

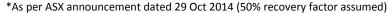
# March 2015 Quarterly Report

29 April 2015

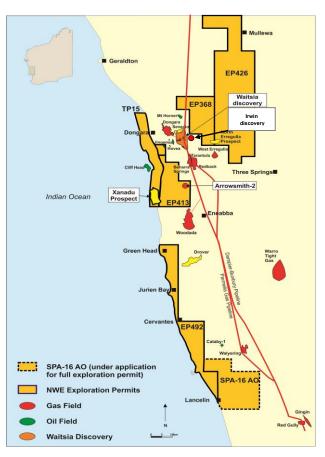
# **Highlights**

ASX: NWE

- The focus on the northern Perth Basin continues to gain momentum and Norwest is well placed to capitalise on the renaissance of the Basin and increasing investor interest.
- High equity position (100%) in 3 northern Perth Basin permits provides equity to deal and transact.
- Farm-out negotiations for TP/15 (Xanadu oil prospect) progress as third party due diligence continues.
- An active exploration and appraisal program is currently underway, including the commencement of the EP413 Arrowsmith 3D seismic program and mobilisation of equipment for the upcoming airborne geophysical survey over EP368 and EP426.
- A balanced portfolio of oil and gas prospects providing opportunity for diversity, including:
  - TP15's conventional oil prospect Xanadu with a 160mmstb un-risked prospective recoverable resource\*,
  - EP413's Arrowsmith discovery with a prospective gross recoverable resource of 2.6 Tcf of gas\*\*, and
  - EP368 and EP426 located adjacent to the AWE Waitsia and Irwin gas discoveries.
- All permits in optimal locations, with excellent access to existing infrastructure and the domestic market and a low associated cost of development.
- Recent acquisitions at the under-explored southern end of the basin present a unique and exciting opportunity.
- Reprocessing of historic 3D seismic data commences over P2265 in the Wessex Basin, southern United Kingdom.



<sup>\*\*</sup>As per ASX announcement dated 2<sup>nd</sup> August 2013



#### Contact

Norwest Energy NL Level 2, 6 Thelma Street West Perth WA 6005 PO Box 1264 West Perth WA 6872

Tel: +61 8 9227 3240 Fax: +61 8 9227 3211

Web: www.norwestenergy.com.au

Media enquiries:

info@norwestenergy.com.au

Shareholder enquiries:

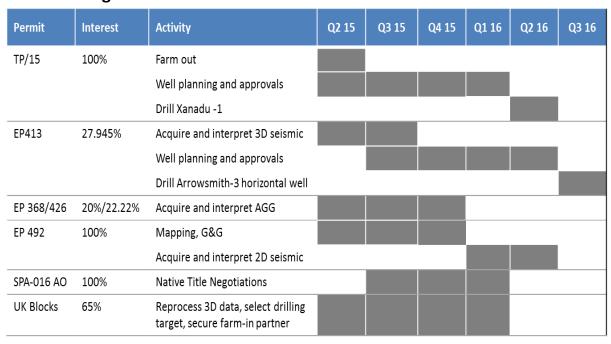
shareholder@norwestenergy.com.au

## **Petroleum Tenements – Interests**

Permit	Location	Type of Permit	Area (100%)	Norwest %	
NORTHERN PERTH BASIN					
EP368	Perth Basin, WA	Onshore	600.3 km <sup>2</sup>	20%	
EP426	Perth Basin, WA	Onshore	2360.0 km <sup>2</sup>	22.22%	
EP413	Perth Basin, WA	Onshore	508.3 km <sup>2</sup>	27.945%	
L14	Perth Basin, WA	Onshore	39.8 km²	6.278%	
TP/15	Perth Basin, WA	Offshore	645.8 km <sup>2</sup>	100%	
EP492	Perth Basin, WA	Onshore	860.0 km <sup>2</sup>	100%	
SPA-016 AO	Perth Basin, WA	Onshore	805.0 km <sup>2</sup>	100%	
TOTAL AREA NET TO NORWEST 3,100.1 KM2 (766,261.4 ACRES)					
TIMOR SEA					
AC/L6 (ROYALTY)	Vulcan Sub-Basin, NT	Offshore	252.1 km²	1.25% ORRI	
UNITED KINGDOM					
P2265	Wessex Basin, UK	Offshore	~160 km²	65%	

There have been no changes to any permits or Norwest's interests in those permits during the quarter.

## **Forward Program**



With Norwest's planned activity in the basin coupled with programs by AWE, Origin, Empire, Transerv, UIL and others, 2015 is shaping up to be the 'renaissance' of the northern Perth Basin, with Norwest an active participant holding some of the most prospective acreage

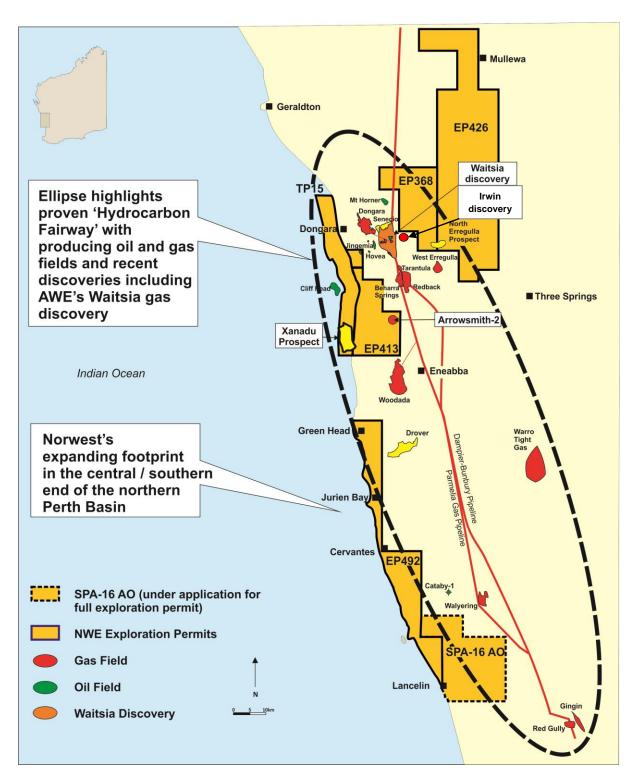


Figure 1. NWE tenements

# **Australian Exploration Program**

## **TP/15**

## (Norwest 100%)

During the quarter, Norwest continued to progress discussions with a third party to agree on the terms and conditions under which the party may earn an interest in TP/15. To date, the party has conducted preliminary due diligence on the permit, with negotiations and further due diligence continuing subsequent to quarter end.

Also during this period, retrieval and mapping of additional 2D marine seismic data was undertaken to provide a more comprehensive interpretation of the structure and charge history for the Xanadu oil prospect.

#### The Permit

TP/15 is situated approximately 250 kilometres north of Perth, and occupies the three nautical mile wide state territorial waters of Western Australia, adjacent to the township of Port Denison. It covers an area of 645.8 km² and is ideally situated within a proven hydrocarbon "fairway", with a number of oil and gas discoveries and producing fields such as Cliff Head in the near vicinity. (Refer to Figure 2 below).

As detailed in the ASX Announcement dated 29<sup>th</sup> October 2014, TP/15 contains a number of conventional oil plays, with primary prospect Xanadu having an un-risked prospective recoverable resource of 160mmbbls (best estimate).

Norwest has commenced the planning phase for the drilling of Xanadu, located at the southern end of the TP/15 permit. Recent independent interpretation, which took into account lessons learnt from other wells drilled within the permit and the region, combined with detailed third-party research findings, supports the drilling of Xanadu-1.

An application to modify the approved permit work program has been approved by the WA Department of Mines and Petroleum, which now exempts a 2D seismic survey from the five year work program and brings forward the drilling commitment into the 2015 permit year. Timing is dependent upon the government approvals process, rig availability, and securing a farm-out partner.

Norwest intends to farm-out TP/15 by seeking a "carry" through the exploration drilling phase, while retaining a material interest in the permit. As noted above, Norwest is progressing discussions with a third party that has conducted preliminary due diligence and negotiations are underway to agree on the terms and conditions under which the party may earn an interest in the permit.

#### **The Xanadu Prospect**

Structurally, the Xanadu Prospect is a prominent horst block lying parallel to the coastline in very shallow water. Xanadu-1 will target Permian sands from a depth of approximately 800 metres. Near-shore sands of the Dongara Sandstone represent the primary target, with secondary targets in the fluvio-deltaic Irwin River Coal Measures and the regressive marine sands of the High Cliff Sandstone.

The structural mapping, which is based on good quality 2D seismic data as well as high resolution gravity data resulting from a 2009 airborne 3D Full Tensor Gradiometry Survey, indicates the Xanadu Prospect is geologically similar to both the Cliff Head and Hovea structures. On the basis of good seismic correlations, the stratigraphic section at Xanadu is expected to be very similar to that encountered at Vindara 1, 7 kilometres to the north-northwest. In estimating potential Xanadu hydrocarbon volumes, the reservoir parameter values observed in Vindara 1 have been the primary reference. Vindara 1, testing a rotated fault block, had only minor hydrocarbon shows. The failure of this well, and similar structural tests further north, is considered to be due to insufficient charge and/or breach of seal resulting from fault re-activation. The Xanadu structure is considered to be more favourably located for hydrocarbon charge. Additionally, leakage on fault planes is considered less likely because of the interlocking nature of the fault network which gives rise to the Xanadu horst.

In estimating the recoverable oil volumes summarised in Table 1 below, a 50% recovery factor has been assumed.

Ta	bl	е	1.

Un-risked Prospective Resource: recoverable volumes oil (mmstb)*					
Reservoir	Low estimate	Best estimate	High estimate		
Dongara Sandstone	3	12	22		
Irwin River Coal Measures	13	88	159		
High Cliff Sandstone	29	60	256		
Total	45	160	437		

\*The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

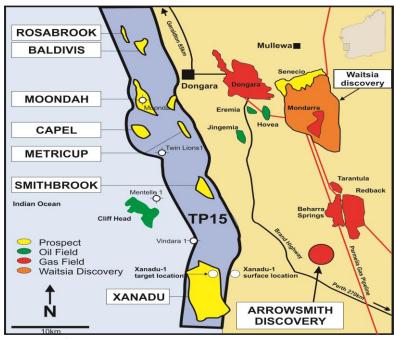


Figure 2. TP/15 permit location highlighting Xanadu prospect

## **EP413 – Northern Perth Basin shale gas exploration**

#### (Norwest 27.945%, Operator)

EP413 is located approximately 250 kilometres north of Perth, predominantly to the western side of the Brand Highway between Eneabba and Dongara (refer Figure 5).

The Arrowsmith-2 well (situated in EP413) was drilled, stimulated and tested over the extended period 2011-2014, with final analysis and review completed in Q1 CY2015. Two separate intervals were high-graded for potential development as a result of this review; the Carynginia Formation and the Irwin River Coal Measures. Both these formations are located more than 2700 metres below the surface.

The area immediately surrounding the Arrowsmith-2 well was ranked a 'Discovery' by independent evaluers DeGolyer and MacNaughton, and the area surrounding it named the 'Arrowsmith Field'.

## Q1 CY2015 review

In December 2012, Norwest Energy commenced the planning and regulatory process required to conduct a 3D seismic survey on the Arrowsmith Field area. The survey was designed to assess the extent of the resource surrounding Arrowsmith-2, and to assist in defining the optimal location and target formation for Norwest's first horizontal well Arrowsmith-3.

In late Q1 CY2015, when all necessary state and federal regulatory approvals were granted, Terrex Seismic was awarded the contract to complete the survey, and commenced immediately.



Figure 3. Terrex operations base on location, EP413 3D Seismic Survey April 2015



Figure 4. Terrex Vibroseis vehicle on location, EP413 3D Seismic Survey April 2015

Preparatory work for the survey included clearing narrow lanes for vehicle access, spaced approximately 400 metres apart. No broad-scale clearing occurred. The lanes were mulched, which involved cutting the vegetation above ground level, leaving topsoil and rootstock intact to enable effective and immediate regeneration.

The mulching phase was completed in early April, with the acquisition phase of the project currently underway. Once the acquisition phase is complete in early May, processing and interpretation of the data will follow. During Q1 CY2015, invitations to bid for processing of the survey data were issued. Subsequent to quarter end, bid proposals have been received and reviewed, with a contract award imminent. Processing and interpretation of the dataset is expected to be completed in Q3 CY2015.

Rehabilitation will commence immediately once the survey is complete. Norwest is required to conduct annual audits demonstrating progress, and is confident of meeting all rehabilitation milestones set by the respective government agencies. Several audit processes have already been implemented during the preparation and acquisition phases to closely monitor adherence to all environmental requirements.

The project has an associated state offset requirement set by the Environmental Protection Authority comprising funding to a value of no less than \$200,000, triggered if after 5 years it is determined that significant residual environmental impacts remain. A separate commonwealth offset requires an upfront unconditional provision of funds to the Department of Parks and Wildlife to purchase no less than 290 Ha of land with similar environmental values to the area that has been cleared.

#### **Arrowsmith-3 Planning**

Preliminary planning with the co-venturers has commenced for Arrowsmith-3, planned for the 2015/16 permit year, with timing dependent upon equipment availability and the regulatory approvals process.

The final decision on surface location, target formation and lateral extent will be made once the 3D seismic survey acquisition, processing and interpretation cycle is complete, as a clear understanding of the subsurface geology is essential to this process.

There is no intention of drilling any wells within Beekeepers' Nature Reserve within the boundaries of EP413, as all exploration potential is to the east of the reserve.

Extensive consultation on the drilling program will commence with all relevant stakeholders including the local community as soon as practicable.

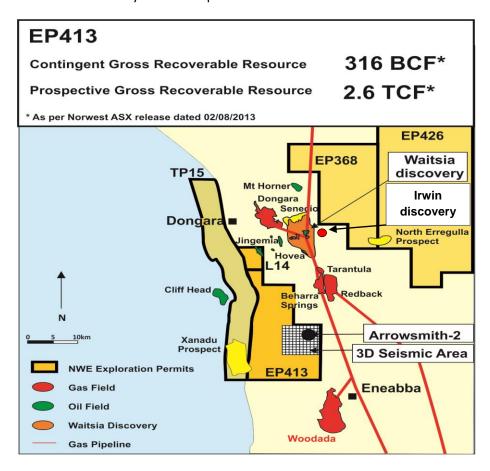


Figure 5. Location Map highlighting EP413 and proposed 3D seismic acquisition envelope

#### **EP413 Joint Venture**

Norwest Energy NL 27.945% (Operator)

AWE Limited 44.252% (via subsidiaries)

Bharat PetroResources Ltd 27.803%

#### **EP368 and EP426**

#### **EP426**

Empire Oil Company (WA) Limited (Operator)	46.91%
ERM Gas Pty Limited	30.87%
Westranch Holdings Pty Ltd (Norwest Energy NL)	22.22%
Allied Oil & Gas Plc	0.00%
(Allied is subject to deemed withdrawal due to default)	

#### **EP368**

Empire Oil Company (WA) Limited (Operator)	80.00%
Westranch Holdings Pty Ltd (Norwest Energy NL)	20.00%

Operator of the North Erregulla project, Empire Oil and Gas NL, reported on 13<sup>th</sup> April 2015 that mobilisation of all equipment for the "Black Swan" airborne geophysical survey had commenced with the survey scheduled to commence from late April 2015. Both EP368 and EP426 will be covered by this airborne survey.

Final government approval for the survey was received in early April 2015.

The survey will involve the acquisition of airborne gradiometric gravity data and will be used to identify exploration leads and prospects for drilling within EP368 and EP426 with final interpretation expected to be available in Q4 CY2015.

This survey will replace the previously planned 3D seismic survey planned to cover the North Erregulla structure, and will greatly assist in building a rich inventory of plays, leads and prospects whilst accelerating the timing for drilling.

This survey will also assist in determining whether the prospective fairway identified by the AWE Waitsia and Irwin gas discoveries (located on the eastern boundary of EP368) in the adjoining permit extends into EP368. The Waitsia discovery is reported by AWE as potentially the largest conventional discovery in the Perth Basin since the 1960's, assigning a 2C (P50) Contingent Resource quoted at 360 bcf. Wireline logging on the Irwin-1 gas discovery is currently being undertaken.

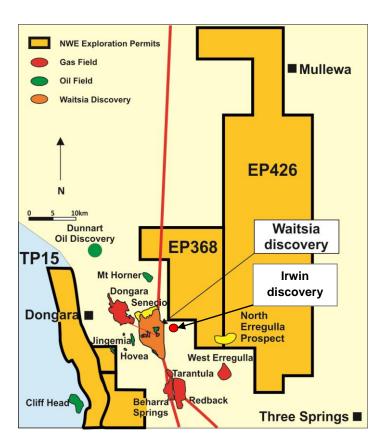


Figure 6. EP368 & EP426 highlighting North Erregulla Prospect

## **EP 492**

## (Norwest 100%)

During the quarter, data retrieval and interpretation of structural and depositional history of EP492 was undertaken to further assist with the evaluation of hydrocarbon prospectivity.

In late 2014, the Department of Mines and Petroleum awarded Exploration Permit EP492 to Norwest, with full details provided in the ASX announcement dated 3 November 2014. EP492 covers 860km<sup>2</sup>, along the northern Perth Basin coastal region between Green Head and Lancelin.

The award of EP492 is the result of successful negotiations with the Traditional Owners, the Yued People, with whom Norwest has developed a strong relationship.

The permit area is split in two by a significant north to south sub surface geological feature, the Beagle Fault. Norwest considers there is no exploration potential to the west of the Beagle Fault, including the coastal strip containing the townships along the Turquoise Coast.

Norwest's preliminary geological review of the remainder of the permit to the east of the fault indicates a potential geological lead outside of the Nambung National Park and near to the eastern boundary of the permit. This lead suggests the potential for oil rather than gas.

During 2015 Norwest intends undertaking consultation with the local community to discuss the proposed forward work program for EP492. A stringent regulatory process must be undertaken prior to conducting any on ground exploration activity whatsoever. It is the intention of Norwest that this process will be transparent to the local community and interested parties.

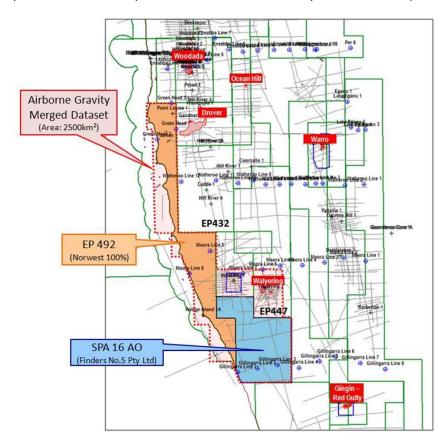


Figure 7. EP492 location alongside Norwest tenement SPA-16 AO.

EP492 has a six year term, with year one of the work program requiring geological studies to be followed in year two with a 2D seismic survey.

## **SPA-16 AO**

#### (Norwest 100%)

SPA-16 AO (SPA) is located at the southern end of the northern Perth Basin and adjoins EP447 that contains the Walyering gas/condensate field. EP447 is held jointly by Eneabba Gas/UIL Energy. The SPA also adjoins the Empire Oil and Gas held EP432 that contains the Cooljarloo and Woolka oil prospects and the Cataby-1 oil discovery.

The SPA, with its sizeable area of 805.3km², when combined with Norwest's EP492 represents a significant footprint of 1,665km² in this under-explored region of the northern Perth Basin, and is considered by Norwest to be a valuable addition to its overall position in the Basin.

During the quarter, data retrieval and preliminary seismic interpretation of historic data continued on the permit to further assist with the evaluation of hydrocarbon prospectivity.

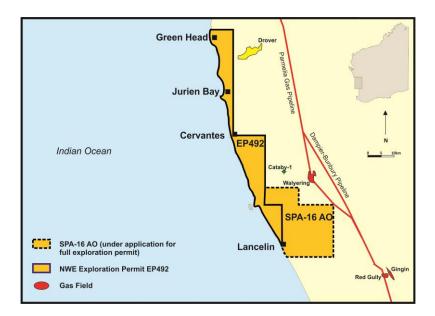


Figure 8. EP492 and SPA-16 AO Location

Norwest has applied to the Department of Mines and Petroleum to convert the SPA to an Exploration Permit and has submitted a proposed six year minimum work program.

The area covering the SPA is the subject of a registered Native Title Claim by the Yued People and accordingly the necessary process and negotiations will be carried out between the two parties. The outcome of these negotiations is for an Exploration Deed to be executed between the Yued People and the Company; in conjunction with a State Deed being executed by the DMP. The award of the exploration permit will then follow. Throughout this phase on ground exploration activities may not be conducted on the SPA but desktop studies may continue.

# L14 Jingemia Oil Field

#### (Norwest 6.278%)

The L14 production licence contains the Origin Energy operated Jingemia oil field. The Jingemia project has now come to the end of its commercial life and has been placed under care and maintenance, leading to eventual abandonment and rehabilitation. Jingemia is estimated to have initially contained 12 million barrels of oil in place, with 4.6 million barrels produced to date.

# Timor Sea: AC/L6 - AC/P22 - Puffin

(Norwest 1.25%, ORRI)

The Puffin Oil field, located in Production Licence AC/L6 and Exploration Permit AC/P22 covers an area of approximately 900km<sup>2</sup>, and is situated in the commonwealth waters of the southern Timor Sea. The Puffin Field is operated by Chinese major Sinopec Limited (60% interest) with AED Oil Limited (Subject to Deed of Company Arrangement) (AED - 40%).

In 2014 the permit holders surrendered AC/P22 but retained ownership of AC/L6, on which Norwest continues to hold a 1.25% overriding royalty interest (ORRI) on the AC/L6 permit.

Discussions continue between the operator and the regulators with regard to a future work program and status of the permit.

# **United Kingdom Exploration Program**

P2265 (Blocks 98/7b, 98/8a and 98/12a) - Offshore Wessex Basin

#### (Norwest 65%)

On 10 November 2014, Norwest announced the award of a Promote Licence over offshore blocks in the United Kingdom by the UK Department of Energy and Climate Change.

Permit P2265 (containing the blocks (98/7b, 98/8a, and 98/12a) lies to the east of the producing Wytch Farm oil field in Bournemouth Bay in southern England and includes conventional oil targets, with the ability for nearshore targets to be drilled from onshore.

Norwest's subsidiary NWE Mirrabooka (UK) Pty Ltd holds a 65% working interest and Haque and London Oil (HALO) (formerly Wessex Exploration PLC) holds the remaining 35%.

Norwest and HALO have two years to reprocess the historical 3D seismic data, select a drillable target and find a suitable farm-in partner. At the end of this two year period, a commitment must be given to drill a well in the subsequent two years or relinquish the Licence.

During the quarter, reprocessing of the historical 3D seismic data commenced and this work is ongoing. It is anticipated that this reprocessing will be completed by the end of Q2 CY2015.

Immediately to the west of P2265 and straddling this permit is the Colter Prospect (operated by InfraStrata plc) which is estimated to have 50 mmbbls oil in place. The reprocessing of the historical 3D seismic data will further assist in determing how far this prospect extends into P2265.

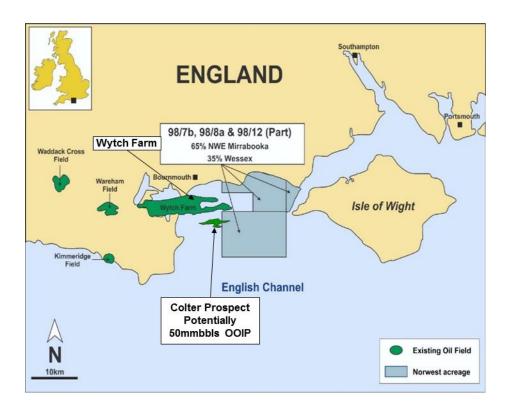


Figure 9. UK Permit Map

# **Corporate**

## **Share Purchase Plan**

On 25 March 2015, Norwest announced that it had raised funds totalling \$1,080,000, through a fully underwritten Share Purchase Plan and Top-Up Placement. The funds will be used primarily to advance the planning for both the Xanadu-1 conventional oil well and Arrowsmith-3 shale gas well in TP/15 and EP413 respectively, as well as provide ongoing working capital.

229,202,163 additional shares were issued at \$0.004712, with total shares now on issue being 1,334,342,945 shares.

Funds held at the end of the guarter totalled \$2.0 million.

# Research and Development refund

Norwest lodged a claim for a refund based upon eligible R&D expenditure incurred during the 2013/14 financial year. A tax refund of approximately \$426,000 has been received subsequent to quarter end.

## **Legal matters**

Empire Oil and Gas, as operator of EP426, continued preparation of legal proceedings in respect of the deemed withdrawal of Allied Oil and Gas NL due to that company being in default of its obligations under the joint operating agreement for the joint venture. Norwest currently holds a deemed 22.22% of the permit and this percentage interest will be confirmed in the event of successful legal proceedings.

#### For further information, please contact:

Peter Munachen
Chief Executive Officer / Director

phone: +61 8 9227 3240

email: info@norwestenergy.com.au visit: www.norwestenergy.com.au

#### **Competent Person**

The information on the Xanadu prospect is based on information compiled by Mr. Dean Powell of Powell Seismic Services. Mr. Powell holds a Bachelor Degree of Applied Science (Physics) and is a member of the Society of Exploration Geophysicists. He has over 40 years of experience in petroleum exploration.

Mr. Powell has consented in writing to the inclusion of the information stated in the form and context in which it appears.