

Range Resources Limited
(‘Range’ or ‘the Company’)

30 April 2015

ASX Code: RRS

AIM Code: RRL

CONTACTS

Cantor Fitzgerald Europe (Nominated Advisor and Broker)

David Porter / Sarah Wharry
(Corporate finance)

Richard Redmayne (Corporate broking)

t. +44 (0)20 7894 7000

Range Resources Limited Australian Office

Ground Floor, BGC Centre
28 The Esplanade
Perth WA 6000
Australia

t. + 61 8 6316 2200

f. +61 8 6316 2211

UK Office

Suite 1A, Prince's House
38 Jermyn Street
London, SW1Y 6DN
United Kingdom

t. +44 (0)20 7025 7040

f. +44 (0)20 7287 8028

e. admin@rangeresources.co.uk

www.rangeresources.co.uk



Quarterly Activities Report

For the period ended 31 March 2015

Highlights

- Average oil production of 557 bopd in Trinidad increased by 6% from the previous quarter;
- Three new development wells drilled in the South Quarry field, with one well brought into production and completion operations ongoing on two other wells;
- Three new development wells completed and brought into production in the Morne Diablo field;
- Preparation work continued with good progress for the drilling of the Canari North exploration well, which is the first shallow onshore well planned on the Guayaguayare PSC licences. Road and location building are currently underway in preparation of the anticipated well spudding in Q2 2015;
- The first preferred waterflood project in the Beach Marcelle field has been identified. Well integrity testing carried out during the quarter is providing additional data to optimise the economics and feasibility of the project;
- The Company received regulatory approvals to conduct Electromagnetic Surveying in the Morne Diablo and South Quarry fields, which will commence immediately. This new technology will be used to image resistive targets which may better resolve and identify oil reservoirs and thus help to reduce exploration and development risks;
- Range Resources Drilling Services Limited disposal is anticipated to complete during April 2015. It will continue to provide full oilfield operations services to Range in Trinidad with LandOcean committing to add four new drilling rigs to the existing fleet this year;
- The sale of Texas subsidiary completed;
- The PSC over Block VIb in Georgia has been terminated. Range continues to explore potential disposal options for its interest in Block VIa;
- The completion date for the US\$60 million funding with Core Capital has been extended to 14 May 2015 to enable Core Capital to progress with the receipt of the regulatory and government approvals (the only remaining condition precedent for completion); and
- Once the proceeds from the Core Capital funding have been received, the Company will seek approval as appropriate from ASX and AIM to resume trading of the Company's shares.

Production overview

The Company's oil and gas production for the period is as follows:

- **Trinidad:** 50,150 bbls (average of 557 bopd) net to Range, which is a 6% increase from 524 bopd in the previous quarter.*

*The total production for the period does not include production numbers for the quarter for Guatemala, as the Company is still waiting to receive the final production numbers from the Operator.

Operations

Trinidad

Development programme

- During the quarter, the Company drilled three new development wells in the South Quarry field:
 - The QU 454ST well to a target depth of 1,440 ft., with testing operations currently ongoing;
 - The QU 455 well to a target depth of 890 ft., which was subsequently brought into production; and
 - The QU 456 well to a target depth of 2,002 ft., with the well scheduled to be perforated, subject to relevant government approvals.
- Although the Company is disappointed by the lower than expected production numbers from the South Quarry wells, these shallow development wells remain an attractive target for the Company. Range and its strategic partner LandOcean Energy Services Co., Ltd (LandOcean) are progressing with geological and geophysical studies which are aimed at improving operational efficiency, and sub-surface evaluation, in order to reduce risk and improve well economics by drilling the best possible targets and increasing production potential. These studies have already resulted in a revision of the previous development and exploration drilling programmes, which will be announced in Q2 2015. Range will also be establishing a production planning department to manage the drill locations and planning in advance, including permitting of all drilling locations;
- The Company completed and brought into production three new development wells in the Morne Diablo field during the quarter (these wells were spudded in the previous quarter);
- The Company completed 58 work-over operations; and
- Subsequent to the quarter end, the Company received approval from the Ministry of Energy and Energy Affairs (MEEA) to commence Electromagnetic Surveying (Stratagem) in the Morne Diablo and South Quarry fields. This new technology will be used to reduce exploration and development risk by measuring changes in subsurface resistivity. The Company will now commence the survey on the Morne Diablo and South Quarry fields to detect resistive targets which may be indicators of oil reservoirs.



Exploration programme

- The Company and Niko Resources Ltd (TSX: NKO) are proceeding with work programmes on the Guayaguayare PSC Deep and Shallow licences. Preparation work continued with good progress on the first committed shallow onshore exploration well (the Canari North well) with road and location building underway ahead of anticipated

well spudding in Q2 2015. In addition, Range is continuing negotiations to increase its working interest in the Guayaguayare licence; and

- During the quarter, the Company signed the St Mary's Joint Operating Agreement with Petrotrin. In order to ensure that Range fulfils its minimum work obligations under the E&P licence, the Company is required to provide the MEEA with a performance bond. Range is seeking financing options to satisfy the requirements for the bond and working with the MEEA on finalising the required documentation. The St. Mary's work programme is planned to commence in 2H 2015, and includes the audit of existing field infrastructure, preparation for environmental permitting and tendering for services.

Waterflood programmes

Beach Marcelle waterflood project

LandOcean has been evaluating three waterflood blocks in the Beach Marcelle field: C, NE, and SE blocks, and two blocks in the South Quarry field. Study work also includes two further blocks in Beach Marcelle: SW and NW blocks, which were previously partially waterflooded by Texaco.

Following a further review, Range and LandOcean have jointly come to a conclusion that given its potential for additional reserves recoverable by waterflooding, the first preferred waterflood project on the Beach Marcelle field will be on the SE block. The next key steps in the programme will be for Range to study the economics and feasibility of the waterflood project for this block in detail, ahead of any relevant approvals, including regulatory approvals.

In the meantime, operations are progressing with integrity testing of existing wellbores in the SE, NE and C blocks now completed, and integrity testing of existing wellbores in the SW and NW blocks to commence shortly. Surface facility studies by LandOcean engineers are continuing.

The Company perforated a potential source water well in the SE block to determine if the water can be utilised for water injection. Evaluation and testing is underway to confirm deliverability and compatibility of the water source.

Morne Diablo waterflood project

LandOcean reviewed existing plans for expansion of the successful pilot waterflood scheme, and suggested changes to the waterflooding pattern which could enhance incremental production and recovery from the project. Studies to compare the anticipated recoveries and production from each of the waterflood patterns are underway, with a view to defining the preferred waterflood scheme, and commencing implementation during Q2 / Q3 2015.

Rig fleet update

Subsequent to the quarter end, Range announced that the completion of Range Resources Drilling Services Limited (RRDSL) disposal is anticipated during April 2015.

RRDSL will continue to provide full oilfield operations services to Range in Trinidad, to accelerate Range's planned development and exploration drilling programmes. Services will be priced in line with market rates in Trinidad with special credit terms, to be reviewed by Range's management periodically.

LandOcean has also committed to add four new drilling rigs to the existing fleet this year, with the first new rig expected to arrive in Trinidad in June 2015.



New drilling rig manufactured in China

Texas

During the quarter, Range announced the completion of the sale of its Texas subsidiary to Citation Resources Limited (Citation). As part of the sale proceeds Range received a AU\$500,000 cash payment, a carry on the Guatemalan assets to the value of AU\$830,000, a forgiveness on monies owed by Range to Citation to the value of AU\$189,000 and 200 million new ordinary shares in Citation.

Guatemala

Range was advised that the Operator, Latin American Resources will recommence testing operations on the previously drilled Atzam 5 well at the Atzam Oil Project in Guatemala as soon as Citation completes its farm-out arrangements (refer to Citation's announcement: <http://www.asx.com.au/asxpdf/20150324/pdf/42xgrb6gbhk7wk.pdf>).

Following completion of the Texas sale, Range holds a 13% equity holding in Citation, which in turn provides a 28% direct and indirect interest in the Guatemalan project. Range has the right to appoint one Director to the Board of Citation, provided that Range holds a minimum of 100 million Citation shares. Range has not appointed any Director at this time but will keep this option under review.

Georgia

Subsequent to the quarter end, the Ministry of Energy of Georgia formally notified the Operator of the Georgian project, Strait Oil & Gas ("SOG": in which Range holds a 45% interest) that the Production Sharing Contract ("PSC") over Block VIb has been terminated. The Ministry cites the non-performance of obligations, specifically the requirement to drill a well in accordance with the stipulated procedure. The penalty to be imposed on SOG by the Ministry is US\$1 million, payable immediately.

Range has been a supportive investor in SOG and the Georgia project since 2009 and has invested approximately US\$40 million into the project, which is significantly in excess of the original expectation of cost to this point. As announced on 14 April 2015, subject to all the conditions of the various agreements between the shareholders of SOG which were entered into during 2011 being satisfied, Range would have been required to fund the costs of the second exploration well. However, Range believes that SOG has failed to comply with material terms of the agreements and has notified SOG of a dispute. Range expressly reserves all its legal rights under the agreements.

Georgia is a non-core asset for Range and the Company continues to explore potential disposal options for its interest. However, whilst pursuing a disposal Range will work with the other shareholders of SOG in a constructive manner to achieve a satisfactory outcome for all the parties. This notification is solely in respect of Block VIb and does not affect the validity of Block VIa.

Puntland

During the quarter, the Joint Venture (JV) made a decision to close down its office in Somalia, in order to reduce the JV's cost exposure until there is clarity and contractual certainty around the Production Sharing Agreements (PSAs) and the legal regime that currently exists in Puntland.

These actions do not affect the JV's position with regards to the existing PSAs on two licences in the Dharoor and Nugaal Valleys. The JV proposed that the Puntland government offers a two year extension on both PSAs, free of any consideration, so that an adequate resolution can be achieved with regard to progressing the exploration programme.

Range continues to be supportive of the Operator and 60% interest holder, Africa Energy Corp. (TSXV: AFE) and remains hopeful that an extension of the PSAs can be granted.

Colombia

During the quarter, the Operator, Optima Oil Corp continued working on the environmental and socialisation programmes in the VMM-7 and VSM-1 blocks, in the Upper Magdalena and Middle Magdalena Basins respectively, with seismic exploration programmes to commence upon completion of these studies. Activities in the PUT-5 block in the Putumayo Basin are dependent on the Environmental Impact Assessment approvals for the drilling location of the first exploration well. The initial exploration term expires in December 2015, during which time 2D seismic and one exploration well are required to be drilled on each block.

Financial

- **US\$60 million financing with Core Capital:** During the quarter, Range announced that it received approval of shareholders at the Company's Extraordinary General Meeting on 27 March 2015 to proceed with the US\$60 million funding with Core Capital Management Co., Ltd (Core Capital). Subsequent to the quarter end, Range has been advised by Core Capital that it has not yet received all necessary regulatory and government approvals to complete the funding. Under the terms of the funding agreements, completion should have occurred by 30 April 2015, subject to satisfaction of this remaining condition precedent. Range is disappointed that the completion has not occurred to date, but has agreed with Core Capital to extend the completion date to 14 May 2015 to enable Core Capital to progress with the receipt of the approvals. Range continues to closely monitor the progress with Core Capital and will provide a further market update in due course;
- **US\$50 million trade financing package:** During the previous quarter, Range announced that LandOcean shall arrange and make available a financing facility with China-based Sinosure for the Company to pay for US\$50 million of LandOcean's services, subject to payment of a security deposit of US\$7.5 million. The financing is subject to interest at 10% per annum and repayments are due 720 days after each drawdown on the financing to pay for LandOcean's services;
- **Lind loan financing:** During the quarter, Range received a statutory demand from Lind Asset Management, LLC (Lind) demanding repayment of approximately US\$7.2 million that Lind alleges is due and payable. Subsequently, Range submitted an application to the Supreme Court of Western Australia to set aside the statutory demand, with the court hearing currently listed for June 2015;
- **Sales revenue** for the 3 months to 31 March 2015 was US\$2.4 million, compared with US\$4.0 million in the previous quarter. The negative movement in revenue was a result of a lower oil price during the period;
- **Capital expenditure** for the 3 months to 31 March 2015 was US\$5.8 million, down from US\$7.0 million in the previous quarter with the decrease being a result of lower expenditure on exploration and production activities; and
- **Cash** at 31 March 2015 of US\$1.67 million was largely unchanged from the previous quarter.

Corporate

Change of Company Secretary

During the quarter, Ms Rebecca Sandford resigned as a Joint Company Secretary. Range's Chief Financial Officer, Mr Nick Beattie, was appointed as a Joint Company Secretary. Ms Sara Kelly continues to act as a Joint Company Secretary.

Share Trading Suspension

Once the proceeds from the Core Capital funding have been received, the Company will seek approval as appropriate from ASX and AIM to resume trading of the Company's shares.

Petroleum tenements held at the end of the quarter (Appendix A)

Tenement Reference	Location	Working Interest	Operator
Morne Diablo	Trinidad	100%	Range
South Quarry	Trinidad	100%	Range
Beach Marcelle	Trinidad	100%	Range
Guayaguayare Shallow*	Trinidad	32.5%	Range
Guayaguayare Deep*	Trinidad	40%	Range
St Mary's	Trinidad	80%	Range
Block 1-2005, South Peten Basin**	Guatemala	28%	Latin American Resources Ltd
Block VIa	Georgia	45%	Strait Oil & Gas
Block VIb***	Georgia	45%	Strait Oil & Gas
Dharoor Block	Puntland	20%	Africa Energy Corp
Nugaal Block	Puntland	20%	Africa Energy Corp
PUT-5, Putumayo Basin	Colombia	10%	Optima Oil Corp
VMM-7, Magdalena Valley	Colombia	10%	Optima Oil Corp
VSM-1, Magdalena Valley	Colombia	10%	Optima Oil Corp

Notes:

*Pending completion of final agreements and government approvals. The Company is currently in negotiations to increase its working interest on the Guayaguayare licences.

**Range holds a 20% direct interest in the Guatemalan project, plus an indirect interest via 13% equity holding in Citation. During the quarter, the Company's interest in the Guatemalan project increased from 21% to 28%, as a result of the Texas sale completion to Citation.

No petroleum tenements or farm-in, farm-out interests were acquired during the quarter.

***Block VIb terminated by the government in April 2015.

Disclaimer

This information in this report contains certain forward-looking statements that are subject to the usual risk factors and uncertainties associated with the oil and gas exploration and the Company's control where, for example, the Company decides on a change of plan or strategy. While Range believes the expectations reflected herein to be reasonable in light of the information available to them at this time, the actual outcome may be materially different owing to factors beyond the Company's control or within undertakes no obligation to revise any such forward-looking statements to reflect any changes in the Company's expectations or any change in circumstances, events or the Company's plans and strategy. Accordingly no reliance may be placed on the figures contained in such forward looking statements.

CPR statement

In Accordance with AIM Rules, Guidance for Mining and Oil & Gas Companies, the information contained in this announcement has been reviewed and signed off by Dr Douglas Field. Dr Field is a petroleum and reservoir engineer who is a suitably qualified person with over 30 years' experience in assessing hydrocarbon reserves, and holds a PhD in Organic Chemistry. The reserves information in this announcement has been prepared in accordance with the guidelines of the Society of Petroleum Engineers (SPE).

SPE reserves definitions

Proved Reserves are those quantities of petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. 1P refers to Proved Reserves, 2P refers to Proved plus Probable Reserves.

Rule 5.3

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Name of entity

RANGE RESOURCES LIMITED

ABN

88 002 522 009

Quarter ended ("current quarter")

31 March 2015

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$US'000	Year to date (9 months) \$US'000
1.1 Receipts from product sales and related debtors	2,363	11,520
1.2 Payments for (a) exploration & evaluation	(186)	(1,321)
(b) development	(3,299)	(9,092)
(c) production	(2,300)	(7,581)
(d) administration	(1,166)	(4,797)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	-	4
1.5 Interest and other costs of finance paid	-	(773)
1.6 Taxes refunded	394	826
1.7 Other – Colombia performance bond	-	(3,480)
Net Operating Cash Flows	(4,194)	(14,694)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	(675)	(2,178)
1.9 Proceeds from sale of:		
(a) prospects	-	-
(b) equity investments	-	231
(c) other fixed assets ¹	2,728	2,715
Loans to other entities	-	-
1.10 Loans repaid by other entities	-	500
1.11 Other – net cash acquired on acquisition of subsidiary	-	-
1.12 Net investing cash flows	2,053	1,268
Total operating and investing cash flows (carried forward)	(2,141)	(13,426)
1.13		

+ See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(2,141)	(13,426)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	-	924
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	7,800
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (provide details if material) ²	2,300	-
	Net financing cash flows	2,300	8,724
	Net increase / (decrease) in cash held	159	(4,702)
1.20	Cash at beginning of quarter/year to date	1,519	6,468
1.21	Exchange rate adjustments to item 1.20	(13)	(101)
1.22	Cash at end of quarter	1,665	1,665

¹During the period, Range received US\$428,000 in relation to the sale of its Texas subsidiary and US\$2,300,000 in relation to the sale of RRDSL.

²During the interim period prior to completion of the sale, RRDSL received US\$2,300,000 from LandOcean to assist with working capital requirements.

Payment to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$US'000
1.23	Aggregate amount of payments to the parties included in item 1.2	119
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

payment of directors' fees

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

N/A

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

N/A

+ See chapter 19 for defined terms.

Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$US'000	Amount used \$US'000
3.1 Loan facilities	-	5,500
3.2 Credit standby arrangements	-	-

During the quarter, Range announced that it received approval of shareholders at the Company's Extraordinary General Meeting on 27 March 2015 to proceed with the US\$60 million funding with Core Capital. The completion date for the funding has been extended to 14 May 2015 to enable Core Capital to progress with the receipt of the regulatory and government approvals (the only remaining condition precedent for completion).

On 11 December 2014, Range announced that LandOcean shall arrange and make available a financing facility with China-based Sinosure for the Company to pay for US\$50 million of LandOcean's services, subject to payment of a security deposit of US\$7.5 million.

Estimated cash outflows for next quarter

	\$US'000
4.1 Exploration and evaluation	200
4.2 Development	1,600
4.3 Production	1,800
4.4 Administration	2,300
Total	5,900

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$US'000	Previous quarter \$US'000
5.1 Cash on hand and at bank	1,665	1,519
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	1,665	1,519

+ See chapter 19 for defined terms.

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	Refer to Appendix A	20-25%	Nil
	East Cotton Valley, Texas		22%	Nil
6.2	Interests in mining tenements acquired or increased	Block 1-2005, South Peten Basin, Guatemala	21%	28%

+ See chapter 19 for defined terms.

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference *securities <i>(description)</i>	Nil			
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 *Ordinary securities	5,117,169,188	5,117,169,188		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5 *Convertible debt securities <i>(description)</i>	Nil	Nil		
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				

+ See chapter 19 for defined terms.

7.7	Options <i>(description and conversion factor)</i>		<i>Exercise price</i>	<i>Expiry date</i>
		80,508,341	\$0.05	31 January 2016
		855,166	£0.04	30 June 2015
		7,058,824	£0.17	30 April 2016
		5,180,000	£0.075	31 January 2017
		15,708,801	£0.0615	19 October 2015
		32,275,862	£0.05075	30 November 2015
		5,000,000	A\$0.10	31 January 2016
		5,000,000	A\$0.06	10 February 2016
		146,533,850	£0.04	30 April 2016
		5,000,000	£0.037	11 July 2016
		476,190	£0.021	25 July 2016
		952,381	£0.021	29 July 2016
		6,714,284	£0.021	31 August 2016
		9,000,000	£0.020	31 August 2016
		3,947,369	£0.019	30 September 2016
		8,666,670	£0.018	30 September 2016
		694,445	£0.018	31 October 2016
		2,205,885	£0.017	31 October 2016
		1,250,000	£0.016	31 October 2016
		17,333,336	£0.015	31 October 2016
		3,000,001	£0.015	30 November 2016
		5,153,846	£0.013	30 November 2016
		2,000,000	\$0.0321	11 December 2016
		2,000,000	£0.012	31 December 2016
		5,000,000	£0.011	31 December 2016
		23,636,364	£0.011	31 January 2017
		7,500,000	£0.03	9 September 2017
		161,472,247	£0.01	14 July 2018
		118,729,593	£0.02	14 July 2018
		1,000,000	\$0.05	31 January 2018
		31,000,000	£0.01203	15 October 2017
		75,000,000	£0.01	30 March 2020
7.8	Issued during quarter	75,000,000	£0.01	30 March 2020
7.9	Exercised during quarter			
7.10	Expired during quarter	9,000,000	£0.125	31 March 2015

+ See chapter 19 for defined terms.

7.11	Debentures <i>(totals only)</i>	Nil			
7.12	Unsecured notes <i>(totals only)</i>	Nil			
7.13	Converting Performance Shares	Nil			

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.



Yan Liu
Chief Executive Officer
29 April 2015

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 Accounting Standards ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

== == == == ==

+ See chapter 19 for defined terms.