

QUALIFIED PERSON'S REPORT

Contingent Resources for the FALK Discovery, PL1125, Norway

Lime Petroleum AS



ECV2414
Qualified Person's Report
SGX Summary
FINAL
22 April 2021

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
Draft	Draft for client	JC, BL, AB			12/04/21
Final		JC, BL, AB	GT	GT	22/04/21

Approval for issue

Gordon Taylor



22 April 2021

© Copyright RPS Group Plc. All rights reserved.

The report has been prepared for the exclusive use of our client and applicable requirements of Practice Note 4C of the Catalist Rules of the Singapore Exchange Securities Trading Limited (SGX) for a Qualified Person's Report unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS'), no other party may use, make use of, or rely on the contents of this report. The report has been compiled using the resources agreed with the client and in accordance with the scope of work agreed with the client. No liability is accepted by RPS for any use of this report, other than the purpose for which it was prepared. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. RPS does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report.

RPS accepts no responsibility for any documents or information supplied to RPS by others and no legal liability arising from the use by others of opinions or data contained in this report. It is expressly stated that no independent verification of any documents or information supplied by others has been made. RPS has used reasonable skill, care and diligence in compiling this report and no warranty is provided as to the report's accuracy. No part of this report may be copied or reproduced, by any means, without the prior written consent of RPS.

Prepared by:

Prepared for:

RPS Energy Consultants Ltd

Lime Petroleum AS

Gordon Taylor
Director

Lars Hüberr

Goldvale House, 27-41 Church Street West
Woking, Surrey GU21 6DH

Drammensveien 145a
0277 Oslo
Norway

T +44 1483 746 500
E taylorg@rpsgroup.com

T +47 4099 3541
E Lars.Hubert@limepetroleum.com

Our ref: ECV2414

Date: 22 April 2021

Lime Petroleum AS
Drammensveien 145a
0277 Oslo
Norway

Attention: Lars Hübner

Qualified Person's Report, Falk Discovery, Licence PL1125, Norway

In response to a request by Lime Petroleum AS ("Lime"), and the Letter of Engagement dated 3 February 2021 with Lime (the "Agreement"), RPS Energy Consultants Ltd ("RPS") has completed an independent evaluation of the Falk discovery, Licence PL1125, Norway.

A full report was issued by RPS under the appointment by Lime and was produced as part of the Services detailed therein and subject to the terms and conditions of the Agreement. This report is a summary of the full report.

As per the Agreement, we have estimated Proved, Probable and Possible Reserves for the Falk discovery as of 1 July 2020 and estimated the Prospective Resources for Block 50. All Reserves and Resources definitions and estimates shown in this report are based on the 2018 Petroleum Resource Management System of SPE/WPC/AAPG/SPEE/SEG/SPWLA/EAGE ("PRMS"). The report has also been prepared in accordance with the disclosure requirements in Practice Note 4C of the Catalist Rules of the Singapore Exchange Securities Trading Limited (SGX).

The work was undertaken by a team of petroleum engineers and geoscientists and is based on data supplied by Lime. Our approach has been to audit Lime's seismic interpretation, static model and dynamic modelling of recoverable volumes, based on the 2019 SPE Reserves Auditing Standards.

In estimating Reserves, we have used standard petroleum engineering techniques. We have estimated the degree of uncertainty inherent in the measurements and interpretation of the data and have calculated a range of reserves based on the data provided by Lime.

We have taken the working interest that Lime has in the field as presented by Lime. We have not investigated, nor do we make any warranty as to Lime's interest in the Assets.

No site visit was conducted as part of this study.

Gross in place volumes and gross, working interest and net entitlement Contingent Resources as of 31 December 2020 are summarised in Table 1-1 and Table 1-2 of the Executive Summary.

QUALIFICATIONS

RPS is an independent consultancy specialising in petroleum reservoir evaluation and economic analysis. The provision of professional services has been solely on a fee basis. Gordon Taylor, Director, has supervised this evaluation. Mr Taylor is a Chartered Geologist and Chartered Engineer with over 40 years' experience in upstream oil and gas. The project has been managed by Dr Jason Canning, a Chartered Geologist who has over 25 years' experience in upstream oil and gas. Other RPS employees involved in this

work hold at least a degree in geology, geophysics, petroleum engineering or a related subject or have at least five years of relevant experience in the practice of geology, geophysics or petroleum engineering.

BASIS OF OPINION

The evaluation presented in this report reflects our informed judgment, based on accepted standards of professional investigation, but is subject to generally recognised uncertainties associated with the interpretation of geological, geophysical and engineering data. The evaluation has been conducted within our understanding of petroleum legislation, taxation and other regulations that currently apply to these interests. However, RPS is not in a position to attest to the property title, financial interest relationships or encumbrances related to the property. Our estimates of Reserves are based on data provided by Lime. We have accepted, without independent verification, the accuracy and completeness of this data. RPS accepts no responsibility for any documents or information supplied to RPS by Lime or others, having made reasonable enquiries and exercised our judgment on the reasonable use of such information, and found no reason to doubt the accuracy or reliability of the information.

No liability is accepted by RPS for any use of this report, other than the purpose for which it was prepared. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. RPS does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report. The report represents RPS's best professional judgment and should not be considered a guarantee or prediction of results. It should be understood that any evaluation, particularly one involving future performance and development activities may be subject to significant variations over short periods of time as new information becomes available. This report relates specifically and solely to the subject assets and is conditional upon various assumptions that are described herein. This report must, therefore, be read in its entirety. This report was provided for the sole use of Lime, its holding company Rex International Holding Limited ("Rex") and their corporate advisors on a fee basis.

This report may be reproduced in its entirety. However, excerpts may only be reproduced or published by Lime and Rex (as required for regulated securities reporting purposes) with the express written permission of RPS.

Yours sincerely,
for RPS Energy Consultants Ltd



Gordon Taylor CGeol, CEng
Director, Consulting

+44 1483 746 594

Name	Role	Signature
<i>Signatories unavailable, working from home</i>		
Jason Canning	Geology and Geophysics and Project Manager	
Ben Lowden	Petrophysics	
Ali Bahrami	Engineering	

Contents

1	EXECUTIVE SUMMARY	5
1.1	Overview of Asset	5
1.2	Subsurface and Reserve Evaluation.....	5
2	INTRODUCTION	7
2.1	Falk discovery Licence Details.....	7
2.2	RPS Remit.....	9
2.3	Basis of Opinion	10
2.4	Audit Methodology	10
2.5	PRMS	11
2.6	Volumetric Uncertainty	11
3	DATA AVAILABLE	13
4	THE FALK DISCOVERY	14
4.1	Introduction.....	14
4.2	In-Place Volumes	14
4.2.1	Geology.....	14
4.2.2	Geophysics	14
4.2.3	Petrophysics	15
4.2.4	In-Place Volumes for the Falk discovery	16
4.3	Reservoir Engineering.....	16
4.3.1	Oil Properties	16
4.3.2	Recovery Factors.....	17
4.3.3	Recoverable Volumes.....	17
5	CONSULTANT'S INFORMATION.....	19

Tables

Table 1-1:	Gross STOIP.....	5
Table 1-2:	Falk Field Contingent Resources – Development Unclassified	6
Table 2-1:	Summary of Lime Assets	7
Table 2-2:	Status of Activity on Licence PL1125	8
Table 4-1	Falk Discovery Volumetric inputs	16
Table 4-2	Gross HIIP for the Falk discovery	16
Table 4-3:	Falk Field Contingent Resources – Development Unclassified	18
Table 5-1:	Summary of Consultant Personnel	20

Figures

Figure 2-1:	Map showing the application area of PL1125 (combined areas of 6608/10 and 6608/11) and the location of the Falk discovery	9
Figure 2.2:	Resources Classification (from PRMS 2018)	11
Figure 4-1:	Base Not Group depth grid across the Falk discovery and western flank of the Nordland Ridge (taken from Kingdom project)	15

1 EXECUTIVE SUMMARY

In response to a request by Lime Petroleum AS ("Lime"), and the Letter of Engagement dated 3 February 2020 with Lime (the "Agreement"), RPS Energy Consultants Ltd ("RPS") has completed an Independent Audit of the recoverable hydrocarbon volumes in the Falk discovery, PL1125, Norway.

This report is issued by RPS under the appointment by Lime and is produced as part of the Services detailed therein and subject to the terms and conditions of the Agreement. This report is a summary of the full report.

We have audited the interpretation generated by Lime. RPS has then estimated low (P90), base (P50) and high (P10) recoverable hydrocarbon volumes, based on statistical ranges of hydrocarbon-initially-in-place (HIIP) estimates.

All definitions and estimates shown in this report are based on the 2018 Petroleum Resource Management System of SPE/WPC/AAPG/SPEE/SEG/SPWLA/EAGE ("PRMS"). The work was undertaken by a team of petroleum engineers and geoscientists and is based on data supplied by Lime. Our approach has been to audit Lime's own estimates of recoverable resources, based on the 2019 SPE Reserves Auditing Standards.

No site visit was conducted as part of this study.

No economic assessment was conducted as part of this study.

1.1 Overview of Asset

The PL1125 licence was awarded to Lime and the operator OKEA ASA in February 2021 and straddles blocks 6608/10 and 6608/11 in the Norwegian Sea. The initial licence period is for five years, expiring in February 2026.

The Falk discovery is located northwest of the Norne Field in water depths of approximately 350 metres. The discovery was made in 2000 and contains oil with minor associated gas. The PL1125 licence also includes the Linerle Discovery, made in 2004. Linerle was not evaluated by RPS in this study.

The Falk discovery is a hanging wall trap, with both structural and fault seal elements. The main reservoir is Lower Jurassic Åre Formation sandstone.

1.2 Subsurface and Reserve Evaluation

RPS audited the latest seismic interpretation provided by Lime, and found it to be acceptable. An independent petrophysical interpretation was made on the 6608/11-2 and 6608/11-8 wells. RPS used the geological and geophysical data provided to estimate statistical ranges of gross in place volumes and gross, working interest and net entitlement Contingent Resources as of 31 December 2020 (Table 1-1 and Table 1-2).

	STOIIP					
	(MMcm)			(MMstb)		
	Low (P90)	Best (P50)	High (P10)	Low (P90)	Best (P50)	High (P10)
Ile and Åre¹ Formations	10.1	14.9	21.7	63.7	94.0	136

¹ Combined Åre 3 and Åre 2 units

Table 1-1: Gross STOIIP

Category	Gross Attributable to Licence		Lime's 50% Working Interest			Rex's Interest (90% in Lime)		Risk Factors ¹	Remarks
	Contingent Resources		Contingent Resources	Change from Previous Update (%)	Contingent Resources				
Contingent Resources - Oil									
	(MMcm)	(MMstb)	(MMcm)	(MMstb)		(MMcm)	(MMstb)		
1C	2.77	17.40	1.39	8.70	N.A.	1.25	7.83	N.A.	-
2C	4.42	27.80	2.21	13.90	N.A.	1.99	12.51	N.A.	-
3C	6.86	43.20	3.43	21.60	N.A.	3.09	19.44	N.A.	-
Contingent Resources – Gas ²									
	(Bcm)	(Bscf)	(Bcm)	(Bscf)		(Bcm)	(Bscf)		
1C	0.08	2.89	0.04	1.45	N.A.	0.04	1.31	N.A.	-
2C	0.13	4.67	0.07	2.34	N.A.	0.06	2.11	N.A.	-
3C	0.21	7.32	0.11	3.66	N.A.	0.10	3.29	N.A.	-

Notes

- Given the early stage of assessment of development options, RPS does not deem it appropriate to assign a chance of development
- Associated gas only

Table 1-2: Falk Field Contingent Resources – Development Unclarified

2 INTRODUCTION

RPS has undertaken an audit of recoverable hydrocarbon volumes in the Falk discovery, PL1125, including parts of Blocks 6608/10 and 6608/11, Norway (Figure 2-1). The Falk discovery is located on the Western Flank of the Nordland Ridge, northwest of the producing Norne Field, in water depths of approximately 350 metres. The discovery was made in 2000 and contains oil with minor associated gas. The Falk discovery is a hanging wall trap, with both structural and fault seal elements. The main reservoir is Lower Jurassic Åre Formation sandstone.

2.1 Falk discovery Licence Details

The PL1125 licence was awarded in February 2021. The initial licence period is for five years. Three wells have been drilled in the licence, the Falk discovery well 6608/11-2 in 2000, the Linerle discovery well 6608/11-4 in 2004 and an unsuccessful appraisal well 6608/11-8 on Falk in 2013.

Asset/ Country	Lime's Working Interest (WI)	Rex's WI (90% of Lime WI)	Development Status	Licence Expiry Date	Licence Area (sq. km)	Type of deposit	Partners
Falk PL1125	50%	45%	Active	19 February 2026	61.140 ¹	Oil	OKEA ASA (50%) Operator Lime Petroleum (50%)
Note 1. 5.604 sq km in 6608/10, 55.536 sq km in 6608/11							

Table 2-1: Summary of Lime Assets

The licence is governed by standard Norwegian fiscal terms and environmental and rehabilitation requirements¹. The obligations of the licence holders and current status as listed on the Norwegian Petroleum Directorate website are given in Table 2-2. RPS has been advised by Lime that all financial obligations and work commitments associated with the licence have been fulfilled. The joint venture is working towards a decision to commercialise the project.

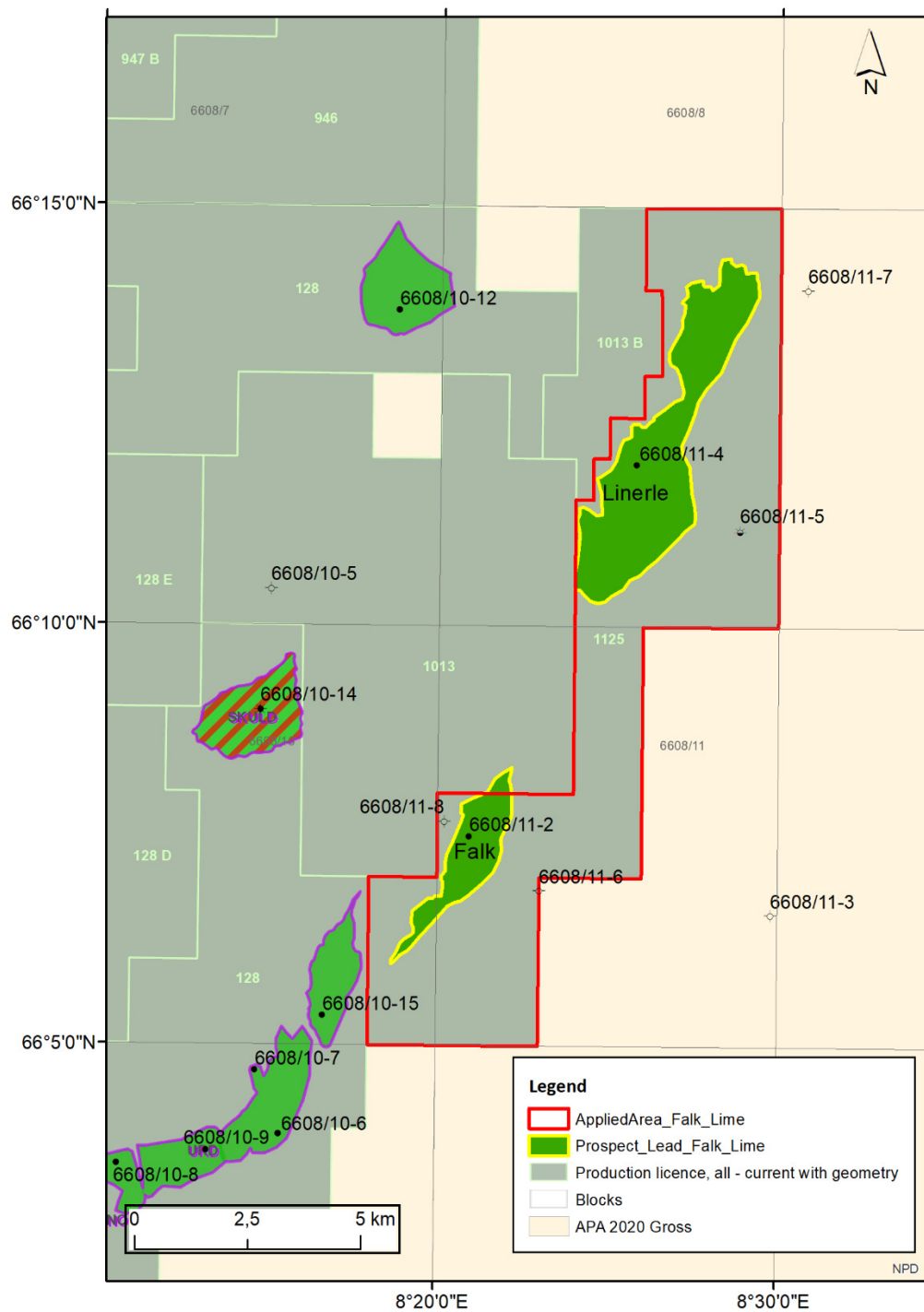
¹ <https://www.npd.no/en/regulations/regulations/petroleum-register/>

Obligation	Decision	Task status	Expiry date
Conceptual studies		In process	
	Decision to drill	In process	19.02.2023
	(BoV) Decision to continue	In process	19.02.2023
(PDO) Prepare plan for development		In process	
	(PDO) Submit plan for development	In process	19.02.2024
	Decision to enter extension period	In process	19.02.2024
Drill exploration well		In process	
	(BoV) Decision to continue	(BoV) Decision to continue	19.02.2025
(PDO) Prepare plan for development		In process	
	(PDO) Submit plan for development	In process	19.02.2026
	Decision to enter extension period	In process	19.02.2026

Table 2-2: Status of Activity on Licence PL1125

The PL1125 licence covers parts of Blocks 6608/10 and 6608/11 and covers 61.14 sq km as shown in Figure 2-1.

Lime provided a polygon defining the limits of the PL1125 licence. It is clear that even using the mid-case Falk outline polygon, that the prospect extends beyond the block boundary. All volumetrics included in this report are restricted to the PL1125 licence only.



Source: Lime

Figure 2-1: Map showing the application area of PL1125 (combined areas of 6608/10 and 6608/11) and the location of the Falk discovery

2.2 RPS Remit

This report is issued by RPS under the appointment by Lime and is produced as part of the Services detailed therein and subject to the terms and conditions of the Agreement. Under the Agreement, the aim of this report is to provide an audit of Lime's estimates of in-place and recoverable volumes in the Falk discovery. The scope of this report is to document the RPS audit. This report is based on data and interpretations provided by Lime. RPS has audited the interpretation used by Lime and has then evaluated low, base and

high recoverable volumes, based on a statistical range of in-place numbers calculated based on the available data.

All definitions and estimates shown in this report are based on the 2018 Petroleum Resource Management System of SPE/WPC/AAPG/SPEE/SEG/SPWLA/EAGE ("PRMS") and Norwegian Petroleum Directorate's resource classification system 2016 (2018). The work was undertaken by a team of petroleum engineers and geoscientists. The audit is based on the 2019 SPE Reserves Auditing Standards.

No site visit was conducted as part of this study.

Mr Gordon Taylor, CEng, CGeol, has supervised this evaluation, which was project managed by Dr Jason Canning, CGeol. Mr Taylor meets the requirements of the Singapore Stock Exchange as an independent qualified person. Full details are given in Section 5. Work has been undertaken solely on a fee basis. Neither Mr Taylor nor RPS has any interest in Lime.

2.3 Basis of Opinion

The evaluation presented in this report reflects our informed judgment, based on accepted standards of professional investigation, but is subject to generally recognised uncertainties associated with the interpretation of geological, geophysical and engineering data. The evaluation has been conducted within our understanding of petroleum legislation, taxation and other regulations that currently apply to these interests. However, RPS is not in a position to attest to the property title, financial interest relationships or encumbrances related to the property. Our estimates of Reserves and Resources are based on data provided by Lime. We have accepted, without independent verification, the accuracy and completeness of these data, having made reasonable enquiries and exercised our judgment on the reasonable use of such data, and found no reason to doubt the accuracy or reliability of the data.

The report represents RPS's best professional judgment and should not be considered a guarantee or prediction of results. It should be understood that any evaluation, particularly one involving future performance and development activities, may be subject to significant variations over short periods of time as new information becomes available. This report relates specifically and solely to the subject assets and is conditional upon various assumptions that are described herein. This report must, therefore, be read in its entirety. This report was provided for the sole use of Lime and their corporate advisors on a fee basis.

This report may be reproduced in its entirety. However, excerpts may only be reproduced or published (as required for regulated securities reporting purposes) with the express written permission of RPS.

2.4 Audit Methodology

As noted above, our approach has been to audit Lime's estimates of recoverable volumes, based on the 2019 SPE Reserves Auditing Standards, which describe an audit as follows:

A Reserves Audit is the process of reviewing certain of the pertinent facts interpreted and assumptions made that have resulted in an estimate of reserves and/or Reserves Information prepared by others and the rendering of an opinion about:

- (1) the appropriateness of the methodologies employed,
- (2) the adequacy and quality of the data relied upon,
- (3) the depth and thoroughness of the reserves estimation process,
- (4) the classification of reserves appropriate to the relevant definitions used, and
- (5) the reasonableness of the estimated reserves quantities and/or the Reserves Information.

The term "reasonableness" cannot be defined with precision but should reflect a quantity and/or value difference of not more than plus or minus 10%, or the subject Reserves Information does not meet minimum recommended audit standards.

Where appropriate RPS has modified the Lime work to produce an independent estimate of Reserves and Resources.

2.5 PRMS

Volumetric estimates for the identified prospects are presented in accordance with the 2018 Petroleum Resource Management System (PRMS) guidelines.

Lime's Falk discovery contains hydrocarbons which fall within the PRMS classification of **Contingent Resources – Development Unclear** (Figure 2.2).

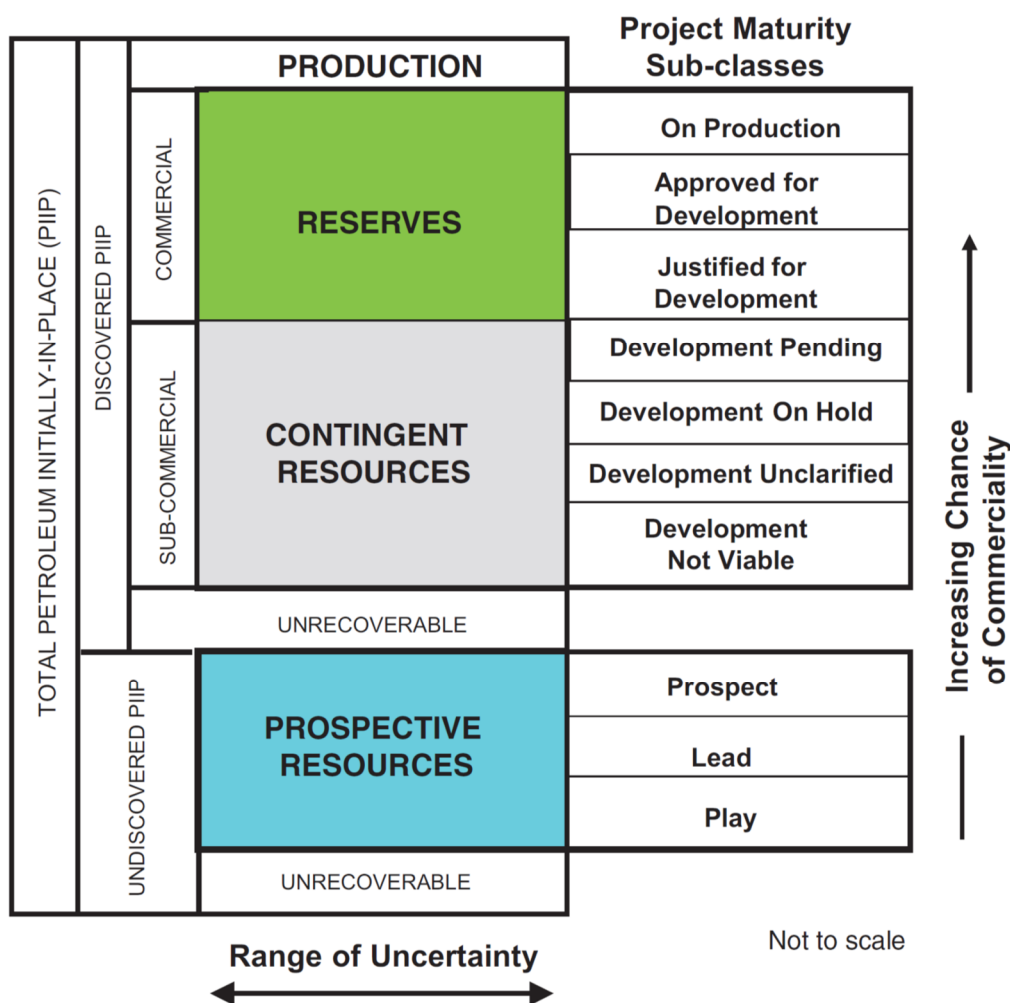


Figure 2.2: Resources Classification (from PRMS 2018)

2.6 Volumetric Uncertainty

The estimation of hydrocarbon volumes is an integral part of the evaluation process. It is normal practice to assign a range to the volume estimates because of the uncertainty over exactly how large the discovery or prospect will be. Estimating the range is normally undertaken in a probabilistic way (using Monte Carlo simulation), using a range for each input parameter to derive a range for the output volumes. RPS uses commercially available Monte Carlo simulation software - Logicom's Reserves Evaluation Programme (REP). Key contributing factors to the overall uncertainty are data, interpretation and model uncertainties. Volumetric input parameters, gross rock volume (GRV), porosity, net-to-gross (NTG), water saturation (Sw), fluid expansion factor (Bo or Bg) and recovery factor, are considered separately. RPS has internal guidelines on the best practice in characterising appropriate input distributions for these parameters.

Systematic bias in volumetric assessment is a well-established phenomenon. There is a tendency to estimate parameters to a greater degree of precision than is warranted and to bias pre-drill estimates to the high side (Rose 1987; Rose and Edwards 2001). In addition, there is a tendency towards assessing volumes in too narrow a range with overly large low-side and mean estimates (Rose and Edwards 2001). RPS uses benchmarked P90/P10 ratios and known field size distributions to check the reasonableness of estimated volumes.

3 DATA AVAILABLE

Lime Petroleum provided a Kingdom project containing seismic data volumes, well data and limited interpretation including the Top and Base Reservoir two-way time (TWT) and depth grids. Well tops were provided in the Kingdom project. Petrophysical data, including interpretation, was provided for the 6608/11-2 discovery well and the 6608/11-8 appraisal wells. Also provided was the 2020 Lime/Okea Awards in Predefined Areas (APA) Licence Round Application document.

4 THE FALK DISCOVERY

4.1 Introduction

Three wells have been drilled in the licence: the Falk discovery well 6608/11-2 in 2000, the Linerle discovery well 6608/11-4 in 2004 and an unsuccessful appraisal well 6608/11-8 on Falk in 2013.

4.2 In-Place Volumes

4.2.1 Geology

The Falk trap is controlled by the overall geometry of the Nordland Ridge, a major NW-SE trending structural feature bounding the Donna Terrace and Ras basin to the west. The Nordland ridge is characterised by a series of down thrown, normal faults which have significant impact of the presence, geometry and thickness of the Jurassic and Cretaceous basin fill. The Falk trap is in the hanging wall of an antithetic fault on the Nordland ridge and is a three-way fault closure, with one way dip closure to the west.

The Falk reservoirs are composed of Middle to Lower Jurassic, Ile and Åre formation sandstones. The Ile formation is part of the Fangst Group and the Åre Formation is part of the Båt Group. The seal is overlying 'Not Formation' mudstone, a deep marine mudstone of Aalenian age. The Ile Formation, a widely distributed reservoir unit on the Mid-Norwegian shelf, is a transgressive sand and is deposited on top of the regional Toarcian Unconformity in the Falk area. The Åre Formation is interpreted to represent a complex coastal plan deposit, consisting of fluvial channels, crevasse splays and inter-channel ponds, lagoons, marshes and mudflats.

4.2.2 Geophysics

Lime provided the latest TWT and depth maps in a Kingdom project. Limited fault interpretations were provided, although no fault polygons were present in the Kingdom project. The seismic data are generally of good quality over the Falk field. RPS has reviewed the TWT mapping and finds Lime's TWT interpretation to be reasonable. RPS has not undertaken an independent depth conversion of the time surfaces provided, but we have reviewed the depth conversion methodology described by Lime in the 2020 APA application document. The Lime depth conversion is based on a time-depth relationship derived from offset well data (nine wells in total). Given the relatively shallow nature of the reservoir at only 1,500 m to 1,800 m depth, and the relatively simple overburden, Lime estimates that the errors in depth conversion are small and in the order of only +/- 5m.

The Falk discovery is within a discrete fault block or segment on the Western flank of the Nordland Ridge (Figure 4-1). The Discovery is fault closed to the North, East and South and is dipped closed to the West.

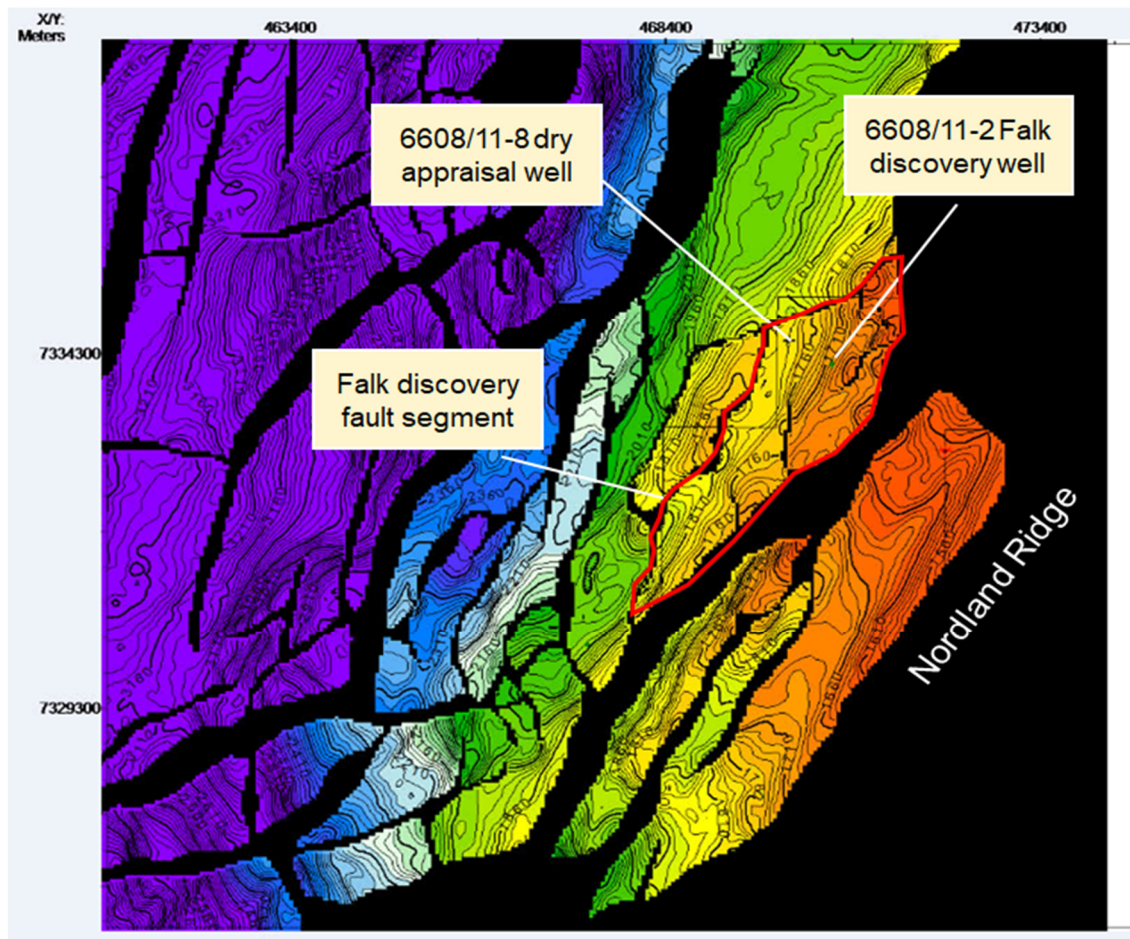


Figure 4-1: Base Not Group depth grid across the Falk discovery and western flank of the Nordland Ridge (taken from Kingdom project)

4.2.3 Petrophysics

Petrophysical computer-processed interpretation (CPI) curve data were provided for the 6608/11-2 discovery well. These CPI results provided by Lime, were compared against RPS's own independent petrophysical analysis of the well and core data.

RPS used petrophysical averages by formation based on the RPS petrophysical interpretation. The range of parameters is based on the range of NTG, porosity and saturation from wells 6608/11-2 and 6608/11-8. For Sw we have used a P10 value of 35%, which reflects some of the uncertainty around measured and corrected water saturation. Engineering results of the well PVT analysis were used for the oil formation volume factor, gas expansion factor and gas-oil-ratio (see section 4.3.1).

The input parameter ranges for the estimation of the HIIP range is summarised in Table 4-1.

Name	Unit	Shape	P90	P50	P10
Area uncertainty	%	Normal	90	100	110
OWC	M TVDSS	Normal	1728	1759	1790
Net-to-gross	%	Normal	70	80	90
Porosity	%	Normal	25	29	33
Sw	%	Normal	15	25	35
Oil formation volume factor (FVF) (Bo)	rb/stb	Normal	0.90	0.92	0.94
Gas-oil ratio (GOR)	m3/m3	Normal	27	30	33

Table 4-1 Falk Discovery Volumetric inputs

The most uncertain of the volumetric input parameters is the Oil Water Contact (OWC).

4.2.4 In-Place Volumes for the Falk discovery

RPS used the area-depth pairs for the mid-case Top Reservoir depth map, discussed above and the range of parameters in Table 4-1 as inputs for the probabilistic estimation of the range of oil and gas in-place for the Falk field. The Gross HIIP for Falk is presented in Table 4-2.

	STOIIP					
	(MMcm)			(MMstb)		
	Low (P90)	Best (P50)	High (P10)	Low (P90)	Best (P50)	High (P10)
Ile and Åre ¹ Formations	10.1	14.9	21.7	63.7	94.0	136

¹ Combined Åre 3 and Åre 2 units

Table 4-2 Gross HIIP for the Falk discovery

4.3 Reservoir Engineering

RPS has reviewed and audited Reservoir Engineering data supplied by Lime. The focus was on evaluating two specific areas of the engineering work; first, the oil properties and their impact on the HIIP estimates, and second, the assumed recovery factors controlling the estimates of recoverable volumes.

4.3.1 Oil Properties

Core Laboratories (UK) Limited carried out PVT laboratory analyses of three oil samples taken from well 6608/11-2 at a depth of 1,747.0m MD, from Åre 2 unit reservoir². The reservoir temperature is reported as 55°C and the reservoir pressures as 177.6 bara. The bubble point pressures of the three samples at

² Reservoir Fluid Study for Statoil A.S., 6608/11-2, RFLA 20000282, Core Laboratories (U.K.) Limited, 9th March 2001

reservoir temperature, were reported as 114.3 to 118.4 bara, which indicates that the reservoir is undersaturated.

The oil has an average gravity of 18.8°API and the viscosity of the oil is reported as ~15 cP, at reservoir temperature. The formation volume factor (Bo) for the three samples varies from 1.083 to 1.094 Sm³/Sm³, and the gas-oil ratio varies from 30.0 to 30.7 Sm³/Sm³. Based on these, RPS suggests a GOR range of 27-30-33 Sm³/Sm³ and a 1/Bo range of 0.90-0.92-0.94 Sm³/Sm³ to be used for in-place calculations³. The values have been used in the estimates of HIIP.

4.3.2 Recovery Factors

Lime has provided an ECLIPSE dynamic simulation model which has been used to estimate the Falk field recovery factors, assuming a development including water injection. The model, which has been reviewed by RPS, is a layer-cake model with constant reservoir and fluid properties. It uses a simplified grid with a dip variation to resemble the field structure and covers both the Ile/Åre 3 and the Åre 2 units. In the Lime models, the Ile/Åre 3 reservoir layer is isolated from the Åre 2 reservoir and does not contribute to any production.

One water injector and two oil producers have been assumed in the model. Sensitivity cases have been simulated and reported in the 2020 APA application report.

4.3.3 Recoverable Volumes

Although the Falk discovery was made in 2000, the PL1125 was only awarded in February 2021. Lime and its partner have only undertaken limited work on the licence to support the application in the 2020 APA licence round. RPS has reviewed these data and made an estimation of the In-Place oil as presented in Section 4.2.4. No development plans were made available to RPS during the course of this work.

In order to audit the recoverable volumes for Falk, RPS has made a series of assumptions regarding a notional development plan, as discussed in 4.3.2 above. Typically, for Contingent Resources to be estimated for a discovery, a field development plan should be agreed. However, Falk is clearly a discovered accumulation where project development activities are being considered but where there is no agreed development plan. Therefore, the Falk volumes cannot be screened for commerciality at this stage. RPS recognises that Falk may have potential for eventual commercial development, but further development planning is required to clarify the potential for eventual commercial development.

Assessment of the eventually agreed plan and estimate of Contingent Resources delivered by that project will be required in a future study. In this initial report, to conform with SGX requirements, RPS has notionally classified the recoverable volumes as **Contingent Resources – Development Unclassified**. Given the early stage of assessment of development options, RPS does not deem it appropriate to assign a change of development.

As a result, recoverable volume estimates have been made in this report, assuming the notional development plan and the estimated recovery factors. Full field gross and Lime working interest contingent resource volumes of oil and gas for the Falk discovery are summarised in Table 4-3.

³ The APA 2020 report suggests a narrower range for the Bo to be used while it uses a wider range for the GOR.

Category	Gross Attributable to Licence		Lime’s 50% Working Interest			Rex’s Interest (90% in Lime)		Risk Factors ¹	Remarks
	Contingent Resources		Contingent Resources	Change from Previous Update (%)	Contingent Resources				
Contingent Resources - Oil									
	(MMcm)	(MMstb)	(MMcm)	(MMstb)		(MMcm)	(MMstb)		
1C	2.77	17.40	1.39	8.70	N.A.	1.25	7.83	N.A.	-
2C	4.42	27.80	2.21	13.90	N.A.	1.99	12.51	N.A.	-
3C	6.86	43.20	3.43	21.60	N.A.	3.09	19.44	N.A.	-
Contingent Resources – Gas ²									
	(Bcm)	(Bscf)	(Bcm)	(Bscf)		(Bcm)	(Bscf)		
1C	0.08	2.89	0.04	1.45	N.A.	0.04	1.31	N.A.	-
2C	0.13	4.67	0.07	2.34	N.A.	0.06	2.11	N.A.	-
3C	0.21	7.32	0.11	3.66	N.A.	0.10	3.29	N.A.	-

Notes

1. Given the early stage of assessment of development options RPS does not deem it appropriate to assign a chance of development.
2. Associated Gas only

Table 4-3: Falk Field Contingent Resources – Development Unclarified

5 CONSULTANT'S INFORMATION

RPS is an independent consultancy specialising in petroleum reservoir evaluation and economic analysis. The evaluation presented in this report reflects our informed judgment, based on accepted standards of professional investigation, but is subject to generally recognised uncertainties associated with the interpretation of geological, geophysical and engineering data. The evaluation has been conducted within our understanding of petroleum legislation, taxation and other regulations that currently apply to these interests. However, RPS is not in a position to attest to the property title, financial interest relationships or encumbrances related to the property. Our estimates of Resources are based on data provided by Lime. We have accepted, without independent verification, the accuracy and completeness of this data.

The report represents RPS's best professional judgment and should not be considered a guarantee or prediction of results. It should be understood that any evaluation, particularly one involving future performance and development activities, may be subject to significant variations over short periods of time as new information becomes available. This report relates specifically and solely to the subject assets and is conditional upon various assumptions that are described herein. This report must, therefore, be read in its entirety. This report was provided for the sole use of Lime, its holding company Rex International Holding Limited and their corporate advisers. The provision of professional services has been solely on a fee basis.

To the best of our knowledge, no conflict of interest has existed in the work conducted as part of this report. Furthermore, RPS nor any of the management and employees involved in the work have any interest in the assets evaluated or related to the analysis carried out as part of this report.

Mr Gordon Taylor, Director, Consulting, has supervised this evaluation. Mr Taylor is a Chartered Geologist and Chartered Engineer with over 40 years' experience in upstream oil and gas. Other RPS employees involved in this work hold at least a Master degree in geology, geophysics, petroleum engineering or a related subject or have at least five years of relevant experience in the practice of geology, geophysics or petroleum engineering. Table 5.1 provides a summary of staff involved in this evaluation, their level of experience and professional qualifications.

Name	Role	Years of Experience	Qualifications	Professional Memberships
Gordon Taylor	Supervisor	>40	BSc. Geological Sciences, Birmingham University MSc. Foundation Engineering, Birmingham University	Fellow, Geological Society (Chartered Geologist - 1991) Member, Institute of Materials, Minerals and Mining (Chartered Engineer-1983) Member, AAPG Division of Professional Affairs (Certified Geologist-2005) Member, Society of Petroleum Engineers
Jason Canning	Geoscience Lead	25	BSc Geology, Oxford Brookes University PhD, Birmingham University	Fellow, Geological Society (Chartered Geologist - 2014) Member, PESGB
Ben Lowden	Petrophysics Lead	25	BSc Geology & Oceanography, University of the South West MSc Sedimentology, Reading University PhD, Imperial College, London	Member SPWLA
Ali Bahrami	Engineering Lead	25	PhD Amir Kabir University of Technology, Tehran	Member, SPE Member, Energy Institute

Table 5-1: Summary of Consultant Personnel

Appendix A

Glossary

1C	The low estimate of Contingent Resources. There is estimated to be a 90% probability that the quantities actually recovered could equal or exceed this estimate
2C	The best estimate of Contingent Resources. There is estimated to be a 50% probability that the quantities actually recovered could equal or exceed this estimate
3C	The high estimate of Contingent Resources. There is estimated to be a 10% probability that the quantities actually recovered could equal or exceed this estimate
1P	The low estimate of Reserves (proved). There is estimated to be a 90% probability that the quantities remaining to be recovered will equal or exceed this estimate
2P	The best estimate of Reserves (proved+probable). There is estimated to be a 50% probability that the quantities remaining to be recovered will equal or exceed this estimate
3P	The high estimate of Reserves (proved+probable+possible). There is estimated to be a 10% probability that the quantities remaining to be recovered will equal or exceed this estimate
1U	The unrisks low estimate of Prospective Resources
2U	The unrisks best estimate of Prospective Resources
3U	The unrisks high estimate of Prospective Resources
B	Billion
bbl(s)	Barrels
bbls/d	Barrels per day
Bcm	Billion cubic metres
B _g	Gas formation volume factor
B _{gi}	Gas formation volume factor (initial)
B _o	Oil formation volume factor
B _{oi}	Oil formation volume factor (initial)
B _w	Water volume factor
boe	Barrels of oil equivalent
stb/d	Barrels of oil per day
BHP	Bottom hole pressure
Bscf	Billions of standard cubic feet
bwpd	Barrels of water per day
condensate	A mixture of hydrocarbons which exist in gaseous phase at reservoir conditions but are produced as a liquid at surface conditions
cP	Centipoise
E _{gi}	Gas Expansion Factor
EMV	Expected Monetary Value
EUR	Estimated Ultimate Recovery
ft	Feet
FWL	Free Water Level
GDT	Gas Down To
GIIP	Gas Initially in Place
GOC	Gas oil Contact
GOR	Gas/oil ratio

FALK REPORT

GRV	Gross rock volume
GWC	Gas water contact
HIIP	Hydrocarbon Initially in Place
km	Kilometres
LPG	Liquefied Petroleum Gases
m	Metres
m ³	Cubic metres
m ³ /d	Cubic metres per day
ma	Million years
M	Thousand
M\$	Thousand US dollars
MBAL	Material balance software
Mbbls	Thousand barrels
mD	Permeability in millidarcies
MD	Measured depth
MDT	Modular formation dynamics tester tool
MM	Million
MMbbls	Million barrels
MMcm	Million cubic metres
MMscf/d	Millions of standard cubic feet per day
MMstb	Million stock tank barrels (at 14.7 psi and 60° F)
MMt	Millions of tonnes
MM\$	Million US dollars
m/s	Metres per second
msec	Milliseconds
NTG or N:G	Net to gross ratio
NGL	Natural Gas Liquids
OWC	Oil water contact
P90	There is estimated to be at least a 90% probability (P90) that this quantity will equal or exceed this low estimate
P50	There is estimated to be at least a 50% probability (P50) that this quantity will equal or exceed this best estimate
P10	There is estimated to be at least a 10% probability (P10) that this quantity will equal or exceed this high estimate
petroleum	Naturally occurring mixtures of hydrocarbons which are found beneath the Earth's surface in liquid, solid or gaseous form
phi	Porosity
PSDM	Pre-stack depth migrated seismic data
PSTM	Pre-stack time migrated seismic data
PVT	Pressure volume temperature
rb	Barrel(s) at reservoir conditions
rcf	Reservoir cubic feet
REP™	A Monte Carlo simulation software package
RF	Recovery factor
RFT	Repeat formation tester
rm ³	Reservoir cubic metres
SCAL	Special Core Analysis
scf	Standard cubic feet measured at 14.7 pounds per square inch and 60° F

FALK REPORT

scf/d	Standard cubic feet per day
scf/stb	Standard cubic feet per stock tank barrel
sm ³	Standard cubic metres
S _o	Oil saturation
S _{oi}	Initial oil saturation
S _{or}	Residual oil saturation
S _{orw}	Residual oil saturation relative to water
sq. km	Square kilometers
stb	Stock tank barrels measured at 14.7 pounds per square inch and 60° F
stb/d	Stock tank barrels per day
STOIIP	Stock tank oil initially in place
S _w	Water saturation
S _{wc}	Vonnate water saturation
\$	United States Dollars
t	Tonnes
THP	Tubing head pressure
Tscf	Trillion standard cubic feet
TVDSS	True vertical depth (sub-sea)
TVT	True vertical thickness
TWT	Two-way time
US\$	United States Dollar
V _{sh}	Shale volume
VSP	Vertical Seismic Profile
W/m/K	Watts/metre/° K
WC	Water cut
WUT	Water Up To
Z	A measure of the “non-idealness” of gas
φ	Porosity
μ	Viscosity
μ _g	Viscosity of gas
μ _o	Viscosity of oil
μ _w	Viscosity of water