



## **TOUCHSTONE ANNOUNCES ORTOIRE INDEPENDENT PROSPECT EVALUATION**

Calgary, Alberta – January 17, 2019 – Touchstone Exploration Inc. ("Touchstone" or the "Company") (TSX / LSE: TXP) announces a summary of the results of an independent review prepared by GLJ Petroleum Consultants Ltd. ("GLJ") of Calgary, Alberta dated January 16, 2019 of the Company's Ortoire exploration block (the "Prospect Evaluation") located onshore in the Republic of Trinidad and Tobago ("Trinidad").

The Company engaged GLJ to review each of the internally identified onshore Trinidad exploration prospects on the Ortoire exploration block and to provide an independent Prospect Evaluation in accordance with definitions, standards and procedures contained in the Canadian Oil and Gas Evaluation Handbook ("COGEH") and National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* ("NI 51-101"). Touchstone has an 80% working interest in the Ortoire block.

The Prospect Evaluation includes an estimate of the Company's Risked and Unrisked Recoverable Volumes and the net present value of future net revenue of its Contingent Resources and Prospective Resources. The Prospect Evaluation relied on several factors including existing well bores, offset producing properties and historical production tests on two of the three prospects. The Company also utilized a combination of 2D and 3D seismic data to further delineate the individual prospects. The locations target turbidite fan sequences of the Herrera formation at depths between 7,000 and 11,500 feet.

The Prospect Evaluation was performed to provide the Company with an independent assessment of the Ortoire exploration block opportunities and to assist in quantifying individual prospects. At this time, GLJ and the Company have not included the Contingent Resources and Prospective Resources identified in the Prospect Evaluation in Touchstone's Reserves Report as the exploration license governing the Ortoire block requires the Company to first declare commerciality of any discovery prior to economic production.

### **Paul R. Baay, President and Chief Executive Officer, commented:**

*"This independent prospect evaluation provides confirmation that the prospects that have been identified by the Touchstone team are of a significant size and provide an excellent opportunity for a step change in reserves, production and net asset value of the Company. Proving this geological model could be monumental for Touchstone and Trinidad as it will set up a multi year exploration and development program."*

### **Prospect Evaluation Summary**

The prospect Evaluation classifies exploration targets in either the Contingent Resources (Development Pending) or Prospective Resources (Prospect) COGEH category. Both Contingent Resources and Prospective Resources have risks associated with the Chance of Commerciality, which is defined as the product of Chance of Development and the Chance of Discovery. Contingent Resources are defined as discovered resources, due to historical production or testing, thereby carrying no Discovery Risk. Contingent Resources have risks associated with Chance of Development only. Prospective Resources are defined as undiscovered resources, with risks associated with both Chance of Development and Chance of Discovery.

GLJ's estimate of the Recoverable Volumes and Net Present Values (both Risked and Unrisked) of the Contingent Resources and Prospective Resources identified at Ortoire are set out below. In all instances, net present value of future net revenue ("Net Present Value") is calculated as at December 31, 2018 using GLJ's pricing forecasts dated January 1, 2019 and is net of estimated future royalties, development and operating costs required to fully develop each prospect and recover all Recoverable Volumes, and abandonment and reclamation costs. Operating costs have been estimated based on the Company's current structure and take in to account premiums related to bringing new volumes on stream over time.

An estimate of risked net present values of future net revenue of Contingent Resources and Prospective Resources is preliminary in nature and is provided to assist the reader in reaching an opinion on the merit and likelihood of the Company proceeding with the required investment. It includes Contingent Resources and Prospective Resources that are considered too uncertain with respect to the Chance of Development and Chance of Discovery to be classified as reserves. There is uncertainty that the risked net present value of future net revenue will be realized.

## Recoverable Volumes

### **Summary of Total Company Interest Contingent Resources (Development Pending)**<sup>(5)(6)(8)(9)(10)</sup>

The following table summarizes GLJ's estimate of the Unrisked Recoverable Volumes associated with the Company's Contingent Resources (Development Pending) including Light and Medium Oil, Residue Gas, Natural Gas Liquids, and Oil Equivalent (each as defined under NI 51-101) for the Company's Ortoire exploration prospects.

Product Type	Unrisked					
	Low Estimate <sup>(2)</sup>		Best Estimate <sup>(3)</sup>		High Estimate <sup>(4)</sup>	
	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>
Light & Medium Oil (Mbbbl)	495	396	1,180	944	2,738	2,190
Residue Gas (MMcf)	8,190	6,552	13,230	10,584	20,160	16,128
Natural Gas Liquids (Mbbbl)	109	87	368	294	874	699
Oil Equivalent (Mboe)	1,969	1,575	3,753	3,002	6,970	5,576

### **Summary of Total Company Interest Prospective Resources (Prospect)**<sup>(5)(7)(8)(9)(10)</sup>

The following is a summary of GLJ's estimate of the Unrisked Recoverable Volumes associated with the Company's Prospective Resources (Prospect) including Light and Medium Oil, Residue Gas, Natural Gas Liquids, and Oil Equivalent for the Company's Ortoire exploration prospects.

Product Type	Unrisked					
	Low Estimate <sup>(2)</sup>		Best Estimate <sup>(3)</sup>		High Estimate <sup>(4)</sup>	
	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>
Light & Medium Oil (Mbbbl)	1,980	1,584	7,800	6,240	23,460	18,768
Residue Gas (MMcf)	18,486	14,789	80,334	64,267	212,949	170,359
Natural Gas Liquids (Mbbbl)	431	345	2,313	1,850	7,554	6,043
Oil Equivalent (Mboe)	5,493	4,394	23,501	18,801	66,505	53,204

The range of Recoverable Values are a function of the uncertainty of various components used in the Prospect Evaluation including subsurface variables (i.e. thickness, porosity, fill, net to gross sand ratio, water saturation and hydrocarbon qualities) as well as recovery factors. As exploration activities move forward these variables will be better quantified.

The estimation of the magnitude of Touchstone's oil and gas prospects on the Ortoire exploration block and the potential commerciality of these prospects is in the early stages of exploration and appraisal. There are a number of positive and negative factors which GLJ took in to account in determining risk and overall uncertainty. The key positive factors include:

- Touchstone has operated in Trinidad since 2010 and has sufficient drilling history and experience to be able to accurately estimate the anticipated drilling and production costs with a reasonable degree of certainty.

- There have been a number of wells drilled on the Ortoire block by prior operators. Many of these wells are documented and several have associated production or hydrocarbon indications. All of the prospects evaluated in the Prospect Evaluation have legacy wells drilled in close proximity to the identified exploration locations.
- Prospects classified as Contingent Resources (Development Pending) have legacy wells from the targeted reservoirs, which have tested significant quantities of hydrocarbons or were previously on production.
- The Company's current exploration plan includes drilling wells deeper than many of the legacy wells reviewed in the evaluation, exposing the Company to potential hydrocarbon bearing zones not observed or tested in the past.
- Touchstone's initial development plans are based solely on primary production strategies. Potential secondary and/or tertiary production schemes were not considered in the Prospect Evaluation and could result in increased future recovery factors.
- Oil and gas markets and prices in Trinidad are strong relative to many other jurisdictions and lend themselves to robust project economics. The Company has access to both existing infrastructure with reasonable investment and few obvious impediments to market.

Negative factors with respect to the estimate of resources include:

- The majority of the available offset well data available relevant to the Ortoire block prospects was obtained in the 1950s and 1960s and the technology and interpretive techniques of the time, and the data available to the Company cannot be verified absolutely.
- There is no publicly available long-term well production performance from oil and/or gas prospects in the immediate area to establish a production type curve specific to the prospect, thereby requiring use of analogue information to establish development plans and to confirm the Chance of Commerciality.
- Recovery efficiencies are uncertain given the absence of publicly available site specific long-term well production performance data on the property.
- Although petroleum activity is commonplace onshore in Trinidad, should activity levels increase, timelines may likewise increase to achieve government approvals and access development infrastructure.

On a risked basis the Chance of Commerciality is the product of the Chance of Discovery, which takes in to account the physical, subsurface risks and the Chance of Development which looks at future risks associated with bringing the prospects to market. Chance of Developments risks include legal, regulatory, market access, economics, commitment, and timing while the Chance of Discovery risks include source, migration, trap, seal, and reservoir.

**Summary of Total Company Interest Contingent Resources (Development Pending)<sup>(5)(6)(8)(9)(10)</sup>**

The following table summarizes GLJ's estimate of the Risked Recoverable Volumes associated with the Company's Contingent Resources (Development Pending) including Light and Medium Oil, Residue Gas, Natural Gas Liquids, and Oil Equivalent for the Company's Ortoire exploration prospects. For the Company's Contingent Resources, GLJ estimated the Chance of Commerciality of these targets to be 95.0%.

Product Type	Risked					
	Low Estimate <sup>(2)</sup>		Best Estimate <sup>(3)</sup>		High Estimate <sup>(4)</sup>	
	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>
Light & Medium Oil (Mbbbl)	470	376	1,121	897	2,600	2,080
Residue Gas (MMcf)	7,780	6,224	12,569	10,055	19,153	15,322
Natural Gas Liquids (Mbbbl)	104	83	371	297	830	664
Oil Equivalent (Mboe)	1,871	1,497	3,565	2,852	6,623	5,298

**Summary of Total Company Interest Prospective Resources (Prospect)<sup>(5)(7)(8)(9)(10)</sup>**

The following is a summary of GLJ's estimate of the Risked Recoverable Volumes associated with the Company's Prospective Resources (Prospect) including Light and Medium Oil, Residue Gas, Natural Gas Liquids, and Oil Equivalent for the Company's Ortoire exploration prospects. For the Company's Prospective Resources, GLJ estimated the average Chance of Commerciality of these targets to be 33.9% as the calculated product of the Chance of Development (average 95.0%) and Chance of Discovery (average 35.7%).

Product Type	Risked					
	Low Estimate <sup>(2)</sup>		Best Estimate <sup>(3)</sup>		High Estimate <sup>(4)</sup>	
	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>
Light & Medium Oil (Mbbl)	678	542	2,668	2,134	8,024	6,419
Residue Gas (MMcf)	6,250	5,000	27,184	21,747	71,895	57,516
Natural Gas Liquids (Mbbl)	146	117	783	626	2,543	2,034
Oil Equivalent (Mboe)	1,865	1,492	7,981	6,385	22,549	18,039

**Net Present Value**

**Summary of Total Company Interest Net Present Value Contingent Resources (Development Pending)<sup>(1)</sup>**

The following table summarizes GLJ's estimate of the Unrisked Net Present Value associated with the Company's Contingent Resources (Development Pending).

Net Present Values Before Income Taxes Discounted at (% per year) (\$000's)	Unrisked		
	Low Estimate <sup>(2)</sup>	Best Estimate <sup>(3)</sup>	High Estimate <sup>(4)</sup>
0%	19,615	61,287	158,627
5%	14,352	45,901	114,309
10%	10,585	35,434	86,860
15%	7,817	28,001	68,452
20%	5,736	22,540	55,405

**Summary of Total Company Interest Net Present Value Prospective Resources (Prospect)<sup>(1)</sup>**

Below is a summary of GLJ's estimate of the Unrisked Net Present Value associated with the Company's Prospective Resources (Prospect).

Net Present Values Before Income Taxes Discounted at (% per year) (\$000's)	Unrisked		
	Low Estimate <sup>(2)</sup>	Best Estimate <sup>(3)</sup>	High Estimate <sup>(4)</sup>
0%	74,045	487,947	1,712,406
5%	48,020	319,851	1,009,326
10%	31,410	219,666	649,688
15%	20,421	156,236	443,369
20%	12,940	114,176	315,803

**Summary of Total Company Interest Net Present Value Contingent Resources (Development Pending)<sup>(1)</sup>**

The following table summarizes GLJ's estimate of the Risked Net Present Value associated with the Company's Contingent Resources (Development Pending).

Net Present Values Before Income Taxes Discounted at (% per year) (\$000's)	Risked		
	Low Estimate <sup>(2)</sup>	Best Estimate <sup>(3)</sup>	High Estimate <sup>(4)</sup>
0%	18,634	58,223	150,696
5%	13,634	43,606	108,593
10%	10,056	33,662	82,517
15%	7,426	26,601	65,029
20%	5,449	21,413	52,635

**Summary of Total Company Interest Net Present Value Prospective Resources (Prospect)<sup>(1)</sup>**

The following is a summary of GLJ's estimate of the Risked Net Present Value associated with the Company's Prospective Resources (Prospect).

Net Present Values Before Income Taxes Discounted at (% per year) (\$000's)	Risked		
	Low Estimate <sup>(2)</sup>	Best Estimate <sup>(3)</sup>	High Estimate <sup>(4)</sup>
0%	25,338	166,192	582,224
5%	16,442	108,826	342,549
10%	10,765	74,656	220,087
15%	7,009	53,036	149,907
20%	4,452	38,709	106,561

**Summary of Total Company Interest Production Upside<sup>(1)(10)</sup>**

The table below summarizes the potential upside to the Company's working interest production, as estimated by GLJ on an Unrisked basis for both Contingent Resources and Prospective Resources in Barrels of Oil Equivalent:

Peak Daily Oil Production (boepd)	Low Estimate <sup>(2)</sup>	Best Estimate <sup>(3)</sup>	High Estimate <sup>(4)</sup>
Unrisked Contingent Resources	832	1,439	2,375
Unrisked Prospective Resources	2,042	8,640	16,673

For the Company's Contingent Resources and Prospective Resources, in all estimated cases GLJ forecasted the date of first commercial production to occur in late 2019. In both the Contingent Resources and Prospective Resources analysis, Recoverable Volumes have been estimated based on developed technology, and on offset wells currently depleting analogous reservoirs within the basin. The overall development strategy for the project is based upon a conceptual model generated by the independent evaluator in coordination with Touchstone.

## Summary of Total Company Interest Future Development Costs<sup>(1)</sup>

The following tables provide information regarding the development costs deducted in the estimation of the Company's future net revenue using forecast prices and costs as included in the Prospect Evaluation.

Year (\$000's)	Contingent Resources (Development Pending)		
	Low Estimate <sup>(2)</sup>	Best Estimate <sup>(3)</sup>	High Estimate <sup>(4)</sup>
2019	10,295	10,295	10,295
2020	-	-	-
2021	7,375	14,223	14,223
2022	-	-	6,813
Thereafter	-	-	-
<b>Total undiscounted</b>	<b>17,670</b>	<b>24,519</b>	<b>31,331</b>
<b>Total discounted at 10% per year</b>	<b>15,628</b>	<b>21,024</b>	<b>25,904</b>

Year (\$000's)	Prospective Resources (Prospect)		
	Low Estimate <sup>(2)</sup>	Best Estimate <sup>(3)</sup>	High Estimate <sup>(4)</sup>
2019	5,669	5,669	5,669
2020	14,770	14,770	14,770
2021	13,696	13,696	13,696
2022	21,332	21,332	21,332
Thereafter	4,386	67,514	173,688
<b>Total undiscounted</b>	<b>59,853</b>	<b>122,983</b>	<b>229,158</b>
<b>Total discounted at 10% per year</b>	<b>47,137</b>	<b>84,786</b>	<b>132,774</b>

## Summary of Pricing, Inflation and Foreign Exchange Assumptions

With respect to both Contingent Resources and Prospective Resources, the following table sets forth the benchmark reference prices, inflation and foreign exchange rates reflected in the Prospect Evaluation.

Forecast Year	Henry Hub (US\$/MMBtu) <sup>(11)</sup>	Brent Blend FOB North Sea (US\$/bbl) <sup>(11)</sup>	Inflation Rate (%/year) <sup>(12)</sup>	US\$/C\$ Exchange Rate <sup>(13)</sup>
2019	3.00	63.25	2.0	0.75
2020	3.17	68.50	2.0	0.77
2021	3.36	71.25	2.0	0.79
2022	3.51	73.00	2.0	0.81
2023	3.64	75.50	2.0	0.82
2024	3.71	78.00	2.0	0.83
2025	3.78	80.50	2.0	0.83
2026	3.86	83.41	2.0	0.83
2027	3.94	85.02	2.0	0.83
2028	4.00	86.66	2.0	0.83
Thereafter % change per year	2.0%	2.0%	Nil	Nil

## Resource Definitions

"Chance of Commerciality" is the arithmetic product of the Chance of Discovery and the Chance of Development.

"Chance of Discovery" is the estimated probability that exploration activities will confirm the existence of a significant accumulation of potentially recoverable petroleum.

"Chance of Development" is the estimated probability that, once discovered, a known accumulation will be commercially developed.

"Contingent Resources" are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not currently considered to be commercially recoverable due to one or more contingencies.

"Prospective Resources" are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both an associated chance of discovery and a chance of development.

### Footnotes

- (1) Touchstone's working interest in the Ortoire block (exploration licences and production leases) is 80%.
- (2) The low estimate is the P90 quantity. P90 means there is a 90% chance that the estimated quantity will be equaled or exceeded.
- (3) The best estimate is the P50 quantity. P50 means there is a 50% chance that the estimated quantity will be equaled or exceeded.
- (4) The high estimate is the P10 quantity. P10 means there is a 10% chance that the estimated quantity will be equaled or exceeded.
- (5) The totals are the arithmetic summation of probabilistic estimates. Arithmetic summation may produce invalid results except for the mean.
- (6) Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingencies may include factors such as economic, legal, environmental, political, and regulatory matters, or a lack of markets. It is also appropriate to classify as Contingent Resources the estimated discovered recoverable quantities associated with a project in the early evaluation stage. Contingent Resources are further classified in accordance with the level of certainty associated with the estimates and may be subclassified based on project maturity and/or characterized by their economic status. There is uncertainty that it will be commercially viable to produce any portion of the Contingent Resources.
- (7) Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both an associated Chance of Discovery and a Chance of Development. Prospective Resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be subclassified based on project maturity.

Prospective Resources have both an associated Chance of Discovery and a Chance of Development. There is no certainty that any portion of the prospective resources estimated herein will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the Prospective Resources evaluated. Estimates of the Prospective Resources should be regarded only as estimates that may change as additional information becomes available. Not only are such Prospective Resources estimates based on that information which is currently available, but such estimates are also subject to uncertainties inherent in the application of judgmental factors in interpreting such information. Prospective Resources should not be confused with those quantities that are associated with Contingent Resources or reserves due to the additional risks involved. Because of the uncertainty of commerciality and the lack of sufficient exploration drilling, the Prospective Resources estimated herein cannot be classified as Contingent Resources or reserves. The quantities that might actually be recovered, should they be discovered and developed, may differ significantly from the estimates herein.

- (8) The Contingent Resource and Prospective Resource estimates contained in the Prospect Evaluation are expressed as gross working interest resources. Working interest Contingent Resources and Prospective Resources incorporate the fraction of potential hydrocarbon pore volume which would be owned or partially owned by Touchstone, before deduction of any associated royalty burdens, following a declaration of commerciality. Recovery efficiency is applied to the Recoverable Volumes noted.
- (9) The estimation of resources quantities for a prospect is subject to both technical and commercial uncertainties and, in general, may be quoted as a range. The range of uncertainty reflects a reasonable range of estimated potentially recoverable quantities. Estimates of petroleum resources herein are expressed using the terms low estimate, best estimate, and high estimate to reflect the range of uncertainty.
- (10) Barrel of oil equivalent includes technical conversions to standardize recoverable volumes of oil, natural (residue) gas, and natural gas liquids. A BOE conversion ratio of 6 mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different than the energy equivalency of 6:1, utilizing a 6:1 conversion basis may be misleading as an indication of value.
- (11) The summary table identifies benchmark reference pricing schedules that might apply to a reporting issuer. Product sales prices will reflect these reference prices with further adjustments for quality differentials and transportation to point of sale.
- (12) Inflation rates for forecasting pricing and costs.
- (13) Exchange rates used to generate the benchmark reference prices in this table.

## **About Touchstone**

Touchstone Exploration Inc. is a Calgary based company engaged in the business of acquiring interests in petroleum and natural gas rights, and the exploration, development, production and sale of petroleum and natural gas. Touchstone is currently active in onshore properties located in the Republic of Trinidad and Tobago. The Company's common shares are traded on the Toronto Stock Exchange and the AIM market of the London Stock Exchange under the symbol "TXP".

## **Advisories**

### ***Forward-Looking Statements***

Certain information provided in this news release may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking information in this news release may include, but is not limited to, statements relating to the Company's exploration and development plans and strategies, and estimated Recoverable Volumes and Net Present Value of the Contingent Resources and Prospective Resources including the estimated total costs required to achieve commercial production, the general timeline of the project, the estimated date of first commercial production, and the recovery technology to be used in achieving commercial production. Although the Company believes that the expectations and assumptions on which the forward-looking statements are based are reasonable, undue reliance should not be placed on the forward-looking statements because the Company can give no assurance that they will prove to be correct. Because forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of factors and risks. Certain of these risks are set out in more detail in the Company's December 31, 2017 Annual Information Form dated March 26, 2018 which has been filed on SEDAR and can be accessed at [www.sedar.com](http://www.sedar.com). The forward-looking statements contained in this news release are made as of the date hereof; and except as may be required by applicable securities laws, the Company assumes no obligation to update publicly or revise



any forward-looking statements made herein or otherwise, whether as a result of new information, future events or otherwise.

Statements relating to reserves are by their nature forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions, that the resources described exist in the quantities predicted or estimated, and can be profitably produced in the future. The recovery estimates provided herein are estimates only, and there is no guarantee that the estimated resources will be recovered. Consequently, actual results may differ materially from those anticipated in the forward-looking statements.

### **Net Present Value vs. Fair Market Value**

It should not be assumed that the present worth of estimated future net revenues presented in the tables above represent the fair market value of the reserves. There is no assurance that the forecast prices and costs assumptions will be attained, and variances could be material.

### **Crude Oil Abbreviations**

boepd	barrels of oil equivalent per day
Mbbl	one thousand barrels
Mboe	one thousand barrels of oil equivalent
MMcf	one million cubic feet

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