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LARGE UNCONVENTIONAL RESOURCE IDENTIFIED AT PROJECT ICEWINE

- Recently completed Independent Resource Report by DeGolyer and MacNaughton for Project Icewine, on the prolific North Slope of Alaska, estimates potential oil in place of 8 billion barrels* (gross mean unrisked)
- Estimated recoverable oil potential of 492 million barrels* (gross mean unrisked)
- Probability of geologic success estimated at 41%
- “Best of Breed” resource concentration confirmed, highlighting excellent potential on a comparative basis to successful North American shale plays
- Conventional oil potential to be assessed at Project Icewine:
 - 3.98Bn barrels of undiscovered potential on the Central North Slope (USGS 2013)
- Tangiers has an 87.5% working interest in the Project and will be operator of 99,360 acres
- High impact 3 well drilling campaign testing unconventional and conventional targets imminent on adjacent acreage north of Project Icewine

**Cautionary Statement: The estimated quantities of petroleum that may be potentially recovered by the application of a future development project relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration, appraisal and evaluation are required to determine the existence of a significant quantity of potentially movable hydrocarbons. Prospective Resource assessments in this release were estimated using probabilistic methods in accordance with SPE-PRMS standards.*

Tangiers Petroleum Limited (“Tangiers” or the “Company”, ASX:TPT, AIM TPET) is pleased to announce the findings of an Independent Report completed by DeGolyer and MacNaughton estimating substantial resource potential at its Project Icewine (the “Project”), located on the North Slope of Alaska. A summary of the report’s findings are tabulated below.

Tangiers’ Managing Director, Dave Wall said “The Independent Report by DeGolyer and MacNaughton has resulted in net mean recoverable unconventional potential for Tangiers of 431 million barrels of oil. Tangiers believe this indicates substantial upside potential if the entire project area is productive and/or mean recovery factor is ultimately higher than that currently estimated. The validation of the exceptional resource concentration is particularly significant as this is a first order driver of well performance in successful liquids rich shale plays like the Eagle Ford and Bakken. The Company anticipates being able to provide guidance on the conventional oil potential at the Project later in the year and looks forward to insights from the imminent drilling program by Great Bear immediately to the north of our acreage.”

Table 1: INDEPENDENT ASSESSMENT OF UNCONVENTIONAL PROSPECTIVE RESOURCES

Prospect Icewine: North Slope, Alaska	Gross Estimated Unconventional Prospective Oil Resources: HRZ, Hue, Kingak & Shublik Shales (Source: DeGolyer & MacNaughton as of December 31, 2014)				
	Unrisked:				Risked: (Chance of geologic success 41 %)
Estimate (million bbl):	Low	Best	High	Mean	Risked Mean
Gross	244.3	446.4	813.2	492.5	200.3
Net to Tangiers (WI post award: 87.5%)	213.7	390.6	711.5	430.9	175.3

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HRZ SHALE MEMBER - PRIMARY OBJECTIVE HIGHLIGHTS

Project Icewine is located in a region that was subject to a unique set of geologic circumstances that have likely resulted in enhanced porosity in the HRZ shale member. This differentiates the HRZ in a positive way from other successful shale plays and is extremely significant. These circumstances are broadly described below:

- Restricted depositional environment within the Cretaceous Seaway (that extended through central North America generating many of its prolific onshore source rocks)
- Volcanic activity contributed volcanic ash and glass during the deposition of the HRZ organic shales
- Differential compaction of the organic material on a 30:1 ratio whilst the volcanic glass, due to its hardness, retained its form
- Post burial diagenesis, (alteration / dissolution), of the volcanic glass resulted in additional voids/pore space creating enhanced primary porosity in the HRZ shale

Improved overall porosity will increase the capacity for the HRZ member to retain hydrocarbons, resulting in exceptional resource concentration. This resource concentration, or oil in place per acre per foot, is highly correlative to well performance and ultimate recovery when combined with other requisite attributes for a successful shale play. Comparative resource concentration between Tangiers' primary target, the HRZ, and other successful shale plays is shown below. Significant factors of note are the exceptional porosity (estimated in the DeGolyer and MacNaughton report) and the oil in place per 640 acres. This results in a resource concentration per well that is multiples of the next best shale play in North America, based on likely well spacing. Whilst it stands to reason that the more resource that can be accessed by the well bore, the better the recovery factor, this can only be truly proven by drilling.

Table 2: Resource Concentration Driven by Exceptional Porosity

Liquids Shale Play	Net Pay (ft)	Porosity (%)	Oil In Place (MMBOE / 640 Acres)	Well Spacing (Acres)	Resource Concentration (In Place MMBOE /Well)
HRZ	173	14	60.4	80	7.54
Bakken	65	5	10.6	160	2.65
Eagle Ford	135	10	46.9	40	2.95

Shale oil plays exploit resources generated within the source rock that did not migrate and it is possible, by predictive modelling, to target the most productive part of a shale fairway – the sweetspot. Analysis of fluid composition and reservoir pressure are essential criteria in the assessment of shale, and therefore it is crucial to have a profound understanding of the source rock kinetic model coupled with the regional basin model. Tangiers' partner and project generator, has analysed substantial data over several years to validate the predictive model, which indicates that Project Icewine is in the sweetspot of the play.

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Table 3: The HRZ vs Other Successful Oil Shale Play Common Attributes

Attribute	Comment	Project Icewine
Burial History and Thermal Maturity	Needs to be volatile oil/wet gas to maximise value of hydrocarbons produced and balance optimal viscosity to increase well performance => Well data (TOC, rock-eval, vitrinite reflectance data) from wells located in and near the Project area confirm a burial history and heat flow model that indicate a depth and maximum bottom hole temperature that correlate to generating the desired ratio of high value liquids	✓
Phase	Liquids must be in gaseous phase in the reservoir to maximise flow rates => unique prospecting tool box developed by Eagle Ford early mover, and Tangiers partner, provide high confidence	✓
Source Rock / Kerogen Type	Must be oil prone – Type I or II => Icewine is organic rich, deep water marine Type II kerogen. Organic matter type also can contribute organic porosity and potentially augments storage potential within the shale	✓
Overpressure	Pressure gradient of >0.5psi/ft required to assist with lift of hydrocarbons and also increase the amount of fluid that can exist as a vapour in the reservoir => petrophysical analysis of bottom seal provided by Pebble Shale indicates >0.55psi/ft	✓
Rock Mechanics	Must be “frackable” i.e. brittle => highly brittle lithology reported in the HRZ/Hue by Great Bear wells on adjacent acreage	✓
Tectonic Setting	Continuity of reservoir => Icewine is outboard of the Brooks Range compressional complex in a structurally simple and tectonically relaxed foreland basin. The simple structuring means greater reservoir continuity and lends itself to horizontal drilling	✓
Total Organic Carbon (TOC)	Decent TOC is required but the amount of hydrogen associated with the carbon is also a critical piece of the puzzle => high TOC (up to 8%) reported in wells from the HRZ/Hue on adjacent acreage	✓

The location of the project – on a major access road, adjacent to the pipeline and only 35 miles South of Pump Station 1 – provides both year-round operational access and a direct path to market through existing infrastructure, meaning that commercialisation can occur inexpensively and quickly, on a comparative basis.

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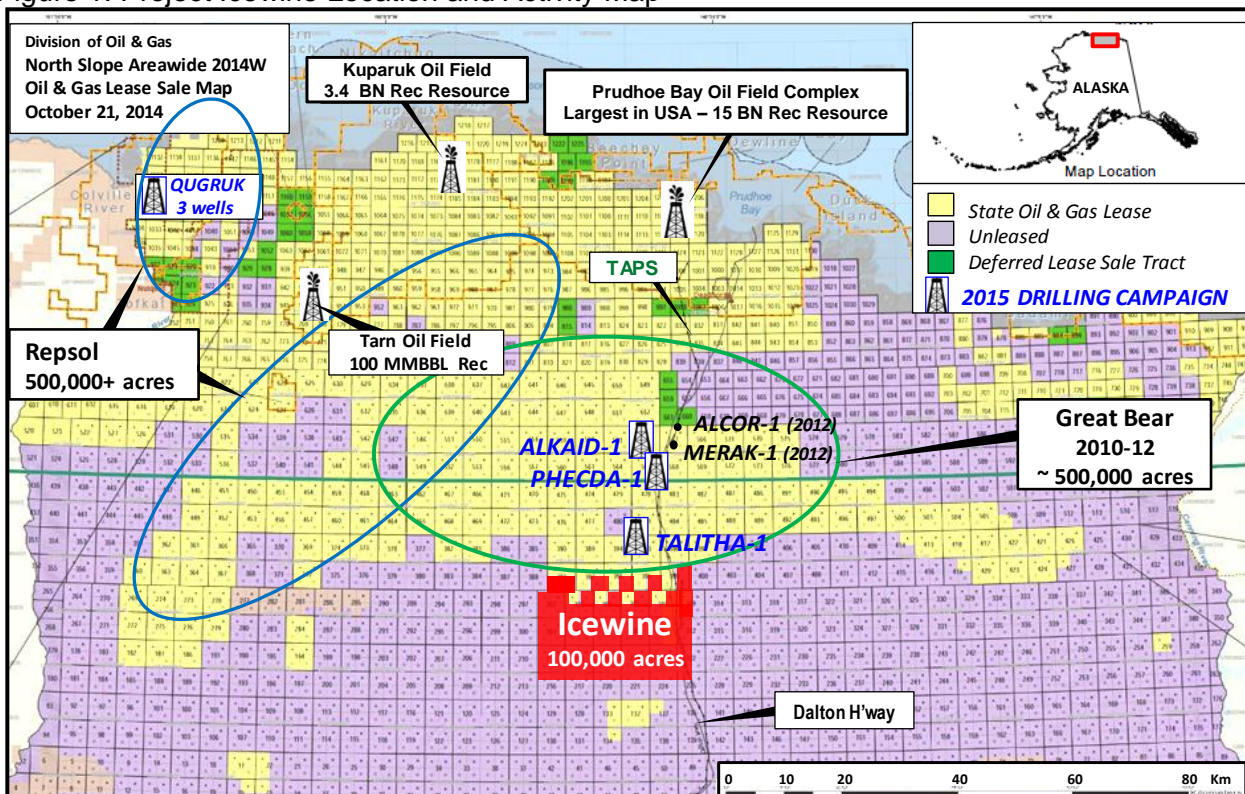
Internal analysis suggests that the full ~100,000 acre position at Project Icewine could be in the sweet spot of the play, where recovery factors of >10% have been forecast for other successful liquids rich shale plays in the USA. Drilling of a vertical core hole to underpin confirm this model analysis is planned as soon as is practical.

Table 4: HRZ Volumetrics

Prospect Icewine: HRZ Shale – Primary Objective (Source: DeGolyer & MacNaughton as of December 31, 2014)				
Monte Carlo: Probability Distribution				
Parameter	P90	P50	P10	Mean
Productive area (acres)	16,619	39,331	79,107	43,809
Thickness (ft)	132	170	218	173
Porosity (decimal)	0.115	0.140	0.166	0.141
Oil Saturation (decimal)	0.511	0.570	0.629	0.570
Fm Volume Factor, Bo	1.208	1.144	1.081	1.142
Recovery Factor (decimal)	0.025	0.058	0.101	0.061
Prospective Gross OOIP (million bbl):	1,488	3,606	7,450	4,107
Prospective Gross Ultimate Recovery (million bbl):	65.8	192.5	501.5	250.4
Prospective Ultimate Recovery net to TPT (million bbl)	57.3	168.5	438.8	219.1

PROJECT ICEWINE LOCATION AND OVERVIEW

Figure 1: Project Icewine Location and Activity Map



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Table 5: Project Icewine Highlights

Located in proven, prolific and productive petroleum province which hosts the largest oil field complex in North America

First Mover Advantage	Tangiers and partner, Burgundy Xploration, early entrants into developing unconventional shale oil play and Brookian conventional plays on the Alaskan North Slope
Two Highly Prospective Liquids Rich Plays	Unconventional Oil Play: Exceptional resource potential of 492mmbbl, HRZ primary target ticks all boxes Conventional Oil Play: 3.98 Billion Barrels of Undiscovered Recoverable Resources in the Central North Slope (USGS 2013)
Attractive Fiscal Terms	Excellent fiscal regime, politically stable 10 year primary leases with no mandatory relinquishment 12.5% State Royalty (16.5% including ORRI)
Mature Infrastructure	Operational year round access - located on Dalton Highway Trans Alaska Pipeline runs through Project Icewine with 1.5 MM BOD spare capacity
Generous Tax Incentives	Alaskan State Tax incentives on exploration drilling: <ul style="list-style-type: none"> • 85% cash refund (2015), 75% (mid 2016) thereafter 35% Mezzanine funding available based on tax incentives
Material Position	Large, contiguous ~100,000 acre position exceeds hurdle rate to attract oil majors; material 87.5% working interest & operatorship

Yours faithfully

Dave Wall
Managing Director
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The Prospective Resource estimates above have been reviewed by Mr Brent Villemarette who is a Non-Executive Director of Tangiers. Mr Villemarette is a reservoir engineer with over 30 years' experience and is a member of the Society of Petroleum Engineers. Mr Villemarette has reviewed the information and supporting documentation referred to in this announcement and considers the prospective resource estimates to be fairly represented and consents to its release in the form and context in which it appears. Terminology and standards adopted by the Society of Petroleum Engineers "Petroleum Resources Management System" have been applied in producing this document.

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