	0	-	-	0	0	0	0	178,516	0	(178,516)	(37,992)
2039	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
2041	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
2043	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
2045	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
2047	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
2049	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
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	65,266	2,511	65,266	2,511			3,923,778	416,086	975,000	65,000	178,516	8,012	2,299,787	1,718,537

Notes:

- Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
- SPF = SPECIAL PARTICIPATION FEE.
- Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
- The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³ U.S.\$) at:

5 Percent	1,981,356
15 Percent	1,505,307
20 Percent	1,332,571

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

TABLE 14
PROJECTION of PROVED DEVELOPED RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
FRADE AND WAHOO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	10,829	1,458	10,829	1,458	58.00	11.33	644,601	67,381	65,000	5,000	0	9,759	516,953	490,007
2024	9,363	827	9,363	827	60.00	11.33	571,090	60,030	65,000	5,000	0	0	441,060	378,442
2025	7,977	298	7,977	298	60.00	11.33	482,056	51,127	65,000	5,000	0	0	360,929	280,333
2026	6,860	0	6,860	0	60.00	-	411,540	43,929	65,000	5,000	0	0	297,611	209,244
2027	5,929	0	5,929	0	60.00	-	355,740	37,949	65,000	5,000	0	0	247,791	157,703
2028	5,164	0	5,164	0	60.00	-	309,840	33,030	65,000	5,000	0	0	206,810	119,145
2029	4,493	0	4,493	0	60.00	-	269,580	28,719	65,000	5,000	0	0	170,861	89,104
2030	3,938	0	3,938	0	60.00	-	236,220	25,147	65,000	5,000	0	0	141,073	66,596
2031	3,363	0	3,363	0	60.00	-	201,840	21,488	65,000	5,000	0	0	110,352	47,156
2032	2,975	0	2,975	0	60.00	-	178,500	18,990	65,000	5,000	0	0	89,510	34,624
2033	2,627	0	2,627	0	60.00	-	157,560	16,750	65,000	5,000	0	0	70,810	24,794
2034	2,331	0	2,331	0	60.00	-	139,920	14,862	65,000	5,000	0	0	55,058	17,451
2035	2,076	0	2,076	0	60.00	-	124,560	13,221	65,000	5,000	0	0	41,339	11,861
2036	1,859	0	1,859	0	60.00	-	111,540	11,829	65,000	5,000	0	0	29,711	7,717
2037	1,659	0	1,659	0	60.00	-	99,540	10,549	65,000	5,000	0	0	18,991	4,465
2038	1,472	0	1,472	0	60.00	-	88,260	9,353	65,000	0	0	0	13,907	2,960
2039	1,320	0	1,320	0	60.00	-	79,260	8,393	65,000	0	0	0	5,867	1,130
2040	0	0	0	0	-	-	0	0	0	0	178,516	0	(178,516)	(31,131)
2041	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
2043	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
2045	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
2047	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
2049	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
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	74,235	2,583	74,235	2,583			4,461,647	472,747	1,105,000	75,000	178,516	9,759	2,640,117	1,911,601

Notes:

- Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
- SPF = SPECIAL PARTICIPATION FEE.
- Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
- The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³ U.S.\$) at:

5 Percent	2,235,114
15 Percent	1,656,559
20 Percent	1,454,756

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

TABLE 15
PROJECTION of TOTAL PROVED RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
FRADE AND WAHOO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ³ ft ³)								
2023	15,249	3,799	15,249	3,799	58.00	11.33	927,485	95,669	65,000	428,597	0	84,779	253,440	240,230
2024	25,899	11,988	22,361	9,214	60.36	11.33	1,454,105	148,331	64,755	222,787	0	40,381	977,851	839,024
2025	26,318	13,189	21,644	9,666	60.49	11.33	1,418,762	144,797	61,680	11,044	0	21,779	1,179,462	916,086
2026	23,571	13,929	19,094	9,906	60.53	11.33	1,267,995	129,720	60,755	6,608	0	8,792	1,062,120	746,752
2027	19,889	14,880	16,090	10,341	60.53	11.33	1,091,152	112,036	60,674	6,608	0	0	911,834	580,322
2028	16,552	13,581	13,432	9,357	60.52	11.33	918,859	94,807	60,863	6,608	0	0	756,581	435,872
2029	13,276	12,000	10,892	8,218	60.49	11.33	751,967	78,118	61,528	6,608	0	0	605,713	315,879
2030	11,015	10,742	9,086	7,313	60.48	11.33	632,377	66,159	61,874	6,608	0	0	497,736	234,965
2031	9,313	9,768	7,667	6,608	60.48	11.33	538,569	56,778	61,741	6,608	0	0	413,442	176,673
2032	7,984	8,004	6,579	5,407	60.48	11.33	459,098	48,831	61,795	6,608	0	0	341,864	132,239
2033	7,012	6,018	5,750	4,069	60.49	11.33	393,980	42,319	61,511	6,608	0	0	283,542	99,283
2034	6,338	4,342	5,152	2,941	60.52	11.33	345,061	37,427	60,961	6,608	0	0	240,065	76,091
2035	5,755	2,902	4,637	1,969	60.54	11.33	303,033	33,224	60,428	6,608	0	0	202,773	58,179
2036	5,339	1,738	4,253	1,182	60.57	11.33	270,996	30,021	59,749	6,608	0	0	174,618	45,352
2037	4,962	826	3,908	563	60.61	11.33	243,303	27,251	59,071	6,608	0	0	150,373	35,353
2038	4,635	192	3,607	131	60.64	11.33	220,212	24,942	58,353	6,608	0	0	130,309	27,732
2039	4,403	0	3,383	0	60.68	-	205,280	23,205	57,636	6,608	0	0	117,831	22,700
2040	4,186	0	3,172	0	60.72	-	192,543	21,642	56,815	6,608	0	0	107,478	18,743
2041	3,950	0	2,957	0	60.76	-	179,667	20,135	56,149	6,608	0	0	96,775	15,277
2042	3,739	0	2,779	0	60.78	-	168,968	18,890	55,753	6,608	0	0	87,717	12,534
2043	3,509	0	2,594	0	60.79	-	157,689	17,602	55,438	6,608	0	0	78,041	10,095
2044	3,269	0	2,401	0	60.81	-	146,005	16,279	55,088	6,608	0	0	68,030	7,966
2045	3,030	0	2,219	0	60.82	-	134,960	15,020	54,933	6,608	0	0	58,399	6,190
2046	2,795	0	2,044	0	60.83	-	124,276	13,797	54,841	6,608	0	0	49,030	4,704
2047	2,524	0	1,831	0	60.85	-	111,416	12,330	54,396	6,608	0	0	38,082	3,307
2048	2,316	0	1,671	0	60.87	-	101,775	11,231	54,138	6,608	0	0	29,798	2,343
2049	2,137	0	1,540	0	60.87	-	93,679	10,314	54,023	6,608	0	0	22,734	1,618
2050	1,976	0	1,419	0	60.88	-	86,450	9,503	53,878	6,608	0	0	16,461	1,060
2051	1,839	0	1,320	0	60.89	-	80,314	8,822	53,815	6,608	0	0	11,069	646
2052	1,721	0	1,232	0	60.89	-	75,077	8,243	53,741	0	0	0	13,093	691
2053	1,611	0	1,153	0	60.90	-	70,157	7,649	53,646	0	0	0	8,862	423
2054	0	0	0	0	-	-	0	0	0	0	249,246	0	(249,246)	(10,781)
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	246,112	127,898	201,116	90,684			13,165,210	1,385,092	1,805,028	834,236	249,246	155,731	8,735,877	5,057,548

Notes:

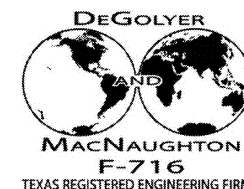
- Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
- SPF = SPECIAL PARTICIPATION FEE.
- Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
- The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³U.S.\$) at:

5 Percent	6,515,124
15 Percent	4,056,857
20 Percent	3,336,933

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

TABLE 16
PROJECTION of PROVED-plus-PROBABLE RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
FRADE AND WAHOO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	16,045	4,089	16,045	4,089	58.00	11.33	976,938	100,615	65,000	428,597	0	95,349	287,377	272,398
2024	31,778	16,294	26,542	12,110	60.44	11.33	1,741,404	177,061	62,641	222,787	0	47,675	1,231,240	1,056,440
2025	33,265	18,278	26,630	13,115	60.56	11.33	1,761,306	179,052	60,041	11,044	0	30,577	1,480,592	1,149,973
2026	30,434	18,672	24,114	13,163	60.59	11.33	1,610,265	163,947	59,427	6,608	0	17,106	1,363,177	958,419
2027	28,044	21,167	22,003	14,607	60.62	11.33	1,499,319	152,853	58,845	6,608	0	8,789	1,272,224	809,687
2028	25,420	26,608	19,845	17,985	60.63	11.33	1,406,972	143,618	58,551	6,608	0	0	1,198,195	690,290
2029	21,071	27,620	16,635	18,524	60.60	11.33	1,217,958	124,717	59,208	6,608	0	0	1,027,425	535,802
2030	16,907	20,124	13,614	13,594	60.54	11.33	978,212	100,742	60,392	6,608	0	0	810,470	382,597
2031	14,282	12,711	11,633	8,718	60.51	11.33	802,688	83,190	61,088	6,608	0	0	651,802	278,530
2032	13,028	8,284	10,580	5,772	60.52	11.33	705,699	73,491	60,907	6,608	0	0	564,693	218,433
2033	12,150	5,868	9,790	4,132	60.54	11.33	639,563	66,877	60,436	6,608	0	0	505,642	177,052
2034	11,304	4,296	9,057	3,048	60.56	11.33	582,965	61,217	60,089	6,608	0	0	455,051	144,234
2035	9,795	2,745	7,920	1,975	60.53	11.33	501,775	53,098	60,644	6,608	0	0	381,425	109,438
2036	8,101	1,442	6,688	1,057	60.48	11.33	416,527	44,574	61,924	6,608	0	0	303,421	78,805
2037	7,048	788	5,879	582	60.45	11.33	361,980	39,119	62,555	6,608	0	0	253,698	59,645
2038	6,256	371	5,255	273	60.43	11.33	320,653	34,986	63,000	6,608	0	0	216,059	45,981
2039	5,590	0	4,721	0	60.41	-	285,196	31,409	63,343	6,608	0	0	183,836	35,415
2040	5,033	0	4,272	0	60.40	-	258,029	28,388	63,669	6,608	0	0	159,364	27,791
2041	4,541	0	3,874	0	60.39	-	233,951	25,719	63,971	6,608	0	0	137,653	21,729
2042	4,128	0	3,536	0	60.38	-	213,504	23,466	64,249	6,608	0	0	119,181	17,030
2043	3,782	0	3,249	0	60.37	-	196,082	21,552	64,435	6,608	0	0	103,487	13,386
2044	3,487	0	3,003	0	60.36	-	181,261	19,920	64,588	6,608	0	0	90,145	10,555
2045	3,214	0	2,772	0	60.36	-	167,378	18,378	64,687	6,608	0	0	77,705	8,236
2046	2,994	0	2,583	0	60.36	-	155,850	17,107	64,699	6,608	0	0	67,436	6,470
2047	2,771	0	2,386	0	60.36	-	144,019	15,811	64,572	6,608	0	0	57,028	4,953
2048	2,580	0	2,197	0	60.37	-	132,573	14,564	64,359	6,608	0	0	47,042	3,698
2049	2,392	0	2,051	0	60.37	-	123,879	13,616	64,327	6,608	0	0	39,328	2,799
2050	2,247	0	1,926	0	60.38	-	116,292	12,786	64,287	6,608	0	0	32,611	2,101
2051	2,115	0	1,812	0	60.38	-	109,348	12,025	64,239	6,608	0	0	26,476	1,544
2052	1,999	0	1,710	0	60.38	-	103,310	11,363	64,178	6,608	0	0	21,161	1,117
2053	1,815	0	1,544	0	60.40	-	93,258	10,227	63,770	0	0	0	19,261	920
2054	1,664	0	1,423	0	60.38	-	85,921	8,592	64,161	0	0	0	13,168	570
2055	0	0	0	0	-	-	0	0	0	0	249,246	0	(249,246)	(9,759)
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	335,260	189,357	275,289	132,744			18,124,075	1,884,080	2,002,282	840,844	249,246	199,496	12,948,127	7,116,279

Notes:

1. Probable reserves and values for probable reserves have not been risk adjusted to make them comparable to proved reserves and values for proved reserves.
2. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
3. SPF = SPECIAL PARTICIPATION FEE.
4. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
5. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10 ³ U.S.\$) at:	
5 Percent	9,377,793
15 Percent	5,601,066
20 Percent	4,533,256

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

TABLE 17
PROJECTION of PROVED-plus-PROBABLE-plus-POSSIBLE RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
FRADE AND WAHOO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	17,367	4,607	17,367	4,607	58.00	11.33	1,059,483	108,869	65,000	428,597	0	118,683	338,334	320,699
2024	35,978	19,053	29,837	14,068	60.46	11.33	1,963,335	199,254	62,198	222,787	0	58,702	1,420,394	1,218,739
2025	38,526	22,293	30,607	15,894	60.58	11.33	2,034,190	206,194	59,583	11,044	0	40,958	1,716,411	1,333,134
2026	36,184	26,550	28,402	18,426	60.62	11.33	1,930,496	195,824	58,871	6,608	0	26,082	1,643,111	1,155,234
2027	30,645	32,524	24,261	22,105	60.59	11.33	1,720,424	174,817	59,374	6,608	0	15,741	1,463,884	931,666
2028	25,490	25,861	20,467	17,678	60.55	11.33	1,439,569	146,732	60,224	6,608	0	10,096	1,215,909	700,495
2029	22,944	18,264	18,405	12,656	60.56	11.33	1,257,999	128,575	60,163	6,608	0	0	1,062,653	554,174
2030	20,414	13,601	16,424	9,537	60.55	11.33	1,102,527	113,027	60,341	6,608	0	0	922,551	435,507
2031	17,264	9,354	14,093	6,691	60.51	11.33	928,576	95,632	61,224	6,608	0	0	765,112	326,949
2032	16,101	7,094	13,087	5,140	60.52	11.33	850,201	87,795	60,960	6,608	0	0	694,838	268,775
2033	15,140	6,136	12,229	4,446	60.54	11.33	790,777	81,852	60,580	6,608	0	0	641,737	224,705
2034	14,305	5,470	11,489	3,954	60.55	11.33	740,397	76,814	60,232	6,608	0	0	596,743	189,145
2035	13,593	4,788	10,850	3,458	60.57	11.33	696,364	72,411	59,866	6,608	0	0	557,479	159,951
2036	12,934	4,218	10,271	3,043	60.58	11.33	656,755	68,450	59,559	6,608	0	0	522,138	135,611
2037	12,042	3,551	9,550	2,564	60.59	11.33	607,624	63,537	59,475	6,608	0	0	478,004	112,380
2038	10,837	2,769	8,645	2,010	60.57	11.33	546,461	57,421	59,838	6,608	0	0	422,594	89,936
2039	9,848	2,184	7,895	1,591	60.56	11.33	496,147	52,389	60,125	6,608	0	0	377,025	72,632
2040	9,103	1,754	7,316	1,280	60.55	11.33	457,425	48,517	60,273	6,608	0	0	342,027	59,645
2041	8,295	1,298	6,696	949	60.54	11.33	416,128	44,388	60,538	6,608	0	0	304,594	48,082
2042	7,345	769	5,993	567	60.51	11.33	369,060	39,681	61,198	6,608	0	0	261,573	37,377
2043	6,576	465	5,422	299	60.48	11.33	331,311	35,906	61,838	6,608	0	0	226,959	29,357
2044	6,076	359	5,033	231	60.47	11.33	306,963	33,471	62,124	6,608	0	0	204,760	23,975
2045	5,626	244	4,676	157	60.46	11.33	284,490	31,224	62,330	6,608	0	0	184,328	19,537
2046	5,255	0	4,377	0	60.45	-	264,590	29,209	62,477	6,608	0	0	166,296	15,955
2047	4,938	0	4,118	0	60.45	-	248,994	27,455	62,555	6,608	0	0	152,376	13,234
2048	4,669	0	3,898	0	60.45	-	235,574	25,964	62,601	6,608	0	0	140,401	11,038
2049	4,406	0	3,678	0	60.45	-	222,335	24,495	62,616	6,608	0	0	128,616	9,153
2050	4,184	0	3,492	0	60.45	-	211,091	23,241	62,594	6,608	0	0	118,648	7,643
2051	3,984	0	3,323	0	60.45	-	200,875	22,107	62,552	6,608	0	0	109,608	6,392
2052	3,812	0	3,176	0	60.45	-	191,989	21,121	62,491	6,608	0	0	101,769	5,372
2053	3,494	0	2,934	0	60.43	-	177,302	19,467	62,992	6,608	0	0	88,235	4,216
2054	3,244	0	2,741	0	60.41	-	165,584	18,158	63,364	6,608	0	0	77,454	3,350
2055	3,018	0	2,565	0	60.40	-	154,866	16,962	63,740	6,608	0	0	67,556	2,645
2056	2,814	0	2,406	0	60.38	-	145,335	15,898	64,135	6,608	0	0	58,694	2,080
2057	2,620	0	2,253	0	60.37	-	136,014	14,860	64,496	6,608	0	0	50,050	1,606
2058	2,447	0	2,117	0	60.35	-	127,701	13,935	64,875	6,608	0	0	42,283	1,228
2059	2,288	0	1,990	0	60.34	-	120,077	13,086	65,254	6,608	0	0	35,129	924
2060	2,145	0	1,878	0	60.32	-	113,281	12,331	65,648	6,608	0	0	28,694	683
2061	1,958	0	1,718	0	60.32	-	103,630	11,271	65,780	6,608	0	0	19,971	430
2062	1,818	0	1,601	0	60.30	-	96,540	10,488	66,062	6,608	0	0	13,382	261
2063	1,710	0	1,514	0	60.29	-	91,279	9,904	66,443	6,608	0	0	8,324	147
2064	1,611	0	1,437	0	60.28	-	86,562	9,380	66,834	0	0	0	10,348	165
2065	1,461	0	1,302	0	60.27	-	78,472	8,494	66,886	0	0	0	3,092	45
2066	0	0	0	0	-	-	0	0	0	0	249,246	0	(249,246)	(3,263)
Total	454,509	213,206	371,533	151,351			24,158,793	2,510,606	2,680,309	913,532	249,246	270,262	17,534,838	8,531,009

Notes:

1. Probable and possible reserves and values for probable and possible reserves have not been risk adjusted to make them comparable to proved reserves and values for proved reserves.
2. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
3. SPF = SPECIAL PARTICIPATION FEE.
4. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
5. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³ U.S.\$) at:

5 Percent	11,738,991
15 Percent	6,579,616
20 Percent	5,271,869

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

TABLE 18
PROJECTION of PROVED DEVELOPED PRODUCING RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
POLVO AND TUBARÃO MARTELO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	5,030	0	5,030	0	56.00	-	281,680	23,863	76,000	15,500	0	0	166,317	157,648
2024	4,330	0	4,330	0	58.00	-	251,140	22,025	76,000	15,500	0	0	137,615	118,078
2025	3,714	0	3,714	0	58.00	-	215,412	19,554	76,000	15,500	0	0	104,358	81,055
2026	3,206	0	3,206	0	58.00	-	185,948	17,451	76,000	15,500	0	0	76,997	54,135
2027	2,775	0	2,775	0	58.00	-	160,950	15,931	76,000	15,500	0	0	53,519	34,061
2028	2,414	0	2,414	0	58.00	-	140,012	14,289	76,000	15,500	0	0	34,223	19,716
2029	2,094	0	2,094	0	58.00	-	121,452	12,516	76,000	15,500	0	0	17,436	9,093
2030	1,825	0	1,825	0	58.00	-	105,908	10,911	76,000	0	0	0	18,997	8,968
2031	1,595	0	1,595	0	58.00	-	92,510	9,529	76,000	0	0	0	6,981	2,983
2032	0	0	0	0	-	-	0	0	0	0	93,100	0	(93,100)	(36,013)
2033	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2034	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2035	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2036	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2037	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
2039	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
2041	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
2043	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
2045	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
2047	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
2049	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
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	26,983	0	26,983	0			1,555,012	146,069	684,000	108,500	93,100	0	523,343	449,724

Notes:

1. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
2. SPF = SPECIAL PARTICIPATION FEE.
3. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
4. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³ U.S.\$) at:

5 Percent	486,778
15 Percent	414,443
20 Percent	381,945

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

TABLE 19
PROJECTION of PROVED DEVELOPED RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
POLVO AND TUBARÃO MARTELO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	5,825	0	5,825	0	56.00	-	326,200	26,271	76,000	15,500	0	0	208,429	197,565
2024	5,274	0	5,274	0	58.00	-	305,950	24,920	76,000	15,500	0	0	189,530	162,622
2025	4,489	0	4,489	0	58.00	-	260,362	21,740	76,000	15,500	0	0	147,122	114,269
2026	3,844	0	3,844	0	58.00	-	222,952	19,303	76,000	15,500	0	0	112,149	78,849
2027	3,304	0	3,304	0	58.00	-	191,574	17,373	76,000	15,500	0	0	82,701	52,634
2028	2,853	0	2,853	0	58.00	-	165,532	16,373	76,000	15,500	0	0	57,659	33,218
2029	2,460	0	2,460	0	58.00	-	142,622	14,545	76,000	15,500	0	0	36,577	19,075
2030	2,131	0	2,131	0	58.00	-	123,598	12,729	76,000	15,500	0	0	19,369	9,144
2031	1,851	0	1,851	0	58.00	-	107,358	11,054	76,000	0	0	0	20,304	8,676
2032	1,617	0	1,617	0	58.00	-	93,728	9,648	76,000	0	0	0	8,080	3,126
2033	0	0	0	0	-	-	0	0	0	0	93,100	0	(93,100)	(32,599)
2034	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2035	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2036	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2037	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
2039	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
2041	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
2043	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
2045	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
2047	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
2049	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
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	33,648	0	33,648	0			1,939,876	173,956	760,000	124,000	93,100	0	788,820	646,579

Notes:

1. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
2. SPF = SPECIAL PARTICIPATION FEE.
3. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
4. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³U.S.\$) at:

5 Percent	714,630
15 Percent	585,925
20 Percent	532,656

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

TABLE 20
PROJECTION of TOTAL PROVED RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
POLVO AND TUBARÃO MARTELO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ⁶ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ³ ft ³)								
2023	6,177	0	6,177	0	56.00	-	345,968	27,143	76,000	26,000	0	0	216,825	205,523
2024	5,743	0	5,743	0	58.00	-	333,094	26,095	76,000	19,500	0	0	211,499	181,472
2025	5,649	0	5,649	0	58.00	-	327,642	25,319	76,000	61,000	0	0	165,323	128,406
2026	5,060	0	5,060	0	58.00	-	293,538	22,981	76,000	15,500	0	0	179,057	125,891
2027	4,277	0	4,277	0	58.00	-	248,008	20,181	76,000	15,500	0	0	136,327	86,763
2028	3,634	0	3,634	0	58.00	-	210,830	17,805	76,000	15,500	0	0	101,525	58,489
2029	3,082	0	3,082	0	58.00	-	178,756	15,830	76,000	15,500	0	0	71,426	37,249
2030	2,630	0	2,630	0	58.00	-	152,482	13,972	76,000	15,500	0	0	47,010	22,192
2031	2,250	0	2,250	0	58.00	-	130,500	12,225	76,000	15,500	0	0	26,775	11,442
2032	1,936	0	1,936	0	58.00	-	112,288	10,748	76,000	0	0	0	25,540	9,879
2033	1,662	0	1,662	0	58.00	-	96,396	9,424	76,000	0	0	0	10,972	3,842
2034	0	0	0	0	-	-	0	0	0	0	93,100	0	(93,100)	(29,509)
2035	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2036	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2037	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
2039	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
2041	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
2043	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
2045	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
2047	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
2049	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
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	42,100	0	42,100	0			2,429,502	201,723	836,000	199,500	93,100	0	1,099,179	841,639

Notes:

1. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
2. SPF = SPECIAL PARTICIPATION FEE.
3. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
4. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³U.S.\$) at:

5 Percent	959,645
15 Percent	742,750
20 Percent	660,079

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

TABLE 21
PROJECTION of PROVED-plus-PROBABLE RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
POLVO AND TUBARÃO MARTELO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ⁶ ft ³)								
2023	6,564	0	6,564	0	56.00	-	367,584	28,462	76,000	26,000	0	0	237,122	224,762
2024	6,321	0	6,321	0	58.00	-	366,618	27,968	76,000	19,500	0	0	243,150	208,630
2025	7,388	0	7,388	0	58.00	-	428,562	30,400	76,000	129,000	0	0	193,162	150,029
2026	7,218	0	7,218	0	58.00	-	418,586	29,234	76,000	15,500	0	0	297,852	209,413
2027	6,307	0	6,307	0	58.00	-	365,864	26,303	76,000	15,500	0	0	248,061	157,875
2028	5,541	0	5,541	0	58.00	-	321,378	23,435	76,000	15,500	0	0	206,443	118,934
2029	4,853	0	4,853	0	58.00	-	281,474	21,103	76,000	15,500	0	0	168,871	88,066
2030	4,273	0	4,273	0	58.00	-	247,834	19,090	76,000	15,500	0	0	137,244	64,789
2031	3,770	0	3,770	0	58.00	-	218,660	17,291	76,000	15,500	0	0	109,869	46,950
2032	3,343	0	3,343	0	58.00	-	193,894	15,731	76,000	15,500	0	0	86,663	33,523
2033	2,954	0	2,954	0	58.00	-	171,332	14,076	76,000	15,500	0	0	65,756	23,025
2034	2,623	0	2,623	0	58.00	-	152,134	12,624	76,000	15,500	0	0	45,010	14,267
2035	2,334	0	2,334	0	58.00	-	135,372	13,902	76,000	15,500	0	0	29,970	8,599
2036	2,085	0	2,085	0	58.00	-	120,988	12,425	76,000	15,500	0	0	17,063	4,432
2037	1,857	0	1,857	0	58.00	-	107,706	11,061	76,000	15,500	0	0	5,145	1,210
2038	1,661	0	1,661	0	58.00	-	96,338	9,893	76,000	0	0	0	10,445	2,223
2039	1,488	0	1,488	0	58.00	-	86,304	8,864	76,000	0	0	0	1,440	277
2040	0	0	0	0	-	-	0	0	0	0	93,100	0	(93,100)	(16,235)
2041	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
2043	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
2045	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
2047	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
2049	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
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	70,580	0	70,580	0			4,080,628	324,862	1,292,000	360,500	93,100	0	2,010,166	1,340,769

Notes:

1. Probable reserves and values for probable reserves have not been risk adjusted to make them comparable to proved reserves and values for proved reserves.
2. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
3. SPF = SPECIAL PARTICIPATION FEE.
4. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
5. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10 ³ U.S.\$) at:	
5 Percent	1,629,841
15 Percent	1,120,780
20 Percent	951,781

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

TABLE 22
PROJECTION of PROVED-plus-PROBABLE-plus-POSSIBLE RESERVES and FUTURE NET REVENUE
as of
JANUARY 1, 2023
for
POLVO AND TUBARÃO MARTELO FIELDS
in
BRAZIL
with interests attributable to
PETRORIO S.A.



Year	Gross Production		Net Production		Volume Weighted Average Prices		Future Gross Revenue (10 ³ U.S.\$)	Royalties Paid in Cash (10 ³ U.S.\$)	Operating Expenses (10 ³ U.S.\$)	Capital Costs (10 ³ U.S.\$)	Abandonment Cost (10 ³ U.S.\$)	SPF (10 ³ U.S.\$)	Future Net Revenue (10 ³ U.S.\$)	Present Worth at 10 Percent (10 ³ U.S.\$)
	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (10 ³ bbl)	Sales Gas (10 ⁶ ft ³)	Oil (U.S.\$/bbl)	Sales Gas (U.S.\$/10 ³ ft ³)								
2023	6,809	0	6,809	0	56.00	-	381,304	29,240	76,000	26,000	0	0	250,064	237,030
2024	6,799	0	6,799	0	58.00	-	394,342	30,191	76,000	19,500	0	0	268,651	230,510
2025	8,779	0	8,779	0	58.00	-	509,182	35,118	76,000	129,000	0	0	269,064	208,982
2026	9,077	0	9,077	0	58.00	-	526,408	35,173	76,000	15,500	0	0	399,735	281,045
2027	8,235	0	8,235	0	58.00	-	477,688	32,417	76,000	15,500	0	0	353,771	225,152
2028	7,509	0	7,509	0	58.00	-	435,522	30,459	76,000	15,500	0	0	313,563	180,646
2029	6,824	0	6,824	0	58.00	-	395,734	28,091	76,000	15,500	0	0	276,143	144,009
2030	6,230	0	6,230	0	58.00	-	361,340	26,027	76,000	15,500	0	0	243,813	115,096
2031	5,699	0	5,699	0	58.00	-	330,542	24,155	76,000	15,500	0	0	214,887	91,826
2032	5,237	0	5,237	0	58.00	-	303,688	22,823	76,000	15,500	0	0	189,365	73,250
2033	4,793	0	4,793	0	58.00	-	277,994	20,611	76,000	15,500	0	0	165,883	58,084
2034	4,408	0	4,408	0	58.00	-	255,664	26,333	76,000	15,500	0	0	137,831	43,687
2035	4,059	0	4,059	0	58.00	-	235,422	24,255	76,000	15,500	0	0	119,667	34,335
2036	3,754	0	3,754	0	58.00	-	217,732	22,438	76,000	15,500	0	0	103,794	26,958
2037	3,458	0	3,458	0	58.00	-	200,564	20,674	76,000	15,500	0	0	88,390	20,781
2038	3,199	0	3,199	0	58.00	-	185,542	19,131	76,000	15,500	0	0	74,911	15,942
2039	2,964	0	2,964	0	58.00	-	171,912	17,729	76,000	15,500	0	0	62,683	12,076
2040	2,757	0	2,757	0	58.00	-	159,906	16,496	76,000	15,500	0	0	51,910	9,052
2041	2,554	0	2,554	0	58.00	-	148,132	15,286	76,000	15,500	0	0	41,346	6,527
2042	2,375	0	2,375	0	58.00	-	137,750	14,218	76,000	15,500	0	0	32,032	4,577
2043	2,212	0	2,212	0	58.00	-	128,296	13,245	76,000	15,500	0	0	23,551	3,046
2044	2,068	0	2,068	0	58.00	-	119,944	12,386	76,000	15,500	0	0	16,058	1,880
2045	1,926	0	1,926	0	58.00	-	111,650	11,533	76,000	15,500	0	0	8,617	913
2046	1,799	0	1,799	0	58.00	-	104,400	10,440	76,000	15,500	0	0	2,460	236
2047	1,684	0	1,684	0	58.00	-	97,672	9,767	76,000	15,500	0	0	(3,595)	(312)
2048	1,581	0	1,581	0	58.00	-	91,756	9,176	76,000	0	0	0	6,580	517
2049	1,480	0	1,480	0	58.00	-	85,782	8,578	76,000	0	0	0	1,204	86
2050	0	0	0	0	-	-	0	0	0	0	93,100	0	(93,100)	(5,997)
2051	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
2053	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2054	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2055	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2056	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2057	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2058	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2059	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2060	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2061	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2062	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2063	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2064	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2065	0	0	0	0	-	-	0	0	0	0	0	0	0	0
2066	0	0	0	0	-	-	0	0	0	0	0	0	0	0
Total	118,269	0	118,269	0			6,845,868	565,990	2,052,000	515,500	93,100	0	3,619,278	2,019,934

Notes:

1. Probable and possible reserves and values for probable and possible reserves have not been risk adjusted to make them comparable to proved reserves and values for proved reserves.
2. Future social contribution taxes and corporate incomes taxes were not taken into account in the preparation of these estimates.
3. SPF = SPECIAL PARTICIPATION FEE.
4. Operating expenses and capital costs do not include the indirect taxation that may be applicable to these expenditures.
5. The estimated economic limit for the field occurs after the expiration date of the concession agreement. PetroRio has represented that it expects to meet the conditions required by the ANP to obtain the concession extension. Based on this representation, and at PetroRio's request, the reserves estimated herein considered the potential concession extension for the field.

Present Worth (10³ U.S.\$) at:

5 Percent	2,651,050
15 Percent	1,594,789
20 Percent	1,297,249

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

