

## HIGH GAS SATURATION AND PERMEABILITY CONFIRMED

- Final adsorption analysis from Snow Leopard wells SL-02 and SL-03 indicate high gas saturation (>80%), consistent with results from SL-01
- High permeability of 56mD confirmed from the upper coal seam interval in SL-05R
- Additional results on gas composition indicate high methane (~96%) and low carbon dioxide (~2.5%) gas composition, consistent with existing data
- Gas desorption testing ongoing from SL-03R, SL-04, SL-05 and SL-05R with final gas contents expected within the next month
- Pilot Well Program progressing with initial design, engineering work and costing estimates nearing completion
- Initial Contingent Resource estimate expected to be completed by Netherland, Sewell and Associates (NSAI) within the next two weeks

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TMK Energy Limited (ASX:TMK) (“**TMK**” or the “**Company**”) is pleased to provide an update on the ongoing testing operations from the recently completed five well exploration program at the Gurvantes XXXV CSG Project in the South Gobi Basin in Mongolia.

### **Final Adsorption Analysis (SL-02 and SL-03)**

Adsorption isotherm analysis and petrography studies of coal samples from SL-02 and SL-03 have recently been completed in Australia. The adsorption isotherm analysis indicates that the coal seams are highly saturated, with gas saturation value results averaging over 80%. Gas saturation is an important parameter which impacts the production profile of wells and high gas saturation generally means gas production occurs earlier and increases the overall gas recovery. Importantly, the adsorption isotherm results from SL-02 will feed into the planning for the Pilot Well Program to be completed in the vicinity of SL-02 site and give higher confidence in the potential production profile of the Pilot Well program.

Petrography studies indicate that the coal is composed of predominantly vitrinite macerals (80% - 96%), with a vitrinite reflectance value ranging from 0.79% to 0.95% indicating a High Volatile Bituminous coal rank. The petrography studies along with the coal quality data indicate that the coal formation is in the ideal range for type, quality and rank for coal seam gas projects.

### **Final Permeability Analysis (SL-05R)**

Final results from Drill Stem Testing (DST) completed over the upper seam interval in SL-05R has confirmed excellent permeability and the highest permeability result to date within the project area with a flow capacity of 1,965mD.m and a coal permeability value of 56mD.

The permeability reading confirmed for the upper coal seam installs additional confidence that the thick upper coal seam should be productive from simple vertical production wells without the need for complex well designs or additional stimulation, reducing the overall cost of development of any resources confirmed in the upper coal seam.



## **Gas Content and Gas Composition Analysis**

Gas desorption testing is ongoing from samples from SL-03R, SL-04, SL-05, SL-05R however preliminary results indicate moderate to high gas contents (5 m<sup>3</sup>/t – 12.5 m<sup>3</sup>/t), with final gas contents expected within the next month.

Additional results on gas composition from samples from SL-03R, SL-04, SL-05 and SL-05R are consistent with previous results and indicate a high-quality gas composition with high Methane (average ~95%) and low Carbon Dioxide (average ~2.8%).

Table-1 summarises the results from the exploration program to date, all of which compare favourably with existing producing CSG fields all over the world.

***Table 1 - 2022 Exploration Drilling Results Summary***

		SL-01	SL-02	SL-03	SL-03R	SL-04	SL-05	SL-05R
Drill hole Details	Date Completed	May-22	Jun-22	Jul-22	Sep-22	Aug-22	Aug-22	Oct-22
	Total Depth (metres)	675	540	348	558	348	354	511
Coal	Net Coal Thickness (metres)	60	91	60 (Upper Seam)	175	40 (Lower Seam)	40 (Upper Seam)	69
	Top Coal Intersection (metres)	405	170	190	175	290	160	190
Gas Content	Gas Content m <sup>3</sup> /t average (as received)	13.2	9.3	9.8	7.5 - 12.5	5 - 7.5	5 - 7.5	5 - 7.5
	Gas Content average m <sup>3</sup> /t (daf basis)	15.7	10.6	11.8	In Progress	In Progress	In Progress	In Progress
Adsorption	Gas Saturation	High (>80%)	High (>80%)	High (>80%)	In Progress	In Progress	In Progress	In Progress
Gas Compositions	Methane (CH <sub>4</sub> ) % (average)	96%	97%	95%	92%	98%	97%	96%
	Carbon Dioxide (CO <sub>2</sub> ) % (average)	3.0%	1.4%	2.8%	5.5%	1.1%	0.7%	1.7%
Permeability (Upper Seam)	Flow Capacity mD.m	4.1	3,184-3,313	760-910	Not Tested	n/a	Not Tested	1,965
	Coal Permeability mD	0.1	45-47	16-19	Not Tested	n/a	Not Tested	56
Permeability (Lower Seam)	Flow Capacity mD.m	Invalid Test	0.79	n/a	Invalid Test	5.21	n/a	Invalid Test
	Coal Permeability mD	Invalid Test	0.04	n/a	Invalid Test	0.13	n/a	Invalid Test

## **Initial Contingent Resource Estimate**

Some of the analysis from the initial exploration program, in particular the adsorption data, has only recently become available and is now being integrated into the updated resource estimate which is expected to deliver a maiden contingent resource for an area in and around the initial drill hole locations (refer to Figure – 1). This work is currently underway with NSAI and is expected to be completed within the next two weeks.

With all the data now available for SL-02, it is expected that the initial Pilot Well Program will be undertaken nearby to the SL-02 location which has ideal parameters and is well located for the drilling of the planned three production wells as part of the Stage 2 program expected to be primarily funded by Talon Energy, the Company's farm-in partner.





**Figure 1 – 2022 Exploration Program Drill Hole Locations.**

For the purposes of ASX Listing Rule 15.5, the Board has authorised for this announcement to be released.

**Mr Brendan Stats, TMK Energy’s Chief Executive Officer commented:**

*“Work continues apace following completion of the initial drilling program with the focus now shifting to completion of the initial contingent resource estimate, finalisation of the engineering and design of the pilot well program and planning and approval of the 2023 exploration program.*

*At this stage, the planned 2023 program includes drilling several step out exploration wells along strike that we anticipate will continue to prove up the scale of the Project, as well as being able to demonstrate the proof of concept with gas to surface from our initial pilot well program.”*

**ABOUT TMK ENERGY LTD**

TMK Energy Limited is listed on the Australian Stock Exchange (ASX:TMK) and holds a 100% interest in the Gurvantes XXXV Coal Seam Gas Project located in the South Gobi Basin of Mongolia and a 20% interest in the Talisman Deep Project, in the Barrow-Dampier sub-Basin. TMK is led by an Australian and Mongolian team bringing together the expertise and experience to develop the Gurvantes XXXV Project.

Talon Energy Limited (ASX:TPD) is earning a 33% Working Interest in the Gurvantes Project under an existing US\$4.65 million two-stage farm-out agreement executed in February 2021. Initial funding of US\$1.5 million is allocated to the current four well drilling and testing program. The second stage of funding, being US\$3.15 million, is currently budgeted towards the pilot well program being planned for later this year, should TPD elect to proceed with the second stage of the farm-out.

TMK are committed to responsibly developing this Project into a world class producing gas field on behalf of and for the benefit of Mongolia.

For more details on the Company please visit [www.tmkenergy.com.au](http://www.tmkenergy.com.au)

**Disclaimer:** This announcement may contain forward looking statements concerning projected costs, approval timelines, construction timelines, earnings, revenue, growth, outlook or other matters (“Projections”). You should not place undue reliance on any Projections, which are based only on current expectations and the information available to TMK. The expectations reflected in such Projections are currently considered by TMK to be reasonable, but they may be affected by a range of variables that could cause actual results or trends to differ materially, including but not limited to: price and currency fluctuations, the ability to obtain reliable gas supply, gas reserve estimates, the ability to locate markets for CNG and hydrogen, fluctuations in gas and hydrogen prices, project site latent conditions, approvals and cost estimates, development progress, operating results, legislative, fiscal and regulatory developments, and economic and financial markets conditions, including availability of financing. TMK undertakes no obligation to update any Projections for events or circumstances that occur subsequent to the date of this announcement or to keep current any of the information provided, except to the extent required by law. You should consult your own advisors as to legal, tax, financial and related matters and conduct your own investigations, enquiries and analysis concerning any transaction or investment or other decision in relation to TMK. \$ refers to Australian Dollars unless otherwise indicated.