

Onshore Colombia

Opportunity for entry & operatorship of two highly prospective Concessions immediately up-dip and on trend with proven - producing foreland basin plays

- **PUT-14, Putumayo basin**
- **LLA-50, Llanos Basin**

Introduction: Envoi has been commissioned by London-listed Gulfsands Petroleum Plc ("Gulfsands") to assist in its search for a partner to join in the exploration of its two prospective, 100% owned and operated, Concessions which are situated within proven producing basins, onshore Colombia. These comprise **PUT-14**, situated in the jungle of the Putumayo Basin in the south of the country and **LLA-50**, to the north in the grass and scrubland of the Llanos Basin. Both concessions are located in the under-explored margins of these proven-producing foreland basins, immediately up-dip and regionally on trend with existing fields that produce from their Cretaceous and Tertiary plays.

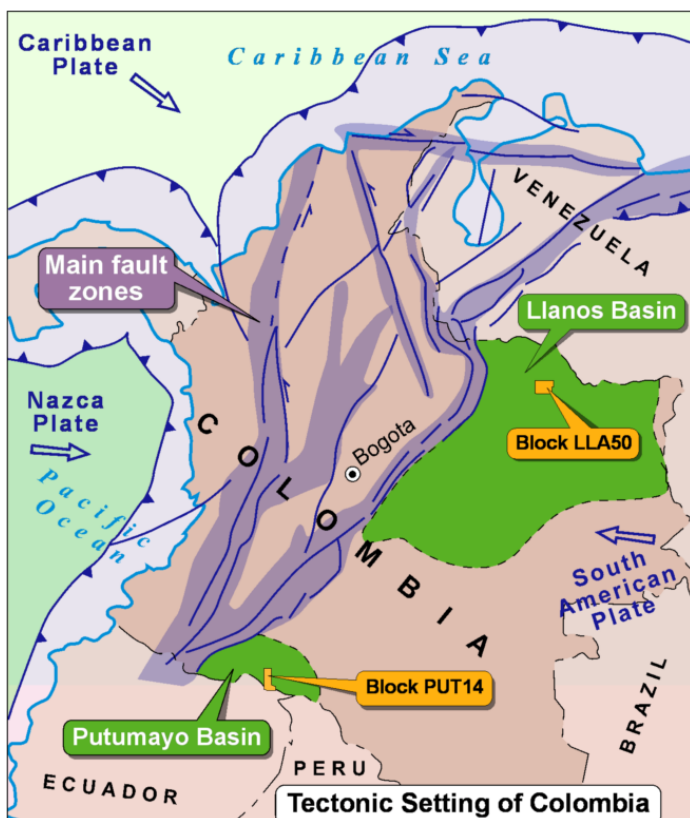
Gulfsands' work to date in each area, based on the sparse available 2D seismic data, has defined several leads including fault related closures similar to many of the existing fields. More significantly, the existing data also shows clear evidence of

several large stratigraphic leads as the stratigraphy responsible for the production in the deeper foreland area to the west thins and pinches-out eastwards on the unexplored basin margins. This is most evident in PUT-14, offering substantially bigger resource potential which also lies onstrike with analogue fields in adjacent blocks across the border in Ecuador's Oriente Basin. Modern 2D seismic infill data is now required to upgrade these leads to drillable status prior to drilling.

Gulfsands is offering a material interest in both Concessions in return for funding the forward work programmes consisting of infill 2D seismic acquisition and one subsequent exploration well in each.

Historical Overview: Colombia has a long history of oil exploration dating back to 1905, when the presence of oil seeps being used for indigenous medicinal purposes was first evident. This pre-dated the first official award of the Barco and De Mares Concessions in which these seeps are found and also the first commercial well in Colombia, drilled in 1918, which resulted in what became the giant La Cira-Infantas field. The bulk of Colombia's production today is from the many fields in the central foreland basin play areas, where the focus was on the many large elongated structural closures associated with faulting created by the Andean tectonic uplift which could be defined on the modern seismic developed in the 1980s. This led to the discovery of many fields over the last 30 years and included the massive 4 billion bbls Rubiales heavy oil field, discovered in 1981, the billion barrel Caño Limón field found in 1983 and the giant Cusiana and Cupiagua fields, both discovered in the 1990s. The geology is complex, with the large, present day inter-montagne and foreland sedimentary basins interspersed between, and in front of, major fold and thrust belts of the Andean Mountains, the result of extensive tectonics created by collision of three plates.

Gulfsands' Concessions are both located on the eastern margins of these prolific foreland basins which, although highly prospective, have remained largely unexplored updip of the prolific foreland play areas. The potential and prospectivity of these two areas is summarised by the Concession Maps below.



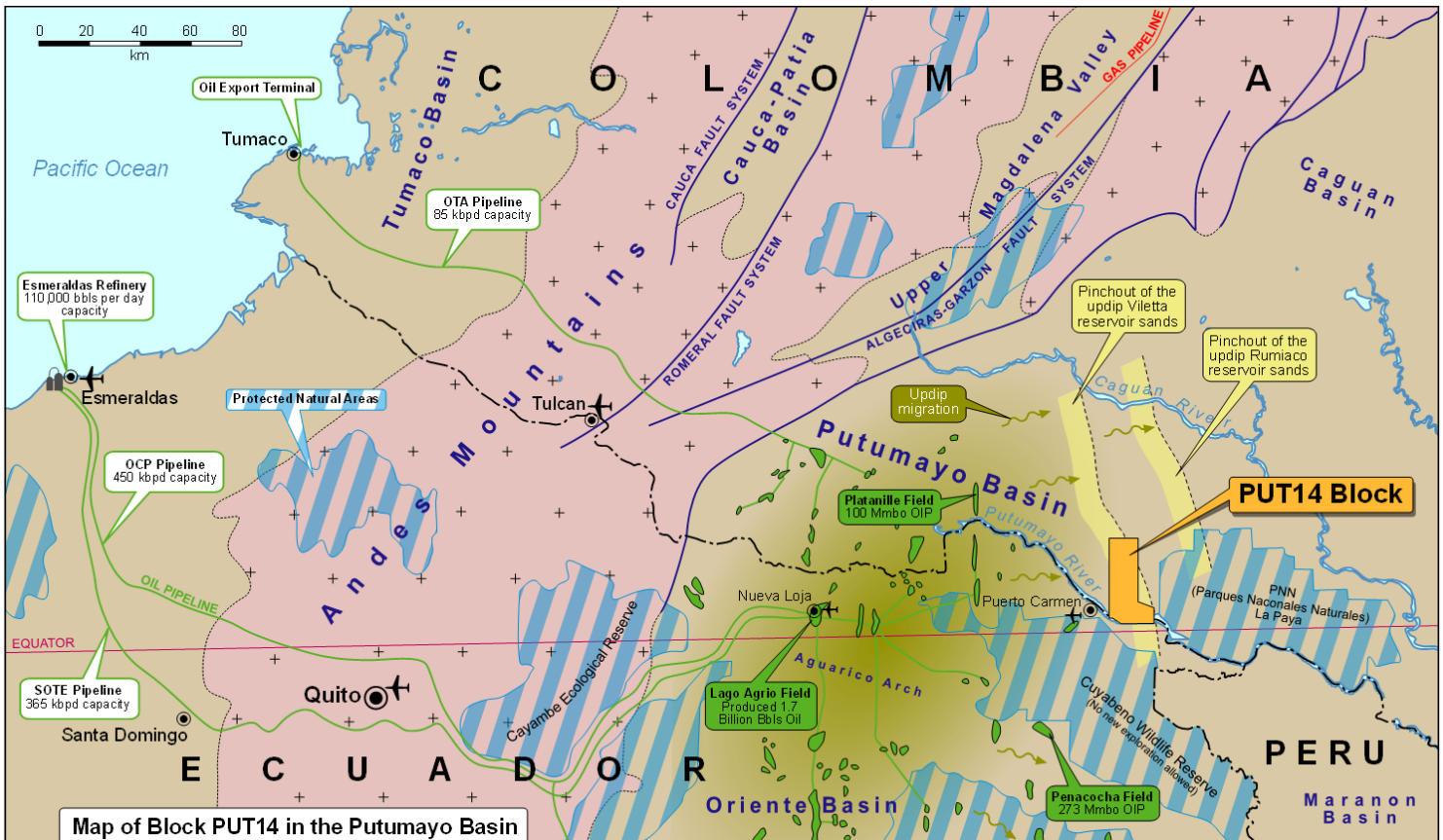
Block PUT-14, Putumayo Basin: The Putumayo Basin covers around 50,000 km² of southern Colombia, the southerly extension of which, in Ecuador, is called the Oriente Basin. The productive trend continues still further south into Peru, where it is known as the Marañon Basin. The Putumayo itself has had a varied geological history, bounded to the west by the Andean Cordillera and the Guyana-Brazilian Shield to the east. Underlain by Precambrian crystalline igneous and metamorphic strata of the Guyana Shield, the basin was initiated by rifting between the Triassic and early Cretaceous with an initial terrestrial deposition of red beds, volcanics and latterly marine sediments. This rifting had evolved by Aptian times into a northwest-facing passive margin setting, with regional deposition of the major source and reservoir rocks now evident across the extensive present-day areas of the Putumayo, Llanos and Magdalena basins in Colombia. By Campanian times, tectonic collision was causing uplift and thrusting eastwards, an early development of the present day foreland basin. More localised uplift in more recent Tertiary Miocene times was responsible for separating what are today the Upper Magdalena and Putumayo basins.

The PUT-14 area is located in the south-east part of the Putumayo basin on the border with Ecuador, in a largely unexplored, updip margin of the proven oil play fairway, where it remains close to established pipeline and oil services infrastructure associated with the proven foreland basin fields to the west, including roads and navigable rivers.

PUT-14 Exploration History: Exploration in the area began in the early 1940s, since when over 120 exploration wells have been drilled resulting in the discovery of over forty fields. These contain reserves of over 365 million bbls of

medium to light 23° to 30° API oils and 305 Bcf gas. The largest of these is the Orito field, discovered in 1963, containing over 210 MMbo recoverable. This was followed by the second largest Acae Field a few years later and latterly by the Costayaco Field, the third largest, discovered in only 2007. The southerly extension of the Putumayo into Ecuador as the Oriente Basin is also a prolific hydrocarbon province. Exploration drilling in its productive play fairway is generally considered low risk, due to the large, well-defined elongate dip closures, easily identifiable on existing 2D seismic data, which are associated with the extensive faulting parallel to the Andean uplift.

The PUT-14 block was originally awarded to Gulfsands by ANH in 2013 for a 6 year term that included two exploration phases of 3 years each. An additional 1 year was granted to Phase I in 2014. Following the discovery of an Indigenous Community within the block during the course of Phase I, the contract has recently been reset into 'Phase 0' to allow a 'Consulta Previa' with the community to take place. Following this, the contract will then move back into a Phase I Exploration Term for 3 years such that the earliest this will likely expire will be in 2021. Once Phase I does commence after an appropriate time for the 'Consulta Previa' process, the minimum exploration work programme will involve an initial infill seismic programme followed by one exploration well. Phase I can automatically be followed by an additional three years in Phase II that would require additional work obligations. Gulfsands have commenced the Consulta Previa, and are completing G&G studies required to plan the infill seismic programme that will allow more accurate mapping of the prospects and selection of suitable drilling locations required to complete Phase I.



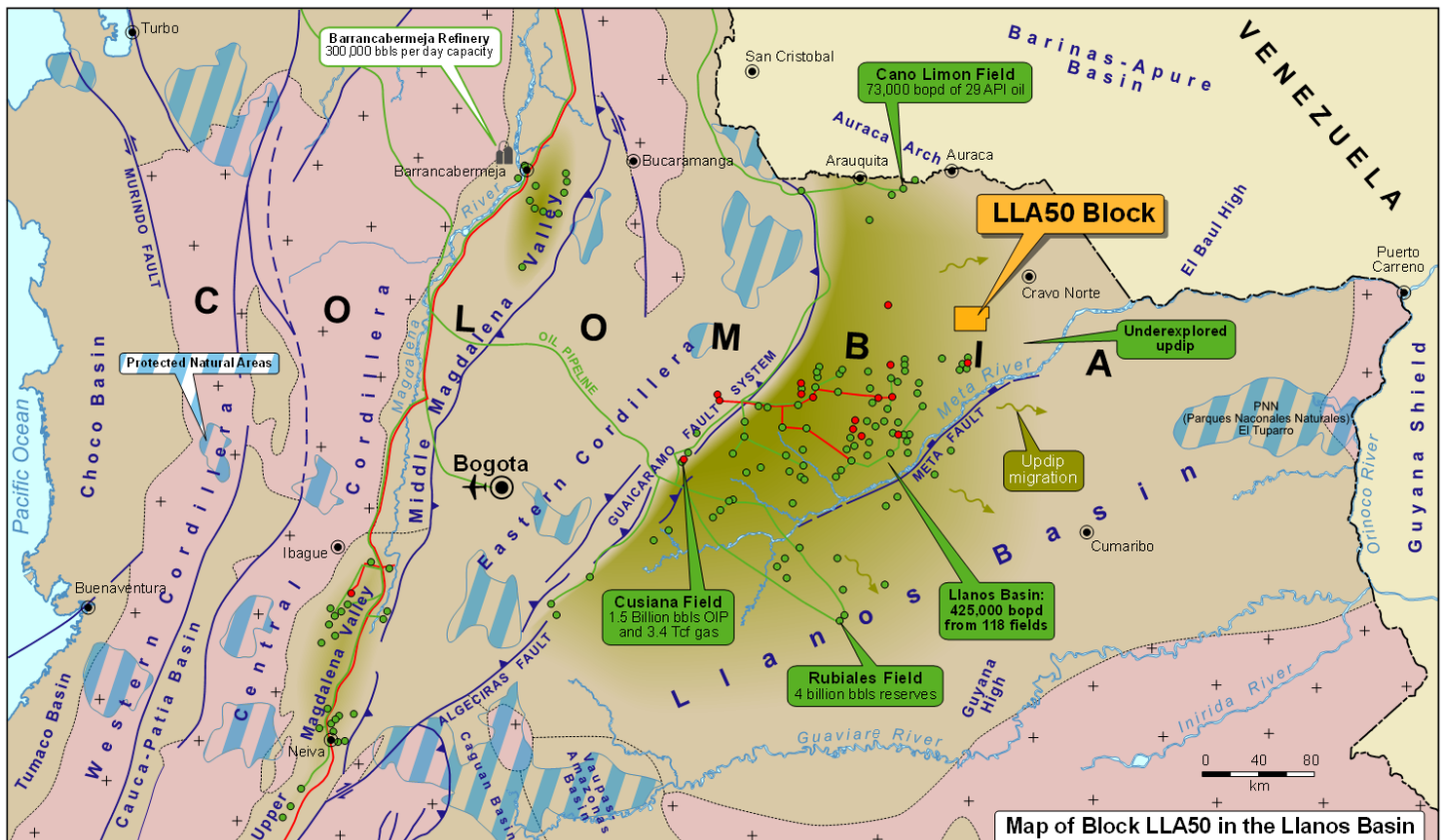
PUT-14 Potential: Situated on the south-eastern flank of the Putumayo Basin the PUT14 Concession lies adjacent to the Ecuadorian border, where Gulfsands has identified several large leads which lie on the unexplored flanks of the foreland, immediately updip of the proven foreland plays to the west in the foreland depocentre and onstrike to the south in Ecuador. Although the PUT-14 leads have been defined on older pre-existing 1980s seismic, which has a sparse ~10 km grid, the data is surprisingly good and clearly shows several fault closed anticlines and potentially large pinch-out leads as the proven plays thin eastwards onto the flanks of the basin. The fault-related anticlines are direct analogues to most of the producing fields to the west, but the more significant, largely undrilled, stratigraphic potential is formed as the primary proven play targets progressively thin and pinch-out eastwards in the PUT-14 acreage, where they can still be sourced by the proven source kitchen to the west. Onstrike to the south in Ecuador are multiple faulted structural and stratigraphic traps including the Vinita field, which contains an estimated 94 MMbo in place down dip 12km away.

The primary play objectives in both the structural and stratigraphic leads in PUT-14 are Cretaceous sandstones in the Villeta Formation, with secondary Eocene sandstone potential in the Pepino and Paleocene Rumiaco formations. These have all been sourced from the west by regionally prolific mature shales interbedded with the sands in the Villeta and Caballos formations. With no barriers to the easterly migration of hydrocarbons out of the foreland onto the basin flanks, PUT-14 is perfectly placed for large stratigraphic play potential. This is also highlighted by concurrent activity of other exploration players immediately to the north of the PUT-14 acreage exploring the same play.

One of the pinchout leads mapped on the existing data in PUT-14 has an estimated recoverable resource potential of 78 MMbbls net to PUT-14 although this is considered conservative, based on the reliance on too few existing seismic lines to delineate an accurate closure size. A second mapped pinchout lead that is shared with the Terecay block to the north is estimated by Amerisur to contain 127 mmbbl recoverable resource, with approximately 20% on PUT-14. Other stratigraphic traps are evident but need new infill data to ensure they can be mapped. Their potential is evident, however, from main foreland play trend to the west which contains numerous producing analogue fields down-dip of PU-T14. These include the 100 MMbo OIP in the structurally closed Planatillo field and the 126 MMbo OIP in the stratigraphically trapped Cohembi field.

Planned PUT-14 Work Programme: Gulfsands is planning a 150 km infill 2D seismic programme which is more than the 98 km required by their minimum obligation, but will more accurately define the closures mapped on the existing data and ensure the leads can be upgraded to drillable status. Subsequent exploration drilling of one exploration well would fulfil all the work obligations of the initial Phase I exploration term for PUT-14 ahead of its expected expiry in mid-2021, pending licence extension approval. The combined gross cost of the planned infill 2D seismic and one subsequent exploration well is estimated likely to cost US\$ 16 million.

Block LLA-50, Llanos Basin: The 514 km² LLA-50 Concession is situated on the under-explored eastern margin of the Llanos Basin, which is the largest sedimentary basin of Colombia, covering some 200,000 km² of the northern part of



the country. Bounded by the Guyana Shield to the east and main Cordillera of the Andes to the west, this foreland basin has had a complex multi-phase tectonic history, evolving in front of the Eastern Cordillera uplift of the Andes from the Late Paleogene to recent times. Beginning life as a failed rift in a relatively shallow epicontinental Palaeozoic sea, the resulting graben filled with largely undifferentiated Palaeozoic clastic sediments onto Pre-Cambrian crystalline basement. The deposition of relatively undocumented Permian-Carboniferous sediments was followed by continental red beds in the Triassic and subsequent Jurassic sediments in a back-arc extensional environment. A marine transgression in the early Cretaceous is marked by a regional unconformity. This evolved with regional basin sag during the late Cretaceous and Tertiary times, leading to shallow marine and littoral, fluvio-deltaic sedimentation. Today this stratigraphy contains the basin's primary source, reservoirs and seals.

The basin's resulting prospectivity today can be subdivided into two distinct hydrocarbon zones, separated by the major Meta shear fault zone. This divides the lighter oil plays to the northwest, in which the LLA-50 Concession is situated, from the predominantly heavy oil plays to the southeast, which contain the 4 billion barrel Rubiales Field.

LLA-50 Exploration History: The Eastern Llanos Basin contains some of most important plays in Colombia as it is responsible for about two thirds of the country's production, producing some 425,000 bopd from a total of 118 fields. The majority of these lie on the western side of the basin where structured immediately in front of the Andes and closures are easy to map on modern seismic. By comparison, the eastern side of the basin is relatively unexplored, with a few exceptions, such as the large Rubiales field which produces over 160,000 bopd in the eastern part of the heavy oil plays to the south. The regional data clearly suggests the undiscovered hydrocarbon potential on the under-explored eastern flanks of the basin, including LLA-50, which is situated between the giant Caño Limon field 100 km to the north and a small complex of existing La Cuerva fields onstrike 30 km to the south.

The Stella-1 well, drilled by Intercol in 1986, is the only existing well in the Concession itself. Block LLA 50 was awarded 100% to Gulfsands by ANH in 2013 for a total of 6 years, comprising two 3 year exploration terms. An 18 month extension has been granted to Phase I, taking its expiry to May 2018.

LLA-50 Potential: Similar to Gulfsands PUT-14 Concession in the Putamayo Basin, their LLA-50 Concession is located east and updip from the most explored part of the proven producing Llanos foreland play trend, where these prolific plays remain. Geochemical modelling further indicates that phases of overthrusting by the Andean foothills created multiple phases of oil generation from source rocks containing over 1% TOC. Migration within the basin is also believed to be assisted by the Palaeozoic topography and by conduits created by shear movement by the Meta Fault zone.

Although the Stella-1 well within the LLA-50 Concession is not reported to have encountered any hydrocarbons, it did confirm the presence and quality of reservoir, but the present day interpretation shows it was not drilled on any valid closure in the north western part of the acreage. The existing 2D data over the rest of LLA-50, acquired in the 1980s and albeit very sparse, has enabled Gulfsands to define several prospective fault associated leads although only on one or two existing lines in some cases. These shallow faulted leads which have been able to be defined are interpreted as exhibiting similar traps, some including drapes, with stacked sands vertically juxtaposed against seals within the primary Paleogene Carbonera formation. Regionally developed intra-formational shales are expected to act as efficient seals within the Carbonera formation itself.

One of the faulted leads identified by Gulfsands has potential for an estimated 16 MMbo recoverable, which new scoping economics show even a modest resource is capable of generating a post-tax NPV10 of US\$ 185 million. Some stratigraphic potential has also been identified as the stacked fluvio-deltaic sands pinch-out eastwards, although the existing seismic, albeit reasonable quality data, is simply too sparse (up to 10 km apart) to define this potential accurately. Recognising this limitation, Gulfsands has recently commissioned the reprocessing of 170 km of this old data.

Planned LLA-50 Work Programme: Similar to PUT-14, the current reprocessing and planned new 160 km 2D infill seismic programme is expected to upgrade at least one of the existing leads to drillable prospect status and allow suitable drilling locations to be defined. One exploration well would then fulfil the work obligations for the current exploration term which is due to expire in May 2018. The company is in dialogue with ANH regarding further extensions to allow completion of the work programme in LLA50 too, which in any event has already commenced with seismic and drilling environmental studies.

The combined gross cost of the planned infill 2D seismic and one exploration well is currently estimated to be US\$ 15.3 million and will fulfil the first term's minimum work obligations.

Offer: Gulfsands is offering a material interest in one or both Concessions in return for funding at least the minimum forward work programme obligations in each concession involving the acquisition of infill 2D seismic and one subsequent exploration well in each block. This is estimated likely to cost a combined US\$ 31.6 million for participation in both Concessions.

It is anticipated that an incoming party would want to take over operatorship, which is possible once the appropriate qualifications have been fulfilled and after reimbursement of the work programme guarantees for each concession. Combined, these total US\$ 3.3 million, which is being held as collateral towards the minimum work commitments. This would be released once the work programmes have been completed.

Further Information: Access to the key data on this opportunity can be made available after execution of a Confidentiality Agreement (CA). Serious parties will be invited to Gulfsands' office in London or Bogota (Colombia), for detailed project reviews and discussions.

All expressions of interest and requests for information should be made through Envoi.

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