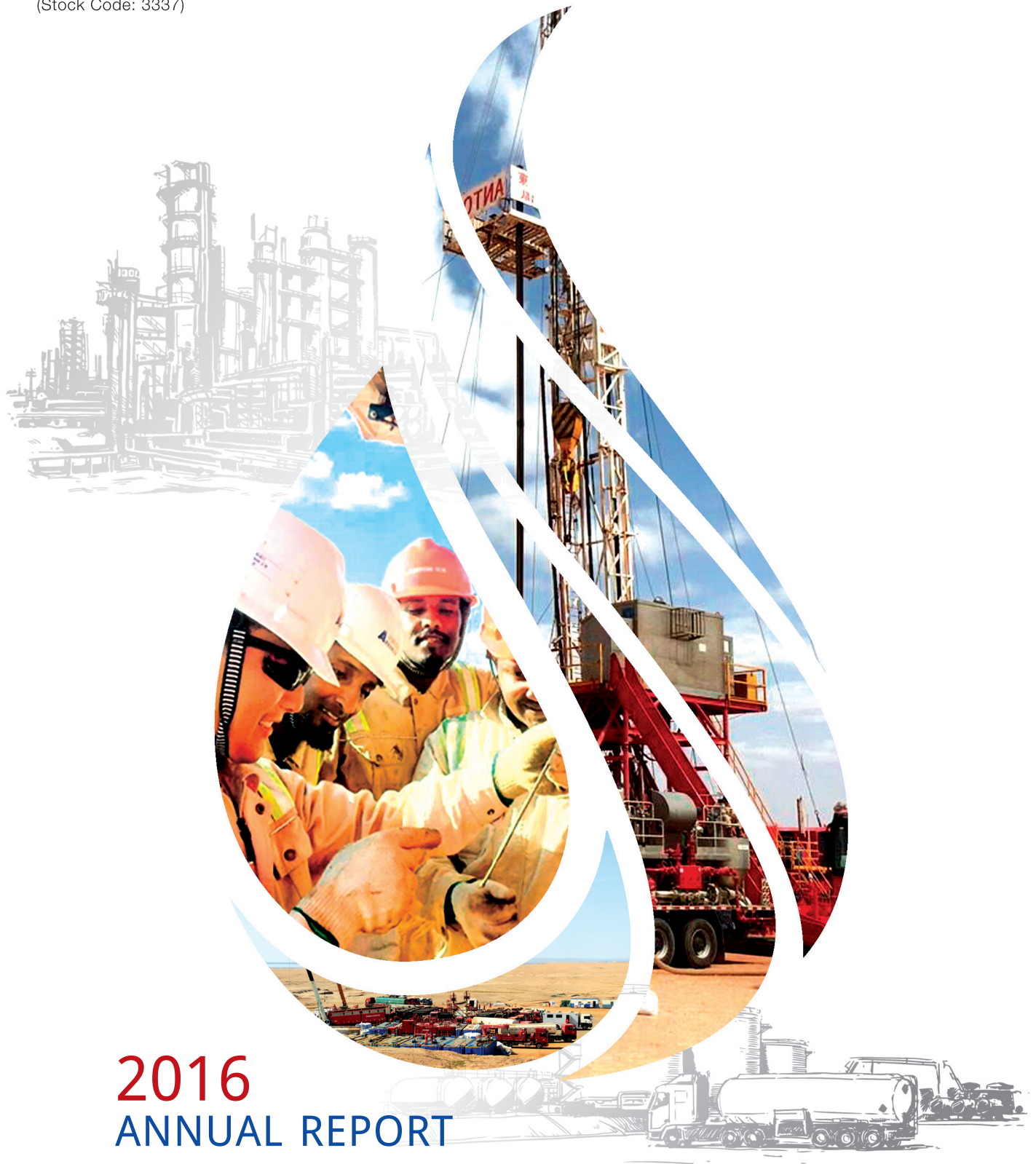


# ANTON 安東

安東油田服務集團  
Anton Oilfield Services Group

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 3337)



2016  
ANNUAL REPORT



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## ABOUT ANTONOIL

Anton Oilfield Services Group (“Antonoil” or the “Company” and, together with its subsidiaries, the “Group”) is a leading independent integrated oilfield services provider. The Group provides products and services for the entire process of oil and gas development and production, including reservoir management, drilling technology, well completion, down-hole operations, oil production as well as tubular service. With its comprehensive product lines and integrated service capacity, the Group is empowered to help oil companies solve the challenges they encounter in oil and gas fields such as increasing production, improving drilling efficiency, lowering costs and optimizing waste management. Its fast growth benefits from the accelerating development of natural gas in China and the Group’s increased presence in the overseas markets. The Group’s strategic objective is to become a leading global oilfield services provider with a solid foothold in China.

The Group is headquartered in Beijing and has established an international network across the global markets. In China, the markets cover the Tarim area, Erdos area, Southwest area and other areas of China, whereas, the overseas markets include Iraq and other Middle East market, Central Asia and Africa market and the Americas market. Antonoil is the best independent Chinese oilfield services partner, the best Chinese partner worldwide.



## About Antonoil

### **BUSINESS**

The main business of the Group is oil and gas field development technical services. Oil and gas field development technical services refer to the solutions provided to and implemented for oil companies to help them complete oil and gas field development and enhance production and reduce costs against various technical problems in the wellbore during the drilling, completion and production stages of field development.

The profit centers of the Group are based on the business clusters and the Group reports its results based on three clusters including drilling technology cluster, well completion cluster, and oil production cluster. Each business cluster is detailed as follows:

### **DRILLING TECHNOLOGY CLUSTER**

Drilling technology cluster provides engineering technical services and products during the drilling stage to solve problems encountered in directional drilling, drilling assessment, drilling acceleration, enhanced reservoir contact and integrated drilling, the Group is a leading drilling technical service provider in China.

#### **Integrated Services Management**

It implements project organization and economic assessment through reservoir geological assessment and integrated geological and engineering design. Provides integrated oil and gas field development engineering and technical management services, from design, organize resources to the project implementation, provide geological, reservoir, engineering, and integration of one-stop turnkey service.

#### **Integrated Drilling Services**

It integrates new technologies for drilling, well completion and special tools; provides comprehensive technical services from design to matching tools, production technique and related equipment; integrates individual competitive drilling technologies and provides integrated drilling and well completion technical solutions.

#### **Directional Drilling**

It engineers operate the drilling tool set to drill wellbores along the pre-set path to enhance the oil and gas recovery rate by reaching the best position in the reserves, the Group is a leading directional drilling service provider in China and its services include directional drilling technology, sidetracking drilling technology and steerable drilling technology.

#### **Drilling and Completion Fluid Service**

It provides drilling fluid system comprising oil-based muds and high-performance water-based muds, intended to address down-hole complications, shorten the drilling cycle and increase drilling speed. The Group has a team of senior drilling fluid technical experts, oil-based mud station, R&D center and the mud materials plant with first class equipment, providing customers with integrated services including drilling fluid on-site services, drilling fluid technology R&D, technical research and design, and sales services.

#### **Drilling Tool Rental and Technical Service**

It provides drilling tool rental, rehabilitation and anti-abrasion service, tubular processing and manufacturing and storage solutions.

## About Antonoil

### Land Drilling Service

It operates rigs to complete drilling jobs, including the delivery of service with self-owned rigs and third party owned rigs under management.

### Oilfield Waste Management

It applies advanced technology and combines domestic and international resources to offer waste and pollutants management service throughout oil and gas exploration and development such as oil-based drilling fluid and drill cutting treatment and fracture fluid treatment.



### Oil and Gas Production Facilities Inspection and Assessment Technology

It enjoys China National Accreditation Service (CNAS) lab status for instruments and Chinese and US Non-destructive Testing (NDT) qualifications; adopts international standards to conduct site testing service for oil production equipment, devices and instruments for customers across petrochemical, pharmaceutical, machinery manufacturing and electronics. It also concludes tubular helium testing services which use the mixed gas of helium and nitrogen to test tubing threaded connector against helium leak in the natural gas wells, thus solving the problem of helium connector leak. It is important to guarantee production safety of high pressure wells, sulfur-rich wells and key natural gas wells.

## WELL COMPLETION CLUSTER

It provides integrated well completion and stimulation services from integrated solutions for well cementing and completion, production well completion, equipment, tools and materials. The Group is a leading well completion technical service and tool provider in China, which provides technical services and products to solve various technical problems experienced by oil companies during well completion stage. It designs well completion solutions and techniques comprised of various well completion tools for different formations and reservoirs, thus completing the preparation works as necessary for wellbore completion and oil production. Its services include well completion integration, screen well completion, gravel packing completion and oil production tools.

### Integrated Completion Services

It provides well completion engineering design and implementation service for low-permeability naturally fractured reservoirs and shale gas reservoirs; provides integrated services ranging from reservoir geological analysis consulting to well completion engineering design, well completion tools and liquid material; provides monitoring service for stimulation measures.

### Completion Tools

It provides a host of well cementing and completion tools and production well completion tool services; addresses various kinds of technical complications in open-hole well completion and casing well completion. It also has capacity of production proprietary tools.

### Sand Screen and Water Control services

It provides the most diverse range of sand control completion tools and integrated design for sand control well completion, sandscreen and water control; provides sand control well completion stimulation service with high-pressure gravel packing as the core offering; provides supporting services for AICD water control. The screen well completion tools of the Group include composite screens, punched slotted screens, sand screens, pack screens, wire wrapped screens, slotted screens and innovative water control screens.

## About Antonoil

### Fracturing/Acidizing Technique and Chemical materials

It focus on acidizing and fracturing stimulation technologies development, provides integrated solutions from stimulation technology evaluation, design, down-hole chemicals and equipment engineering to enable integrated stimulation; provides R&D, manufacturing, marketing and technical services for down-hole chemicals for acidizing, fracturing, killing, and oil production (inflow and profile control) operations.

### Fracturing and Pumping

It harnesses the hydraulic horsepower (HHP) of the pressure pumping equipment and other related operational capabilities to help clients implement pressure pumping design and solutions of varying scales, with the benefit of expanding the permeability of oil and gas reservoirs and improving production capacity. Pressure pumping has become the necessary measure to developing unconventional oil and gas reservoirs.

### Coiled Tubing Services

It combines equipment and tools to form different processes and technologies with broad applications, including stimulation in low-permeability wells, special operations in ultra-complicated wells and regular operations in conventional wells including horizontal well cable testing and workover services such as sidetrack drilling, milling and fishing services.

### Proppant

It is an important material in oil development process when applying fracturing to stimulate oil and gas production. Its role is to support the fractures and keep oil and gas passage in order to increase production

### OIL PRODUCTION CLUSTER

It provides engineering services and products for oil companies during well completion and production; enables economic recovery based on reservoir geological conditions through production operation management and ground process services.

### Production Operation Management

It provides production operation management services for oilfield ground stations, including power engineering construction, operation, inspection and maintenance, artificial life technology design, management, optimization operation support, water injection, profile control, ground equipment maintenance and rehabilitation, re-engineering, installation overhaul and oil and gas field ground construction projects.

### Workover Services

It provides conventional and major workover for oil and gas wells, sidetrack, fishing, oil testing and well completion integrated operation and routine maintenance operation services.

### Tubing/Casing Repair and Anti-corrosion Service

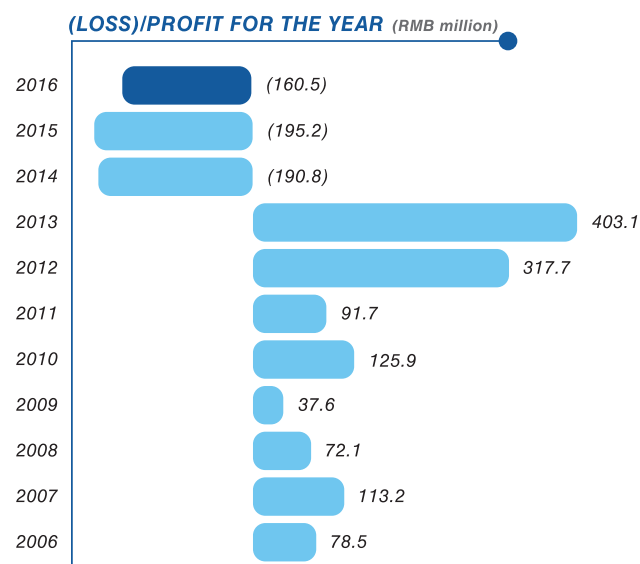
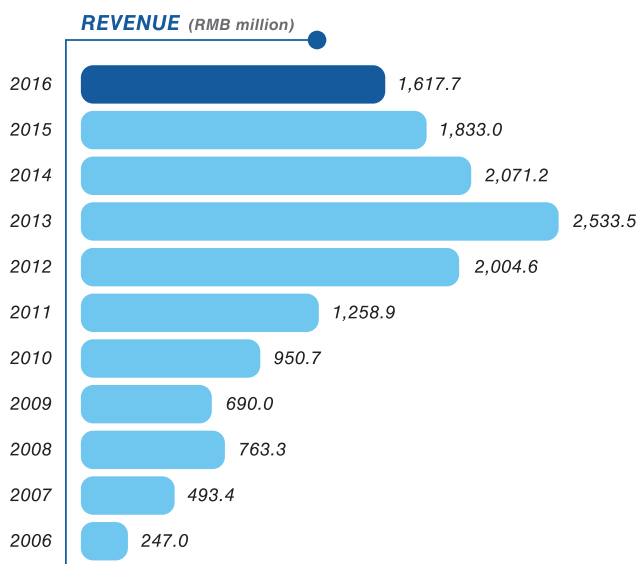
It provides featured tubing and casing technical services with Premium Thread Design as the core offering; a reputable supplier of specialized tubes and casings for Chinese and overseas customers.



# FINANCIAL SUMMARY

## CONDENSED CONSOLIDATED INCOME STATEMENTS

		For the year ended 31 December				
RMB ('000)		2012	2013	2014	2015	2016
	Revenue	2,004,583	2,533,536	2,071,205	1,833,006	<b>1,617,675</b>
	Other gains/(losses), net	10,646	19,950	(1,839)	20,689	<b>68,967</b>
	Operating costs	(1,617,250)	(1,981,130)	(2,031,392)	(1,761,221)	<b>(1,543,446)</b>
	Operating profit	397,979	572,356	37,974	92,474	<b>143,196</b>
	Finance costs, net	(30,610)	(72,678)	(178,464)	(254,770)	<b>(173,379)</b>
	Profit/(Loss) before income tax	367,369	489,977	(159,550)	(163,338)	<b>(30,591)</b>
	Profit/(Loss) for the year	317,705	403,138	(190,805)	(195,248)	<b>(97,672)</b>
	Attributable to:					
	Equity holders of the Company	302,579	382,568	(198,213)	(194,731)	<b>(160,450)</b>
	Non-controlling interests	15,126	20,570	7,408	(517)	<b>62,778</b>
	Dividends	97,600	119,953	—	—	—
<i>Earnings/(loss) per share for profit attributable to the equity holders of the Company during the year (expressed in RMB per share)</i>						
	Basic	0.1430	0.1779	(0.0902)	(0.0878)	<b>(0.0720)</b>
	Diluted	0.1402	0.1733	(0.0902)	(0.0878)	<b>(0.0720)</b>



## Financial Summary

**CONDENSED CONSOLIDATED BALANCE SHEETS**

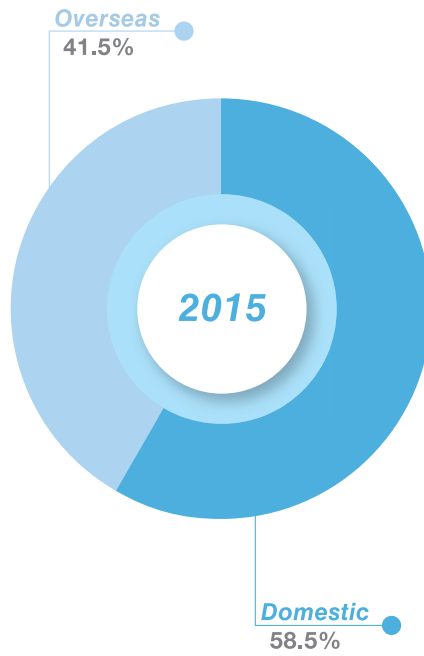
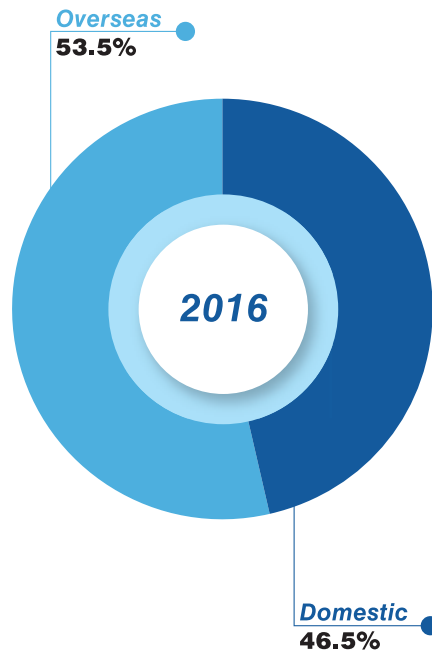
	<b>As at 31 December</b>				
<b>RMB ('000)</b>	2012	2013	2014	2015	<b>2016</b>
<b>Assets</b>					
Non-current assets	1,378,551	2,100,954	2,934,952	3,063,576	<b>2,957,227</b>
Current assets	2,214,283	3,866,898	3,556,215	3,119,584	<b>3,704,054</b>
Total Assets	3,592,834	5,967,852	6,491,167	6,183,160	<b>6,661,281</b>
<hr/>					
Total Equity	2,080,954	2,375,297	2,148,756	1,959,612	<b>1,976,897</b>
<hr/>					
<b>Liabilities</b>					
Non-current liabilities	303,286	1,984,305	1,700,487	1,589,010	<b>2,504,217</b>
Current liabilities	1,208,594	1,608,250	2,641,924	2,634,538	<b>2,180,167</b>
Total liabilities	1,511,880	3,592,555	4,342,411	4,223,548	<b>4,684,384</b>
<hr/>					
Total equity and liabilities	3,592,834	5,967,852	6,491,167	6,183,160	<b>6,661,281</b>
<hr/>					
Net current assets	1,005,689	2,258,648	914,291	485,046	<b>1,523,887</b>
<hr/>					
Total assets less current liabilities	2,384,240	4,359,602	3,849,243	3,548,622	<b>4,481,114</b>





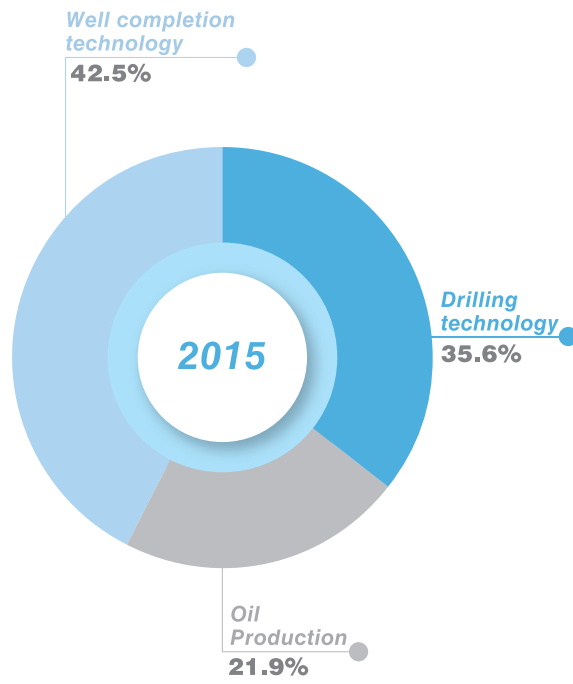
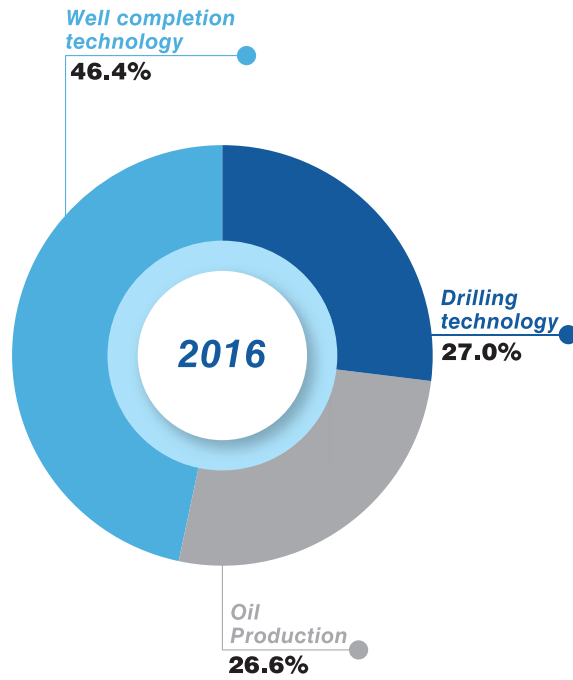
# FINANCIAL HIGHLIGHT

## REVENUE BREAKDOWN BY REGION



Financial Highlight

**REVENUE BREAKDOWN BY BUSINESS CLUSTERS**



## CHAIRMAN'S STATEMENT



Dear Shareholders,

In 2016, the international oil prices once fell to its lowest in almost 12 years. With the market remaining weak, the oil and gas industry was faced with a huge challenge. Being confronted with a very challenging market situation, we made positive and rapid adjustments and still achieved some results. We optimized the market structure, shifting our business focus to overseas market by laying stress on the Iraqi market and developing emerging markets of the oil and gas industry, which resulted in an impressive growth of our overseas operations. With improvement in cost structure, together with continuous personnel structure optimization and effective measures to lower cost and enhance efficiency, we are able to lower our cost and fee significantly. We optimized the company's capital structure and hence alleviating financial strain through such manners as bank financing, disposal of assets and issuing of new shares. In addition, by building business relationships, we formed the most competitive integrated service alliance in China, preparing ourselves for recovery in the future.

## Chairman's Statement

### REVIEW

Domestically, capital expenditure on upstream exploration and development was further squeezed. The market was sluggish and the overall income continued to drop. However, by virtue of the advantages in unconventional development technology, we have seized unconventional project opportunities such as dense oil and gas, coalbed methane and shale gas, and focused on maintaining the market share of unconventional resource development projects. Overseas, by virtue of the good layout in overseas markets and years of market cultivation, our overseas operations experienced contrarian growth. In the Iraqi market, we no longer follow others. Instead, we entered the international oil market heads on, significantly increasing our market size while remaining a continuous income growth. Meanwhile, along the "One Belt, One Road" emerging markets, we continued to follow Chinese investors "go out", achieving faster income growth. The Ethiopian market grew substantially compared to the corresponding period in 2015. Smooth progress was achieved in the newly entered Pakistan market and the future development potential was great. With respect to the income structure, the long-term service contract model and the operations characterized by integrated services in respect of production enhancement and cost reduction grew relatively fast. In the Iraqi market, we obtained various long-term service contracts from the same customer, which provided a guarantee for the continued growth of our overseas business. Product lines such as fracturing pumping services, continuous oil pipe services and chemical production enhancement technology were characterized by production enhancement and cost reduction and still achieved contrarian growth under a sluggish market environment. In addition, under a difficult market environment, we were actively engaged in cooperation, reaped benefits through mutual cooperation and carried out comprehensive technical cooperation with service companies to further enhance the ability to mobilize global resources and form the most competitive integrated service alliance in China. With respect to management, significant results were achieved in cost reduction and efficiency enhancement. Labor costs, raw material costs and financial costs all declined substantially.

### OUTLOOK

Looking ahead to 2017, international oil prices will gradually rebound. The market atmosphere is improving and the industry is ushering in a recovery. Customers' investment in upstream exploration and development increased significantly. Our order backlog has reached a record high. Meanwhile, operation has been commenced successively for orders since the third quarter of last year, hence increasing the equipment utilization rate. As of the reporting date, orders amounting to approximately RMB3 billion had entered the operation commencement phase. We are pleased to see that several large orders in the Iraqi market, such as oil production, workover and completion integrated project, rig service project, oil extraction operation and maintenance project and fracturing service project, have commenced operation, which will significantly increase the business size of the Group. As for the priority market, the Iraqi will remain a rapid growth along with the comprehensive implementation of orders, we will also continue to expand the service scale with existing international oil companies, and strive for tap into the market of new international oil companies. Emerging market of the international oil and gas exploration industry will be our future principal focus of development, we will adapt the following strategy for orderly distribute in emerging market and strive for entry and develop 1-2 overseas market per year. We will continue to expand our market share in the existing Ethiopian market to strive for introducing more production lines; as for the Pakistani market which we have already tapped into, we believe that its future development potential is immense, in 2016, we followed our client to tap into this market and achieved equipment allocation and transportation and cultivation of personnel, we can foresee that the service volume of both new well fracturing and oil well stimulation projects will be considerable. Meanwhile, there will be a larger developing room in the shale gas development market and stimulation service market related to reservoir geology in Pakistan. The clients in new-entry Kazakhstan market and Albania market are our shareholders and strategic partners, the potential of both markets are huge and our technology and service will further stimulate the development potential of our clients in such markets. At the same time, we also pay attention to and advance potential cooperation opportunities with other Asian and African market to strive for a breakthrough in new market. As for the PRC, we will focus on grasping non-conventional market opportunity for achieving the target of production. The shale gas market will face a new opportunity. In 2017, our ultra-long conventional well integration service will be commenced and it will drive the increase in service volume of the Group's drilling and fracturing, thus the service price in such market will also increase due to the pressure on production enhancing.



## Chairman's Statement

As for revenue structure, our service model will continue to optimize and we will continue to increase the revenue scale of production enhancing specialized business as well as focus on developing services in relation to reservoir geology project as so to achieve customers' production target, and strive for major integration project related to reservoir geology with high additional value. Besides, we will try our best to provide more product lines service to the same client or the same country so as to enhance the revenue scale derived from the same client or the same country. In respect of product and technology buildup, we will correspondingly increase headcounts as market recovery. As for the overseas market, especially the emerging market of the oil and gas exploration industry, we will gradually increase headcounts for support the scale up development of the overseas business. In order to cope with the building in reservoir geological capability, we will substantially introduce reservoir geological technology talents and integration product management talents. At the meanwhile, we need to further improve integration service alliance, and through light asset by global resources allocation rather than investment to promote service capability. In respect of financial management, we will enhance capital management and remain sound cash flow through various means.

We believe that Antonoil will be back on the rapid growth track in 2017 and it will be the start year of our bounce back. In the future years, we will insist in "light asset" strategy for achieving our long-term strategic goal of "becoming a leading global oilfield services provider with a solid foothold in China".

### ACKNOWLEDGEMENTS

On behalf of the board of directors (the "Board"), I would like to express my heartfelt thanks to our customer, employees, partners and shareholders. It is owing to your enduring trust and support that we were able to find resilience and amass strengths in a cold winter of the industry. In 2017, we are fully prepared to embrace the upcoming challenges and opportunities.

*Chairman*

**LUO Lin**

27 March 2017

# CORPORATE INFORMATION

## BOARD OF DIRECTORS

### Executive Directors

Mr. LUO Lin (Chairman)  
Mr. WU Di  
Mr. PI Zhifeng (Chief Executive Officer)

### Non-executive Director

Mr. John William CHISHOLM  
(appointed on 2 November 2016)

### Independent Non-executive Directors

Mr. ZHANG Yongyi  
Mr. ZHU Xiaoping  
Mr. WANG Mingcai

## AUDIT COMMITTEE

Mr. ZHU Xiaoping (Committee Chairman)  
Mr. ZHANG Yongyi  
Mr. WANG Mingcai

## REMUNERATION COMMITTEE

Mr. WANG Mingcai (Committee Chairman)  
Mr. ZHU Xiaoping  
Mr. LUO Lin

## NOMINATION COMMITTEE

Mr. ZHANG Yongyi (Committee Chairman)  
Mr. WANG Mingcai  
Mr. LUO Lin

## QHSE ("QUALITY, HEALTH, SAFETY AND ENVIRONMENT") COMMITTEE

Mr. PI Zhifeng (Committee Chairman)  
Mr. LUO Lin

## AUTHORIZED REPRESENTATIVES

Mr. LUO Lin  
Dr. NGAI Wai Fung

## COMPANY SECRETARY

Dr. NGAI Wai Fung (FCIS, FCS (PE), CPA, FCCA)

## COMPANY'S WEBSITE

www.antonoil.com

## INVESTOR RELATIONS HOTLINE

+86 10 57397584  
+852 29077108  
Email: ir@antonoil.com

## PRINCIPAL PLACE OF BUSINESS IN HONG KONG

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183 Queen's Road Central  
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Hong Kong

## PRINCIPAL PLACE OF BUSINESS IN PRC

No. 8, Pingcui West Road, Donghuqu  
Chaoyang District  
Beijing, China 100102

## REGISTERED OFFICE

PO Box 309, Uglan House  
Grand Cayman KY1-1104  
Cayman Islands

## PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Royal Bank of Canada Trust Company (Cayman) Limited  
4th Floor, Royal Bank House  
24 Shedden Road, George Town  
Grand Cayman KY1-1110  
Cayman Islands

## HONG KONG BRANCH SHARE REGISTRAR AND TRANSFER OFFICE

Computershare Hong Kong Investor Services Limited  
Shops 1712-1716, 17th Floor  
Hopewell Centre  
183 Queen's Road East  
Wanchai  
Hong Kong

## Corporate Information

### **AUDITORS**

PricewaterhouseCoopers  
Certified Public Accountants

### **LEGAL ADVISERS**

**as to Hong Kong and U.S. law:**  
Sidley Austin

**as to PRC law:**

RRDS LAW OFFICES

**as to Cayman Islands law:**

Maples and Calder

### **PRINCIPAL BANKS**

Bank of China  
China Merchants Bank  
Bank of Beijing  
Deutsch Bank

### **STOCK CODE ON MAIN BOARD OF THE STOCK EXCHANGE OF HONG KONG LIMITED**

3337

### **DATE OF LISTING**

14 December 2007

# MANAGEMENT DISCUSSIONS AND ANALYSIS



## BUSINESS REVIEW

2016 was a year when the global oil and gas market remained sluggish overall, and business operations were extremely challenging. International oil prices have not stabilized after falling for a year and a half, and had once hit the lowest point in twelve years. Global oil companies reduced oil and gas exploration activities significantly to cut costs vigorously, while oil companies generally had a low rate of operation and excessive capacity.

Domestically, the market was challenging. Oil companies further cut their capital expenditure on the upstream exploration and development operations so that the overall workload of oilfield services was reduced significantly, and service prices fell substantially. On the market side, the market became more protective of conventional services, with intensified competition. Since the Group strived to enhance the utilization of its existing equipment and the projects of a strategic significance, placing emphasis on the unconventional market in which the Group had competitive advantages, it managed to win a number of tenders for tight oil and gas, coal-bed methane and shale gas projects and orders during the year. As to operation, due to the falling oil prices, commencement of some projects continued to be postponed and the rate of operation for orders and the overall capacity utilization remained low. From the third quarter of 2016, the rate of operation for projects gradually picked up as a result of the recovery of the regional market. Hit by falling service prices and low rate of operation for projects, the Group's domestic revenue fell further as compared to the year 2015.

In terms of overseas market, oil companies continued to shrink capital expenditure and exercise stringent control over costs as well after being affected by falling oil prices for a long period of time. With many years of cultivating in the overseas market, the Group continued to proactively expand its systematic competitive advantage of serving quality Chinese companies under the current low-oil price market environment, striving for a market share, as witnessed by its success in winning a number of tenders for projects during the year, for which the services were previously provided by international service companies. Moreover, the Group performed well in emerging markets as it staggered positioning with international oil service companies, and followed Chinese investors to provide services for their exploration of overseas oilfields. As at 31 December 2016, the Group's orders in hand for overseas business amounted to RMB2,528.9 million, accounting for approximately 80.1% of the Group's total orders in hand. In terms of operations, the rate of operation was lower than expected in the first half of the year due to falling international oil prices and oil companies' postponement of the construction of projects impact. Nevertheless, the overseas income for the year still recorded a contrarian growth by approximately 13.8%. The rapid expansion of overseas business created broader growth space for the long-term development of the Group's business, helped the Group enhance the overall business profit level and improve the cash flow.



## Management Discussions and Analysis

Under the challenging market environment, the Group continued to implement measures to reduce costs and increase efficiency. During the reporting period, the Group's staff costs, raw material costs and financial expenses all declined significantly as compared with 2015, coupled with the Group's industrial structure adjustment and changes in the composition of income from the market, the Group's profitability was raised considerably under the low oil price environment.

Moreover, the Group proactively advanced strategic cooperation in various areas in order to cope with the challenging market environment, plan and support the long-term development of the Group's business. At the capital cooperation, the Group brought in China Oil HBP Science & Technology Co., Ltd. (華油惠博普科技股份有限公司) ("HBP"), a company which has strong complementarity with the Group in business, as a strategic partner through the disposal of a 40% equity interest in the Iraqi business. Both parties strived to jointly explore and expand the size of overseas markets further by fully unleashing synergies. Furthermore, the Group brought in independent oil company, Geo-Jade Petroleum Corporation ("Geo-Jade Petroleum"), as a strategic investor, through the issuance of additional new shares. The three parties, including HBP, entered into a strategic cooperation agreement for the formation of a strategic alliance among oil companies and oilfield service companies. At the technical level, the Group established strategic cooperation with Flotek Chemical, LLC ("Flotek"), a North American oilfield technology service company with patented nano stimulation technology, in which the two parties would jointly promote the development and application of advanced stimulation technology in the Chinese market to raise the efficiency of oil and gas exploration for customers.

Regarding capital management, the Group continued to carry out the supervision and control of funds with a focus on the budget. However, the Group had a generally tight overall cash flow because of the long payment days for the domestic accounts receivable and the working capital needs of the high-speed growth of overseas businesses. The Group has strived to broaden its financing channels to improve its cash flow by strengthening its cooperation with several commercial banks, stripping assets from its non-core business, transferring equity in its overseas subsidiaries and issuing additional shares.

## Results and Performance

In 2016, the Group's total revenue amounted to RMB1,617.7 million, a decline of RMB215.3 million or approximately 11.7% as compared with the same period of 2015, which was primarily attributable to the further shrinking of the domestic market and delay in project execution. The Group's operating profit was RMB143.2 million, an increase of RMB50.7 million, or approximately 54.8%, from RMB92.5 million of 2015. A net loss of RMB97.7 million was recorded for the year ended 31 December 2016, representing a decrease of RMB97.5 million, or approximately 49.9%, from RMB195.2 million of 2015. Loss attributable to equity holders of the Company was RMB160.5 million, a decrease of RMB34.2 million, or approximately 17.6%, from RMB194.7 million as compared with the same period of 2015. The margin of net profit attributable to equity holders of the Company was -9.9%, an increase of 0.7 percentage points from -10.6% of 2015.

As at 31 December 2016, approximately RMB1,683.5 million of accounts receivable were recovered by the Group. The average accounts receivable turnover days were 263 days, an increase of 15 days as compared with last year. The average inventory turnover days were 271 days, an increase of 49 days as compared with last year. Average accounts payable turnover days was 142 days, a decrease of 13 days as compared with last year. Cash flow from operating activities was RMB-66.0 million, a decrease of RMB223.4 million from RMB157.4 million of last year.

## Geographical Market Analysis

In 2016, the domestic market has recorded revenue of RMB751.5 million, a decrease of RMB320.6 million (or approximately 29.9%) from 2015 (RMB1,072.1 million). Domestic revenue amounted to approximately 46.5% of the Group's total revenue. Overseas revenue was RMB866.2 million, an increase of RMB105.3 million (or approximately 13.8%) from 2015 (RMB760.9 million). Overseas revenue has for the first time exceeded domestic revenue, taking up approximately 53.5% of total revenue.

## Management Discussions and Analysis



### Breakdown of Revenue by Market

	Year ended 31 December			Share of Total Group Revenue	
	2016 (RMB' million)	2015 (RMB' million)	Change (%)	2016	2015
Domestic	<b>751.5</b>	1,072.1	-29.9%	<b>46.5%</b>	58.5%
Overseas	<b>866.2</b>	760.9	13.8%	<b>53.5%</b>	41.5%
<b>Total</b>	<b>1,617.7</b>	1,833.0	-11.7%	<b>100%</b>	100.0%

### Domestic Market

In 2016, affected by the continuing low oil price and sluggish market, domestic oil companies continue to reduce capital expenditure. On conventional projects, protectionism furthered and competition increased; on unconventional projects, market size decreased dramatically. The Group focused on increasing efficiency of existing equipment and completing for strategic projects. Leveraging on its competitive advantage in the unconventional market, the Group won multiple tenders of tight oil, CBM and shale gas projects. On project execution, certain projects experienced delay in commencing work, owing to the low oil price, and resulted in low commencing ratio of projects overall, and a large reduce in revenue.

## Management Discussions and Analysis

### Revenue Analysis of Domestic Market

	Year ended 31 December			Share of Domestic Revenue Year ended 31 December	
	2016 (RMB' million)	2015 (RMB' million)	Change (%)	2016	2015
Northwest China	<b>317.9</b>	514.7	-38.2%	<b>42.3%</b>	48.0%
North China	<b>196.7</b>	318.1	-38.2%	<b>26.2%</b>	29.7%
Southwest China	<b>137.9</b>	204.2	-32.5%	<b>18.3%</b>	19.0%
Northeast China and other Chinese regions	<b>99.0</b>	35.1	182.1%	<b>13.2%</b>	3.3%
<b>Total</b>	<b>751.5</b>	1,072.1	-29.9%	<b>100.0%</b>	100.0%

Major developments in the domestic market:

- In Northwest China, large decrease was experienced as compared with last year due to decreasing investment from clients and shrinking market. The Group emphasized on conventional businesses in this area, including drilling fluid, drilling and completion integration, workover and inspection, and at the same time promoted vigorously new technologies to actively search for new opportunities, including optical fiber testing, new oil-based mud, nano stimulation, etc.
- In North China, workload has decreased significantly. Large amount of heavy equipment accumulated in this area. Due to lower investment and shrank market, the overall utilization rate was low, and margin level was poor. In the second half of 2016, this market realized recovery growth. The Group actively looked for new orders, and at the same time worked with international oil companies in this area and won drilling integration projects, which drove the project implementation of a series of product lines, project execution including drilling service, directional drilling, and completion. Since October 2016, all four drilling rigs in this region have commenced working.
- In Southwest China, the Group recorded lower revenue in 2016 as compared with 2015, due to the shrinking market of unconventional projects. In this region, the Group has focused on shale gas projects, winning several tenders including coiled tubing and rotary geological steering. The Group had breakthrough in Guizhou CBM market, winning an integration project order. This project has kicked off since October 2016, as at the date of this annual report, the project is operating smoothly with hope of winning additional orders.

- In Eastern China, the Group rigorously explored new markets for new clients, winning tenders and commencing operation both in the Shanxi CBM market and from CNOOC. Revenue in this market has grown substantially as compared with 2015.

### Overseas Markets

In the first half of 2016, oil price has once dropped to the lowest point in 12 years, dragging down the overseas market as a whole. Even so, the Group fully played its competitive edge as a high-quality Chinese company in the low-oil-price environment, and continuously achieved new progress and breakthroughs in the overseas market. The Group had still won multiple service orders which were provided by international oil companies before, and it continued to strengthen its cooperation with independent Chinese investors in the emerging markets under the "Belt and Road" initiatives. Regarding project execution, in the first half of 2016, the ultra-low oil price resulted in low rate of operation overseas and a less-than-expected business growth. In the second half, overseas orders on hand started to commence operation from the third quarter against the backdrop of rising oil price, and the Group has again recorded a slight increase in its all-year overseas revenue. To meet the rising requirement for working capital in overseas market as a result of fast growth, and to support the long-term growth of the Group's overseas growth, the Group has introduced a strategic partner after transferring 40% of equity interest of its Iraq business.

## Management Discussions and Analysis

### Revenue Analysis of Overseas Market

	Year ended 31 December			Share of Overseas Revenue Year ended 31 December	
	2016 (RMB' million)	2015 (RMB' million)	Change (%)	2016	2015
Middle East	<b>643.7</b>	556.6	15.6%	<b>74.3%</b>	73.2%
Americas	<b>8.2</b>	67.2	-87.8%	<b>0.9%</b>	8.8%
Central Asia & Africa	<b>214.3</b>	137.1	56.3%	<b>24.8%</b>	18.0%
Total	<b>866.2</b>	760.9	13.8%	<b>100%</b>	100%

Major developments in the overseas markets:

- In the Middle East, the Iraqi market is still the centerpiece of the overseas market. The Group has relied on its cultivation in this market and competitive edge as a Chinese service company for years to continue to look for new clients and markets, as well as strengthening the cooperation with international oil companies. In 2016, the Group has expanded its business in West Qurna II, winning a tender of USD78 million for comprehensive maintenance. This project has commenced operation in the third quarter of 2016 and has been running smoothly, with hope of additional orders from the client. Besides, the Group, working with international oil companies, has entered into the Badraha oilfield and Gharraf oilfield for the first time. By cooperating with Chinese oil companies, the Group further promoted its stronghold in conventional projects, including production operation service, coiled tubing, directional drilling and completion services. Also, the Group has won fracturing projects in Halfaya oilfield, and completed the first fracturing well in Iraq in the end of 2016. As at the date of this annual report, the stimulation performs well with a stabilized growth by 6-times in daily production comparing with that of pre-fracturing, and the market is expected to further expand in 2017. Regarding project execution, overall commencement rate was lackluster in the first half of 2016, with lower-than-expected full-year growth recorded. Due to the increasing demand for overseas working capital resulting from the fast-developing overseas business, the Group transferred 40% of equity interest of the Iraqi business in the first half of 2016, introducing China Oil HBP Science & Technology Co., Ltd. (“華油惠博普科技股份有限公司”) with strong EPC service capabilities in Iraq as a strategic partner.
- By sharing customer resources, markets and service capacity, synergy was profound. Apart from the Iraqi market, the Group has achieved breakthrough in the GCC market, winning tenders for screens sales in Oman and UAE, as well as passing prequalification of Kuwait and Saudi Arabia which grants qualification for participating in tenders. It prepares the Group for further business development in this area in the future.
- In Central Asia and Africa, the Group seized the market opportunities under the Belt and Road Initiative, and further expanded market share by supporting Chinese investors developing overseas oilfields. The Group has recorded more orders and also significant growth in its revenue. In Ethiopia, projects continue to push through with market size growing. As at the date of this annual report, the Group has multiple product lines in this market including workover service, drilling fluid service, cementing service, fracturing and acidizing service, as well as well completion tools service. In Pakistan, the Group provided experimental fracturing services project which is going smoothly. It is expected that there will still be substantial room for growth in the future in this regional area. Besides, the Group signed a comprehensive strategic cooperation agreement with China HBP (惠博普) and Geo-Jade Petroleum (洲際油氣), promoting fast mutual growth by integrating the capability of oil company, technical service company and EPC company. Geo-Jade Petroleum's reservoir in Kazakhstan will become a new growth point in Central Asia in 2017.
- In the America, the overall market has contracted significantly, with revenue decreasing significantly. However, the Group has achieved breakthrough in the new Ecuador market with independent completion tools.



## Management Discussions and Analysis



### Business Cluster Analysis

For the year ended 31 December 2016, the Group's drilling technology cluster posted RMB437.5 million in revenue; well completion RMB751.1 million; oil production services cluster RMB429.1 million. In terms of the share in the Group's revenue, the well completion cluster was top contributor with approximately 46.4% of the Group's revenue; drilling technology services cluster accounted for approximately 27.0%; oil production technology cluster accounted for approximately 26.6%.

In 2016, the continued sluggish market condition led to the significant decrease of drilling services, which is directly linked to new capital expenditure of clients. Production services, which is connected to more stable operation expenditure of clients, continued to grow. The Group emphasized on meeting clients' "reducing cost and increasing efficiency" demand, strengthened and promoted technological innovations, pushed through international technological cooperation, introduced cutting-edge technologies overseas, which help clients to improve efficiency, while raise profitability of different product lines.

### Revenue Breakdown by Cluster

	Year ended 31 December			As a Percentage of Total Revenue	
	2016 (RMB' million)	2015 (RMB' million)	Change (%)	2016	2015
Drilling technology cluster	<b>437.5</b>	652.0	-32.9%	<b>27.0%</b>	35.6%
Well completion cluster	<b>751.1</b>	778.4	-3.5%	<b>46.4%</b>	42.5%
Oil production services cluster	<b>429.1</b>	402.6	6.6%	<b>26.6%</b>	21.9%
<b>Total</b>	<b>1617.7</b>	1,833.0	-11.7%	<b>100.0%</b>	100.0%

## Management Discussions and Analysis

### Drilling technology cluster

In 2016, the drilling technology cluster recorded RMB437.5 million in revenue, a decrease of approximately 32.9% from last year's RMB652.0 million, mainly due to large reduction of capital expenditure for new wells by its clients, rapidly shrinking market size, as well as lack of overall workload from delayed commencing of projects.

Analysis of product lines in the drilling technology cluster:

- 1) Integrated services of oil and gas field development. Under the grim market condition, the Group had no project in progress in 2016 and no revenue was recorded (same as last year)
- 2) Integrated drilling service. In 2016, domestic integrated projects decreased significantly, which in turn resulted in a decrease in revenue. During 2016, this product line recorded revenue of RMB66.6 million, a decrease of approximately 54.1% from last year's RMB145.0 million. The Group exploited new market opportunity proactively and won tender for Guizhou CBM integrated project. Cementing services achieved reasonable growth and entered new market of Ethiopia in 2016, winning continuous workload and recording increasing revenue.
- 3) Directional drilling service. In 2016, this product line achieved reasonable growth. Domestically, the rotary geological steering service partnered with Schlumberger worked continuously in Southwest China, while the proprietary rotary geological steering service recorded stable growth in Northeast China. Overseas, this product line achieved stable workload in Iraq. During 2016, this product line recorded revenue of RMB126.8 million, a growth of approximately 8.7% from last year's RMB116.6 million.
- 4) Drilling fluid service. Domestically, in the shale gas market in Southwest China, proprietary drilling fluid product and services gained further approval from clients, resulting in increased revenue. In Xinjiang area, revenue was down due to heightened competition and lower price despite steady workload. Overseas, in Ethiopia and Iraq, steady workload was obtained. This product line recorded RMB106.4 million in 2016, a decrease of approximately 14.1% than last year's RMB123.9 million.
- 5) Land drilling service. This product line has seen severe decline in 2016 due to the cut of capex on drilling of new wells and the increase of protectionism lead to lower workload and revenue. In the second half of 2016, drilling rigs started operation, increasing overall utilization rate. The Group has won tender in Erdos for a cooperation project of international oil company, where large potential is expected in the future. During 2016, this product line recorded revenue of RMB35.4 million, a decrease of approximately 55.8% from last year's RMB80.1 million.
- 6) Oilfield waste management service. This product line has adopted a more stable marketing strategy in 2016 domestically, recording revenue mainly from the Southwest shale gas market. Overall business of this product line has been shifted to overseas, where in Ethiopia breakthrough was achieved, bringing continuous workload. During 2016, this product line recorded revenue of RMB22.4 million, a decrease of approximately 24.1% from last year's RMB29.5 million.
- 7) Drilling tool rental and technology service. This product line has witnessed drop in customer demand and lower workload. Full year revenue decreased dramatically despite a warming-up Xinjiang market in the second half of the year. In 2016, this product line recorded revenue of RMB22.7 million, a drop of approximately 67.2% from last year's RMB69.2 million.
- 8) Oil and gas production facilities inspection and evaluation service. This product line mainly covered Xinjiang and Southwest China in 2016, and both drilling tools inspection and gas seal inspection have seen significant drop in workload, coupled with a sliding price from increased competition, lead to a sizable drop in revenue. In 2016, this product line recorded revenue of RMB57.2 million, a drop of approximately 34.8% from last year's RMB87.7 million.

EBITDA of the drilling technology cluster decreased approximately 23.2% from RMB184.4 million last year to RMB141.7 million in 2016. EBITDA margin for 2016 was 32.4%, an increase of approximately 4.1 percentage points from last year's 28.3%, mainly due to cost control measures and increased overseas business margin.

## Management Discussions and Analysis

### Well completion cluster

In 2016, the well completion cluster recorded revenue of RMB751.1 million, a drop of approximately 3.5% from last year's RMB778.4 million. Under the backdrop of overall market shrinking and large impact on conventional businesses. The Group recorded growth in revenues when it continued to advance the coiled tubing business with its technical and service advantages in unconventional markets. Fracturing/acidizing technique and chemical materials services continued to break through overseas markets. Meanwhile, the Group has focused on well completion technology innovation, pushing through proprietary completion tools and getting positive feedback from clients, especially gaining continuous development in new markets overseas. Heavier equipment for the fracturing services has lower utilization rate, and the Group has reallocated some idle fracturing equipment to overseas market to meet the demand, conducted experimental projects in new markets, help the Group to improve utilization as well as project margin. Regarding new technology cooperation, in November 2016, the Group signed a strategic cooperation agreement with Flotek from the United States. Both sides will co-promote the nano chemicals stimulation technology, which has been commonly used in North America oil and gas market, and is currently under research and experimental use in targeted markets in China. It is expected to bring new growth opportunities for the Group in the future.

Analysis of product lines in the well completion cluster:

- 1) Well completion integration. In 2016, due to decreasing workload for conventional projects, overall revenue has dropped. However, proprietary completion tools have gained approval from domestic market, and recorded an increase of revenue. Overseas, the Group finished delivering completion tools in Iran, and proprietary sand control tools entered Ecuador market. In 2016, well completion integration recorded revenue of RMB231.5 million, a decrease of approximately 26.9% from last year's RMB316.6 million.
- 2) Pressure pumping service. This product line has witnessed decreasing workload and utilization in 2016, resulting in a large drop in revenue. In 2016, this product line recorded revenue of RMB123.1 million, a drop of approximately 16.8% from last year's RMB147.9 million. The Group adjusted proactively by reallocating some idle fracturing equipment to overseas. Currently, 10,000 HHP worth of equipment each in Iraq and Pakistan provides stimulation service.



- 3) Coiled tubing service. This product line has actively explored new markets, and as a result recorded RMB331.0 million of revenue in 2016, an increase of approximately 36.9% from last year's RMB241.8 million. This Group has gained continuous workload in shale gas and CBM projects in Sichuan basin, and has stable workload in the Iraqi market.
- 4) Fracturing/acidizing technique and chemical materials. Benefiting from breakthroughs in Ethiopia and Pakistan, this product line has witnessed fast growth of revenue in 2016, recording RMB19.1 million, a rapid increase of approximately 96.9% from last year's RMB9.7 million.
- 5) Proppant. In 2016, the Group has taken the market condition in consideration and halted proppant production, which will resume as soon as the market recovers. Through selling of inventory, this product line recorded revenue of RMB8.1 million as compared with last year's RMB31.1 million.
- 6) Gravel packing service. This product line recorded RMB38.3 million in 2016, an increase of approximately 22.4% from last year's RMB31.3 million.

EBITDA of the well completion cluster decreased from RMB314.2 million in 2015 to RMB303.5 million in 2016, a decrease of approximately 3.5%. EBITDA margin for 2016 was 40.4%, the same as last year's approximately 40.4%.

## Management Discussions and Analysis

### Oil production services cluster

In 2016, the oil production services cluster continued to grow, with new breakthrough of production operation services in Iraq and large increase in workload.

Workover service in the domestic market has achieved reasonable profit despite the grim market situation by reducing cost and increase efficiency. Overseas, workover services grew rapidly with Iraqi and Ethiopian projects under operation. This cluster recorded RMB429.1 million, an increase of approximately 6.6% as compared with last year's RMB402.6 million.

Analysis of product lines in the oil production services cluster:

- 1) Production operation services. It has achieved fast growth in 2016, and apart from normal operations of annual service contracts, the Group continued to break through the Iraqi market, winning new international oil company large-scale services order, and recording large increase in workload. During 2016, production operation services recorded RMB276.0 million of revenue, an increase of approximately 35.8% than last year's RMB203.3 million.
- 2) Workover service. Domestically, proprietary workover teams of the Group continued to operate consecutively in Xinjiang area; overseas, this sector has entered the new market of Ethiopia with steadily increasing workload. The oil production, workover and completion integrated project in Iraq has commenced operation at the end of 2016, after a year of preparation. In 2016, the workover service recorded RMB122.1 million of revenue, an increase of approximately 13.2% from last year's RMB107.9 million.
- 3) Oil tubing and casing and anti-corrosion technology. This product line experienced a decrease of approximately 66.1% in revenue from RMB91.4 million in 2015 to RMB31.0 million in 2016, due to the shrinking Xinjiang market, lowering demand and frequency of operations.

EBITDA for the oil production services cluster increased from RMB156.8 million in 2015 to this year's RMB198.0 million, an increase of approximately 26.3%. The EBITDA margin of this cluster was 46.2%, an increase of approximately 7.3 percentage points as compared with 38.9% in 2015, which was mainly due to the increase in margin along with the growth of revenue in the overseas markets.

### Alignment of Strategic Resources

In 2016, the Group has maintained an asset-light development path and rigorously controlled incremental capital expenditure, and emphasized saving cost and improving efficiency through technology and innovation. In 2016, the Group made approximately RMB515.7 million in capital expenditure, mainly for the settlement of payables of previous years' investments, representing an increase of approximately 145.8% as compared with RMB209.8 million in 2015.

### Alignment of Investment

In 2016, the Group added no significant investment, and mainly provided supplements for the Iraq workover and completion integrated project.

### Significant Investments and Material Acquisition and Disposal

Save as disclosed herein this report, the Group did not have any significant investments, other material acquisition or disposal during the year ended 31 December 2016, and there was no plan authorised by the Board for other material investments or additions of capital assets as at the date of this annual report.

### Alignment of Research and Development Resource

In 2016, the Group emphasized on technology innovation and cooperation to conduct improvement and innovation on technologies and tools according to business needs, to fulfill requirements of its clients to boost production and reduce cost, and to promote optimization and upgrading of our products through technology cooperation. In 2016, the Group invested RMB16.5 million in research and development, a decrease of approximately 12.7% from RMB18.9 in 2015.

### Key Research and Development Pipelines

- Improvement of MWD/LWD systems
- Research and deployment of shale gas oil-based drilling fluid technology
- Research on automatic fluid control technology



## Management Discussions and Analysis

### Alignment of Human Resources

On human resources, the Group continued to optimize human resources structure and re-deployed human resources according to new business development needs, increasing the level of employees internationalization. Major changes in 2016 included:

- Controlling total headcount. In 2016, the Group's staff number decreased by approximately 42.8% compared that of 2015.
- Optimizing human resources structure according to business development needs and increasing number of international employees. At the same time, the Group strengthened training to improve internationalization, providing powerful support to the high speed growth of its overseas businesses.
- Continuing to improve the compensation structure for the whole year, linking the employee compensation to performance appraisal. Improving the incentive mechanism by way of granting share options to employees to encourage employees to work with the Group for long term development. During 2016, the Group has granted a total 122,216,000 share options to about 200 core employees and directors, among which 112,800,000 shares with exercise price of HKD0.74 per share, 7,200,000 shares with exercise price of HKD0.80 per share, and 2,216,000 shares with exercise price of HKD1.10 per share. One third of the options is vested each year, commencing from the first anniversary after issuance.



### Outlook

Looking ahead to 2017, the Group expects that international oil prices will rise from 2016 amid slight fluctuations, the overall market environment will pick up obviously and there will be a restorative increase in the capital expenditure by the oil companies and a considerable increase in the progress of project execution.

On the market side, the Group has laid a sound foundation for its overseas markets with many years of cultivation. In 2017, the Group will continue to implement the "globalization" market strategy, with the focus and priority to expand overseas markets. In the Iraqi market, oil companies will continue to carry out more exploration and production activities. The Group will fully expand the already built competitive advantages. Together with the improved integrated service capabilities upon the introduction of strategic partners, the Group will secure more project opportunities to further replace the market of international service companies. Moreover, by leveraging the quality cooperation with international oil company customers, the Group will further secure more projects from large oil company customers to move into the market for international top-notch oil companies. In addition to focusing on the development of the Iraqi market, the Group will devote every effort to expanding the oil and gas industry in emerging markets, particularly the development project opportunities arising from Chinese investors in the area of overseas investment. In the emerging markets, the Group will adopt a "follow-up strategy" by virtue of China's support policies used to push forward the "One Belt, One Road" initiative, acting as a technology partner of Chinese companies for their overseas projects to help Chinese independent oilfield companies enhance the efficiency of resource exploration and to further expand the local business development. In 2017, the Group will further focus on fostering market development in Ethiopia and Pakistan. The Kazakhstan market, in which the Group works together with its partner Geo-Jade Petroleum, will be a new market growth driver. With respect to the domestic market, the impact of substantial cuts in capital expenditure by major customers on production over the past two years has begun to show, and further cuts are expected to be unsustainable such that an opportunity will rise in the market for restorative growth. The Group will maintain a robust market strategy which places emphasis on natural gas projects in Erdo market and shale gas projects in Southwest China leveraging on its advantages in unconventional technology and integrated service capabilities to secure opportunities arising from unconventional oil and gas projects to increase its market share.

## Management Discussions and Analysis

Regarding project execution, as of the date of this annual report, the Group's orders on hand of approximately RMB3,000.0 million in total have entered into their respective commencement stage, and conversion rate of orders in 2017 will be significantly higher than 2016, which provided guarantee for the Group's performance growth in 2017. Overseas, in Iraq, the workover and completion integrated project totaling USD140.0 million has already commenced operation; the production integrated maintenance project with a total of USD78.0 million was informed by the customer to fully accelerate the execution of the project. It is expected to complete the workload ahead of schedule. The fracturing project with a total of USD15.0 million was completed, and test wells operation of which was completed have significantly stimulated productivity, production per well increasing from a daily production of approximately 100 barrels to that of approximately 600 barrels. Besides, after two years of standing by, the previously-won USD50.0 million drilling integration project has received official notice for to commence operation, and it is expected to start in second quarter of 2017. Domestically, 5 drilling rigs of the Group has achieved continuous workload. With the gradual recovering of the market, the Group will focus on high-performance operations of the Erdos natural gas project and Guizhou CBM project. The Group will maintain high QHSE (Quality, Health, Safety and Environment) management of all projects, and make sure the orders are completed of high-quality and high-efficiency.

Regarding products and technology, the Group will push through comprehensive "internationalization" of technology cooperation, and introduce advanced international technologies and products as well as strengthen proprietary technological innovation, based on customers' demand of "boosting production and reducing cost". The Group will continue developing proprietary products and technologies while continuing technological cooperation. The Group will focus on key technical products which have established international cooperation, e.g. nano chemical stimulation technology, to strengthen market promotion and client trials, strive for market breakthrough, and bring about new business development.

On service model, the Group will promote improvement of the customer-centered "integrated" service model. In emerging markets, because of lacking expertise and service resources, there is strong demand for integrated services. The Group will dig into customers' demand, achieve multi-product coverage on same customers and play out cross-sector synergies, improve efficiency and reduce costs with economies of scale, and ultimately, through various forms of integrated services, meet their demand for reducing cost and boosting production.

On human resources, on the basis of continued and across-the-board cost control, the Group will continue to push through internationalization of the workforce, and train a group of internationalized talents who could represent the Group in key positions over the world. The Group will strengthen the construction of reservoir and engineer expert teams, introduce integrated oil & gas production solution talents and field operation organization, implementation and quality-control talents, as well as furnish training mechanism for internal professionals. The Group will continue localization of talents, increase ratio of local employees in overseas markets, with regular services and operations posts having primarily local employees. On compensation, the Group will continue to build and improve a compensation scheme suiting industry characterizations and the globalization trend.

In terms of capital, with the increase in revenue of the Group, the increase in profit margins and the decrease of overseas projects' cash occupation, the Group's operating cash inflow for 2017 is expected to increase substantially comparing with that of 2016. At the same time, the Group will continue to adhere to the "light assets" strategy, strictly control capital expenditure and reduce investment outflow. In terms of financing, the Group will continue to deepen its cooperation with commercial banks to increase financing inflows. Overall, it is expected that the Group's cash level in 2017 will be significantly higher than that in 2016.

As the whole, the Group is fully prepared for market recovery by completing the adjustments in the trough of the market. The full commencement of the adequate market orders will provide guarantee for the rapid growth of the Group's business. Cost structure optimization will continue to improve the Group's competitiveness, and help the Group recover profitability under low oil price. The Group will spare no effort to use established overseas market advantages and push through the internationalization process, with its focus on the emerging markets. At the same time,

## Management Discussions and Analysis

the Group will enhance international technological cooperation, raise internationalization level of talents, and advance in leaps and bounds towards the strategic goal of becoming a leading global oilfield services provider with a solid foothold in China.

### Revenue

The Group's revenue in 2016 amounted to RMB1,617.7 million, representing a decrease of RMB215.3 million or approximately 11.7% as compared to RMB1,833.0 million in 2015. The decrease in the Group's revenue was mainly attributable to the further downsizing of domestic oil companies' capital expenditure which has led to the shrink of markets and the delay of certain projects, and the increased competition and downward pricing pressure resulting in the decline of revenue in the domestic market.

### Costs of Sales

The costs of sales in 2016 decreased to RMB1,073.8 million, representing a decrease of approximately 14.1%, from RMB1,250.3 million in 2015. The decrease was mainly attributable to lower revenue.

### Other Gains

Other gains in 2016 increased to RMB69.0 million from losses of RMB20.7 million in 2015. The increase was mainly attributable to the disposal of the Group's Subsidiaries.

### Selling Expenses

Selling expenses in 2016 amounted to RMB110.8 million, representing a decrease of RMB26.7 million or approximately 19.4% as compared to RMB137.5 million in 2015. This was mainly attributable to the rapid downsizing and adjustment of human resources and strengthening of cost control in the harsh market environment.

### Administrative Expenses

Administrative expenses in 2016 amounted to RMB337.8 million, representing a decrease of RMB1.2 million or approximately 0.4% as compared to RMB339.0 million in 2015.

### Research and Development Expenses

Research and development expenses in 2016 amounted to RMB16.5 million, representing a decrease of RMB2.4 million or approximately 12.7% as compared to RMB18.9 million in 2015. This was mainly attributable to the fact that the Group planned and implemented its research and development projects to target more specifically under such market environment.

### Sales Tax and Surcharges

Sales tax and surcharge in 2016 amounted to RMB4.6 million, representing a decrease of RMB1.0 million or approximately 70.5% as compared to RMB15.6 million in 2015. This was mainly due to the change of domestic applicable taxes from business taxes to value-added taxes.

### Operating Profit

As a result of the foregoing, the operating profit of the Group in 2016 amounted to RMB143.2 million, representing an increase of RMB50.7 million or approximately 54.8% as compared to RMB92.5 million in 2015. The operating profit margin for 2015 was 8.9%, representing an increase of 3.9 percentage points from 5.0% in 2015.

### Finance Costs (Net)

Net finance costs in 2016 was RMB173.4 million, a decrease of approximately RMB81.4 million as compared to RMB254.8 million in 2015. The decrease was mainly due to the proper allocation of the U.S. dollar asset of the Group.

### Share of Loss of Investments Accounted for Using the Equity Method

The share of loss of associated companies in 2016 amounted to RMB0.4 million (2015: RMB0). The share of loss of joint venture in 2016 amounted to RMB0 (2015: RMB1.0 million).

### Income Tax Expense

Income tax expense in 2016 amounted to RMB67.1 million, representing an increase of RMB 35.2 million from RMB31.9 million in 2015. This was mainly due to the revenue increase of the Group's Iraq business.

## Management Discussions and Analysis



### Loss for the Year

As a result of the foregoing, the Group recorded loss of RMB97.7 million for the year ended 31 December 2016, representing a decrease of RMB97.5 million or approximately 49.9% as compared to 2015.

The Group's loss attributable to equity holders of the Company in 2016 amounted to RMB160.5 million, reduced by RMB34.2 million, or approximately 17.6% as compared to 2015.

### Trade and Notes Receivables

As at 31 December 2016, the Group's net trade and notes receivables were RMB1,298.0 million, representing an increase of RMB13.6 million as compared to 31 December 2015. The average trade receivables turnover days (excluding quality guarantee deposits and other deposits) in 2016 were 263 days, representing an increase of 15 days as compared to 2015. This was mainly attributable to the customers changed their operation strategy amid the difficult market condition.

### Inventories

As at 31 December 2016, the Group's inventories were RMB781.2 million, representing a decrease of RMB53.0 million as compared to 31 December 2015, mainly due to the optimization of the business structure and the consumption of the inventory of the Group.

### LIQUIDITY AND CAPITAL RESOURCES

As at 31 December 2016, the Group's cash and bank deposits amounted to approximately RMB899.6 million (including: restricted bank deposits, term deposits with initial terms of over three months, cash and cash equivalents), representing an increase of RMB272.2 million as compared to 31 December 2015.

As at 31 December 2016, the Group's outstanding short-term loans amounted to RMB739.6 million. The Group's outstanding long-term loans amounted to RMB151.2 million. Credit facilities granted to the Group by banks amounted to RMB960.0 million, of which approximately RMB80.0 million were not used.

As at 31 December 2016, the liability-to-asset ratio (total liabilities divided by total assets) of the Group was 70.3%, representing an increase of 2.0 percentage points from the liability-to-asset ratio of 68.3% as at 31 December 2015. As at 31 December 2016, the gearing ratio of the Group was 67.2%, representing an increase of 6.2 percentage points from the gearing ratio of 61.0% as at 31 December 2015. The gearing ratio is calculated as total borrowings divided by total capital. Total borrowings include borrowings, bonds, non-current portion of accruals and other payables and trade and notes payables, as shown in the consolidated balance sheet. Total capital is calculated as equity, as shown in the consolidated balance sheet, plus total borrowings.

The equity attributable to equity holders of the Company decreased from RMB1,894.0 million as at 31 December 2015 to RMB1,544.9 million as at 31 December 2016.

The Group will further deepen the cooperation with commercial banks to increase cash in-flow from financing activities. The overall cashflow is expected to show a remarkable improvement in 2017.



## Management Discussions and Analysis

### MATERIAL ACQUISITION AND DISPOSAL

On 28 April 2016, Anton Oilfield Services (Group) Co., Ltd. ("Anton Oil"), a wholly-owned subsidiary of the Group, entered into a framework agreement with Ningbo Hengxin Runcheng Investment LP (寧波恒信潤成投資合夥企業(有限合夥)) (the "Purchaser"), pursuant to which Anton Oil agreed to sell 80% interest in 新疆通奧油田技術服務有限公司 (Xinjiang Tong'ao Oilfield Services Co., Ltd.), to the Purchaser for RMB160 million. As at the date of this annual report, the parties have yet to enter into the definitive agreements for the transaction pending further negotiation among the parties.

On 16 May 2016, the Company, Anton International Services Company Limited, a wholly-owned subsidiary of the Company and Anton Oilfield Services DMCC ("DMCC"), an indirect wholly-owned subsidiary of the Company entered into an agreement with Hong Kong Huihua Global Technology Limited (香港惠華環球科技有限公司) and 華油惠博普科技股份有限公司 (China Oil HBP Science & Technology Co., Ltd.), pursuant to which the Company will through the transferring of 40% of the issued share capital of DMCC introduce a joint venture partner for the Iraqi business. The agreement and the transactions contemplated thereunder have been approved by the shareholders of the Company at the extraordinary general meeting of the Company held on 26 July 2016. For more details, please refer to the announcements of the Company dated 16 May 2016 and 26 July 2016 and the circular of the Company dated 11 July 2016.

### ISSUE OF NEW SHARES AND USE OF PROCEEDS

#### Trafalgar Subscription

On 1 December 2016 (after trading hours), the Company entered into a subscription agreement (the "Trafalgar Subscription Agreement") with Trafalgar Trading Fund Inc. ("Trafalgar") pursuant to which Trafalgar agreed to subscribe 221,619,605 new shares of the Company at the subscription price of HK\$1.0080 per Share (the "Trafalgar Subscription"). The subscription shares under the Trafalgar Subscription represent approximately 10.00% of the issued share capital of the Company as at the date of the Trafalgar Subscription Agreement and approximately 9.09% of the Company's issued share capital as enlarged by the Trafalgar Subscription.

A net proceeds of HK\$222.89 million was received by the Company pursuant to the Trafalgar Subscription and the issuance of new shares to Trafalgar was completed on 25 December 2016.

The subscription shares under the Trafalgar Subscription have a market value of HK\$248,213,957.60. The subscription price under the Trafalgar Subscription of HK\$1.0080 per subscription share represents: (i) a discount of approximately 10.00% to the closing price of HK\$1.1200 per share as quoted on the Stock Exchange on 1 December 2016, the date the Trafalgar Subscription Agreement; (ii) a discount of approximately 5.97% to the average closing price of HK\$1.0720 per Share as quoted on the Stock Exchange for the last five trading days up to and including 30 November 2016; and (iii) a discount of approximately 5.79% to the average closing price of HK\$1.0700 per Share as quoted on the Stock Exchange for the last ten trading days up to and including 30 November 2016.

As stated in the announcement of the Company dated 1 December 2016, the Company intended to use the net proceeds raised from the Trafalgar Subscription as general working capital of the Company. As at the date of this annual report, the Group had utilised approximately RMB100.0 million of the proceeds from the Trafalgar Subscription as general working capital. The unutilised portion of the net proceeds from the Trafalgar Subscription is held in cash and cash equivalents and intended that it will be applied in the manner consistent with the proposed allocations.

#### Geo-Jade Subscription

On 15 December 2016 (after trading hours), the Company entered into a subscription agreement (the "Geo-Jade Subscription Agreement") with Geo-Jade Petroleum Corporation (洲際油氣股份有限公司) ("Geo-Jade") pursuant to which Geo-Jade agreed to subscribe 221,619,604 new shares of the Company at the subscription price of HK\$1.0080 per Share (the "Geo-Jade Subscription"). The subscription shares under the Geo-Jade Subscription represent approximately 9.09% of the issued share capital of the Company as at the date of the Geo-Jade Subscription Agreement and approximately 8.33% of the Company's issued share capital as enlarged by the Geo-Jade Subscription.

A net proceeds of HK\$222.89 million was received by the Company pursuant to the Geo-Jade Subscription and the issuance of new shares to Geo-Jade was completed on 25 January 2017.

## Management Discussions and Analysis

The subscription shares under the Geo-Jade Subscription have a market value of HK\$239,349,172.32. The subscription price under the Geo-Jade Subscription of HK\$1.0080 per subscription share represents: (i) a discount of approximately 6.67% to the closing price of HK\$1.080 per share as quoted on the Stock Exchange on 15 December 2016, the date the Geo-Jade Subscription Agreement; (ii) a discount of approximately 8.86% to the average closing price of HK\$1.106 per Share as quoted on the Stock Exchange for the last five trading days up to and including 14 December 2016; and (iii) a discount of approximately 8.78% to the average closing price of HK\$1.105 per Share as quoted on the Stock Exchange for the last ten trading days up to and including 14 December 2016.

As stated in the announcement of the Company dated 15 December 2016. The Company intended to use the net proceeds raised from the Geo-Jade Subscription as general working capital of the Company. As at the date of this annual report, no net proceeds from the Geo-Jade Subscription was utilised. The unutilised portion of the net proceeds from the Geo-Jade Subscription is held in cash and cash equivalents and intended that it will be applied in the manner consistent with the proposed allocations.

### EXCHANGE RISK

The exchange risk of the Group mainly arises from its foreign currency deposits, trade receivables denominated in foreign currencies and the Group's USD-denominated bond issued in 2013. Any fluctuations in RMB exchange rate against the US dollar may have a negative impact on the Group's operating results and financial position.

### CASH FLOW FROM OPERATING ACTIVITIES

For the year ended 31 December 2016, net cash outflow from operating activities of the Group amounted to RMB66.0 million, representing an decrease of RMB223.4 million compared to 2015. This was mainly because of the optimized the payment terms and increased the payment of suppliers.

### CAPITAL EXPENDITURE AND INVESTMENT

The Group's capital expenditure for 2016 was RMB515.7 million, of which, investments in fixed assets were RMB473.4 million, investments in intangible assets (including land use rights) were RMB38.3 million. The Group's net capital expenditure was RMB422.1 million, which included an RMB93.5 million recouping investments capital.

### CONTRACTUAL LIABILITY

The Group's contractual commitments mainly consist of payment obligations under the Group's operating lease arrangements and capital commitments. The Group leases offices and certain equipment and machinery through operating leases. As at 31 December 2016, the Group's operating lease commitments amounted to approximately RMB37.0 million. As at 31 December 2016, the Group had capital commitments of approximately RMB27.5 million, which was not provided for in the balance sheet.

### CONTINGENT LIABILITIES

As at 31 December 2016, the Group did not have any material contingent liabilities or guarantees.

### PLEDGE OF ASSETS

As at 31 December 2016, the Group's pledge of assets including property, plant and equipment with a net book value of RMB547.0 million, land use rights with a net book value of RMB27.3 million and account receivables with a net book value of RMB221.8 million.

### OFF-BALANCE SHEET ARRANGEMENTS

As at 31 December 2016, the Group did not have any off-balance sheet arrangement.



# DIRECTORS' REPORT

The Board of the Company is pleased to present the Directors' Report together with the audited financial statements of the Group for the year ended 31 December 2016.

## PRINCIPAL ACTIVITIES

The Company acts as an investment holding company. The Group provides integrated oil and gas field development technical services covering the entire life cycle of oil and gas field development, including drilling, completion and production stages.

An analysis of the Group's performance for the year by operating segment is set out in Note 5 to the financial statements.

## RESULTS OF OPERATIONS

The financial results of the Group for 2016 are set out on pages 84 to 156 of this Annual Report.

## FIVE YEAR FINANCIAL SUMMARY

The five year financial summary of the Group is set out on pages 6 to 7 in the section headed "Financial Summary" of this Annual Report.

## FINAL DIVIDEND

At the Board meeting held on 27 March 2017, the Board did not recommend a payment of a final dividend for the year ended 31 December 2016 (2015: Nil).

## BUSINESS REVIEW

### Overview

The fair review of the Group's business is detailed in the Management Discussion and Analysis on pages 15 to 23 of this annual report. The discussion constitutes a part of this Director's Report.

### Principal Risks and Uncertainties

The Group provides oil and gas fields technical services, the main market risk and uncertainties come from the fluctuation of oil and gas price and oil and gas development activities. The Board of the Company pays close attention to the market condition and will change the Group's market strategy according to the market changes to ensure a stable business development of the Group.

### Important Events

The Board has not identified any important events affecting the Group that have occurred since the end of the financial year.

### Future Development

The future business development of the Group is detailed in the Management Discussion and Analysis on pages 24 to 26 of this annual report. The discussion constitutes a part of this Director's Report.

## Directors' Report

### Key Performance Indicators

The key performance indicators are detailed in the financial review set out in the Management Discussion and Analysis on pages 26 to 29 of this annual report. This discussion constitutes a part of this Directors' Report.

### Environmental Policies and Performance and Compliance with Laws and Regulations

Details regarding the environmental policies and performance, compliance with relevant laws and regulations can be found in the Environmental, Social and Governance Report of this annual report. The discussion constitutes a part of this Directors' Report.

### Relationships with Employees

The relationships with employees is detailed in the Employee Relations on page 59 of this annual report. The discussion constitutes a part of this Director's Report.

### Relationships with Customers and Suppliers

Main customers of the Group are domestic and overseas oil companies. The Group aims to provide its customer with high quality services as well as low costs and high efficiency. Target of the Group is to make oil and gas development much easier through the services it provides. The Group has formed a long-term strategic partnership with its main customers.

Main providers of the Group are equipment, tools and chemicals providers of this industry. The Group keeps good communication with those providers and formed close cooperation for the production and delivery according to the Group's business needs as well as lowering material costs according to long-term cooperation and batch purchases.

### MAJOR CUSTOMERS AND SUPPLIERS

The largest customer and the five largest customers of the Group accounted for approximately 17.01% and 48.50% respectively of the Group's revenues for the year ended 31 December 2016.

For the year ended 31 December 2016, the total amount of purchases made by the Group from its five largest suppliers amounted to RMB114.3 million, and accounted for 24.54% of the total purchases for the year. The amount of purchases from the largest supplier amounted to RMB32.0 million, and accounted for 6.87% of the total purchases for the year. One of the five largest suppliers of the Group is an affiliate of Schlumberger NV, a substantial shareholder of the Company. Save as disclosed above, as far as the Company is aware, none of the Directors, their associates and shareholders who are interested in more than 5% of the share capital of the Company has any interest in the five largest suppliers and customers.

## Directors' Report

### SUBSIDIARIES

Particulars of the Company's subsidiaries are set out in Note 9 to the consolidated financial statements.

### PROPERTIES, PLANT AND EQUIPMENT

Additions to the property, plant and equipment of the Group for the year ended 31 December 2016 totaled RMB347.9 million. Details of movements are shown under Note 6 to the consolidated financial statements.

### SHARE CAPITAL

Details of the movements in share capital of the Company during the year are set out in Note 16 to the consolidated financial statements.

Shares were issued during the year on subscription of new shares. Details about the issue of shares are also set out in note 16 to the consolidated financial statements.

### PRE-EMPTIVE RIGHTS

There is no provision regarding pre-emptive right under the Articles of Association of the Company and the Cayman Islands laws, which would oblige the Company to offer new shares on a pro rata basis to its existing shareholders.

### PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

For the year ended 31 December 2016, the Company repurchased a total 4,926,000 shares (2015: Nil) on The Stock Exchange of Hong Kong Limited (the "Stock Exchange") at an aggregate consideration of approximately HK\$3,064,120 (before expenses) (2015: Nil). All the repurchased shares were subsequently cancelled by the Company during the year. Particulars of the repurchases were as follows:

Month of the repurchases	Number of ordinary shares repurchased	Purchase price		Aggregate consideration paid (before expenses) HK\$
		per share Highest Lowest		
		HK\$	HK\$	
January 2016	4,926,000	0.63	0.62	3,064,120
Total:	4,926,000			3,064,120

Save as disclosed above, neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2016.

### RESERVES

Details of movements in the reserves of the Company during the year ended 31 December 2016 are set out in Notes 17 and 37 to the consolidated financial statements.

### DISTRIBUTABLE RESERVES

As at 31 December 2016, the aggregate amount of reserves which is available for distribution to the equity shareholders of the Company was RMB611.6 million.

## Directors' Report

### BOND AND SENIOR NOTES

Details of the bonds and senior notes are set out in Note 18 to the consolidated financial statements.

### EQUITY-LINKED AGREEMENTS

Save as the share option scheme of the Company disclosed in this Directors' Report on pages 37 to 40, and note 16 to the consolidated financial statements, no equity-linked agreements were entered into by the Company during the year.

### DIRECTORS

The members of the Board during the year and up to the date of this Annual Report are:

#### Executive Directors

Mr. Luo Lin	(appointed on 3 August 2007)
Mr. Wu Di	(appointed on 22 March 2010)
Mr. Pi Zhifeng	(appointed on 25 March 2015)

#### Non-executive Director

Mr. John William Chisholm	(appointed on 2 November 2016)
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#### Independent Non-executive Directors

Mr. Zhang Yongyi	(appointed on 17 November 2007)
Mr. Zhu Xiaoping	(appointed on 17 November 2007)
Mr. Wang Mingcai	(appointed on 17 November 2007)

The biographical details of the Directors and senior management are set out under the section headed "Profiles of Directors and Senior Management" of this Annual Report.

In accordance with Article 130 of the Articles of Association, one-third of the Directors shall retire from office by rotation provided that every Director (including those appointed for a specific term) shall be subject to retirement by rotation at least once every three years. Accordingly, Mr. Wu Di, an Executive Director shall retire and being eligible, will offer himself for re-election at the forthcoming annual general meeting (the "AGM") of the Company.

In accordance with Articles 114 and 115 of the Articles of Association, Mr. John William Chisholm, a Non-executive Director, shall hold office only until the forthcoming AGM and being eligible, offer himself for re-election at the forthcoming AGM of the Company.

In accordance with the letters of appointment for all the Independent Non-executive Directors, namely Mr. Zhang Yongyi, Mr. Zhu Xiaoping and Mr. Wang Mingcai, the Independent Non-executive Directors shall retire and being eligible, will offer themselves for re-election at the AGM.

### DIRECTORS' SERVICE CONTRACTS AND LETTERS OF APPOINTMENT

Mr. Luo Lin, being the Executive Director, has entered into a service contract with the Company for a term of three years commencing from 4 June 2016, which may be terminated by not less than three months' notice in writing served by either party on the other.

Mr. Wu Di, being the Executive Director, has entered into a service contract with the Company for a term of three years commencing from 1 April 2016, which may be terminated by not less than three months' notice in writing served by either party on the other.

## Directors' Report

Mr. Pi Zhifeng, being the Executive Director, has entered into a service agreement with the Company for a term of three years commencing from 26 May 2015, which may be terminated by not less than three months' notice in writing served by either party on the other.

Mr. John William Chisholm, being the Non-executive Director, has entered into a letter of appointment with the Company under which he will act as a Non-executive Director for a period of 3 years with effect from 2 November 2016, which may be terminated by not less than three months' notice in writing served by either party on the other.

The letter of appointment of each of Mr. Zhang Yongyi, Mr. Zhu Xiaoping and Mr. Wang Mingcai, being the Independent Non-executive Directors, has been renewed by the Company for a term of one year commencing from 9 January 2017, which may be terminated by not less than three months' notice in writing served by either party on the other.

Save as disclosed above, no Director for re-election at the AGM has a service contract with the Company or any of its subsidiaries which is not determinable by the employing company within one year without payment of compensation other than the normal statutory compensation.

### **DIRECTORS' MATERIAL INTEREST IN TRANSACTIONS, ARRANGEMENT OR CONTRACTS**

There was no transactions, arrangements or contract of significance connected to the business of the Group to which the Company, its subsidiaries, or its holding company or any of its fellow subsidiaries was a party and in which any Director and the Director's connected party had a direct or indirect material interest, subsisting at the end of the year or at any time during the year.

### **PERMITTED INDEMNITY PROVISION**

During the financial year, the Company has in force indemnity provisions as permitted under the relevant statutes for the benefit of the Directors. The permitted indemnity provisions are provided for in the Company's Articles of Association in respect of potential losses and liability associated with legal proceedings that may be brought against such Directors and the payment of any sum primarily due from the Company that may be liable by the Directors.

### **MANAGEMENT CONTRACTS**

No contracts concerning the management and administration of the whole or any substantial part of the business of the company were entered into or exited during the year.

### **DIRECTORS' INTERESTS IN COMPETING BUSINESS**

None of the Directors and their respective associates (as defined in the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules")) had an interest in any business which competes or may compete with the business in which the Group is engaged during the year.

Pro Development Holdings Corp. is beneficially controlled by Mr. Luo Lin, the Executive Director, who is the controlling shareholder of the Company.

The controlling shareholder and the Executive Directors have provided the Company with annual confirmations in respect of the compliance with non-competition undertaking given by them.

The Independent Non-executive Directors have also reviewed the compliance by the controlling shareholder and the Executive Directors with the Non-competition Undertaking during the year. The Independent Non-executive Directors have confirmed that, as far as they can ascertain, there is no breach by any of the controlling shareholder and the Executive Directors of the non-competition undertaking given by them.

## Directors' Report

### REMUNERATION OF DIRECTORS

In compliance with the Corporate Governance Code (the "Code") as set out in Appendix 14 to the Listing Rules, the Company has established a remuneration committee (the "Remuneration Committee") to make recommendations to the Board on the Company's policy and structure for all the Directors' remuneration. The Director's remuneration structure may include a director's fee, a fixed salary, share options and performance bonus. The Directors' remuneration is determined by the Board with reference to the Directors' duties and responsibilities, the recommendations of the Remuneration Committee and the performance and results of the Group. Details of the remuneration of the Directors are set out in Note 38 to the consolidated financial statements of this Annual Report.

### CONFIRMATION OF INDEPENDENCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

The Company has received an annual confirmation of independence pursuant to Rule 3.13 of the Listing Rules from each of the Independent Non-executive Directors and considers that all the Independent Non-executive Directors, namely Mr. Zhang Yongyi, Mr. Zhu Xiaoping and Mr. Wang Mingcai to be independent.

### DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY OR ANY SPECIFIED UNDERTAKING OF THE COMPANY OR ANY OTHER ASSOCIATED CORPORATION

As at 31 December 2016, the interests and short positions of each Director and chief executive in the shares, underlying shares and debentures of the Company and its associated corporation (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) as recorded in the register required to be kept by the Company under Section 352 of the SFO or otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transaction by Directors of Listed Issuers of the Listing Rules (the "Model Code") were as follows:

#### (i) Long positions in ordinary shares of HK\$0.10 each:

Name of Director	Note	Capacity	Number of ordinary shares held	Approximate percentage of shareholding
Luo Lin	1	Founder of a discretionary trust and beneficial owner	610,635,408	25.05%
Pi Zhifeng		Beneficial owner	448,000	0.02%
Wang Mingcai		Beneficial owner	550,000	0.02%
Zhang Yongyi		Beneficial owner	440,000	0.02%

- Mr. Luo Lin is the founder of the Loles Trust, which is indirectly interested in the entire issued share capital of Pro Development Holdings Corp., which in turn is interested in 601,580,740 shares. Mr. Luo Lin and his family members are the beneficiaries of the Loles Trust. Mr. Luo Lin also holds 9,054,668 shares of the capacity of a beneficial owner.



## Directors' Report

### (ii) Long positions in underlying shares of share options:

The Directors have been granted options under the Company's share option scheme, details of which are set out in the section headed "Share Option Scheme" below.

Save as disclosed above, at no time during the year ended 31 December 2016, the Directors and chief executive (including their spouses and children under the age of 18 years) had or was deemed to have any interests or short position, in the shares, underlying shares or debentures of the Company, its specified undertakings and its associated corporations required to be disclosed pursuant to the SFO or otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

### INTERESTS AND SHORT POSITIONS IN THE SHARES AND UNDERLYING SHARES OF SUBSTANTIAL SHAREHOLDERS

As at 31 December 2016, to the best knowledge of the Directors, the Company had been notified of the substantial shareholders and other persons (other than the Directors or the chief executive of the Company) who had interests or short positions in the shares or the underlying shares of the Company as recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO were as follows:

#### Long positions/Short positions in the shares or underlying shares of the Company:

Name of substantial shareholder	Note	Capacity	Long position/ short position	Number of ordinary shares held	Approximate percentage of shareholding
Credit Suisse Trust Limited	1	Trustee	Long position	601,580,740	24.68%
Seletar Limited	1	Trustee	Long position	601,580,740	24.68%
Serangoon Limited	1	Trustee	Long position	601,580,740	24.68%
Avalon Assets Limited	1	Trustee	Long position	601,580,740	24.68%
Pro Development Holdings Corp.	1	Beneficial owner	Long position	601,580,740	24.68%
Schlumberger NV	2	Interest of controlled corporation	Long position	423,361,944	17.37%
Trafalgar Capital Management (HK) Limited		Beneficial owner	Long position	214,581,605	8.80%
Trafalgar Capital Management (HK) Limited		Beneficial owner	Short position	45,674,000	1.87%

Notes:

- The 601,580,740 shares referred to the same batch of shares.
- Schlumberger Far East, Inc. directly holds 423,361,944 shares of the Company. Schlumberger Far East, Inc. is a wholly-owned subsidiary of Schlumberger Holding Limited. Schlumberger Holding Limited is a wholly-owned subsidiary of Schlumberger Oilfield Holding Limited. Schlumberger Oilfield Holding Limited is a wholly-owned subsidiary of Schlumberger NV.

Save as disclosed above, as at 31 December 2016, so far was known to the Directors, no other persons (other than the Directors or the chief executive of the Company) had an interest or short position in the shares and underlying shares of the Company which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO or as recorded in the register required to be kept by the Company under Section 336 of the SFO.

## Directors' Report

### SHARE OPTION SCHEME

The Company conditionally adopted its share option scheme on 17 November 2007 and amended its terms on 27 May 2010 (the "Share Option Scheme"). The Share Option Scheme shall be valid and effective for a period of 10 years from 17 November 2007, subject to early termination by the Company in a general meeting or by the Board. The purpose of the Share Option Scheme is to grant option to the eligible participants in recognition and acknowledgement of their contributions made or to be made to the Group. Under the Share Option Scheme, the Board may offer to grant an option to any director or employee, or any advisor, consultant, suppliers, customers or agents.

The shares which may be issued upon exercise of all outstanding options granted and yet to be exercised under the Share Option Scheme and any other share option schemes of the Company at any time shall not exceed 30% of the shares in issue from time to time.

The maximum number of shares available for issue under options which may be granted under the Share Option Scheme or other share option scheme adopted by the Company must not in aggregate exceed 10% of the shares in issue as at the date of approval of the refreshment of the Scheme limit (i.e. 26 May 2015), being 222,035,204 shares.

As at the date of this Annual Report, the total number of shares available for issue which includes share options available to be granted and outstanding options under the Share Option Scheme was 223,403,204 shares, representing 8.40% of the issued share capital of the Company.

The total number of shares issued and which may fall to be issued upon exercise of the options granted pursuant to the Share Option Scheme to an eligible participant in any 12-month period shall not exceed 1% of the number of shares in issue as at the date of grant unless approved by the shareholders in general meeting.

The subscription price of a share in respect of any particular option granted under the Share Option Scheme shall be determined by the Board provided that it shall not be less than the highest of: (i) the closing price of the shares as stated in the Stock Exchange's daily quotation sheet on the date of grant; (ii) the average of closing prices of the shares as stated in the Stock Exchange's daily quotation sheets for the 5 business days immediately preceding the date of grant; and (iii) the nominal value of a share. Upon acceptance of the option, the grantee shall pay HK\$1.00 to the Company by way of consideration for the grant. An option may be exercised in accordance with the terms of the Share Option Scheme at any time after the date upon which the option is deemed to be granted and accepted and prior to the expiry of 10 years from that date. The period during which an option may be exercised will be determined by the Board in its absolute discretion, save that no option may be exercised more than 10 years after it has been granted.

## Directors' Report

As at 31 December 2016, the Directors individually and other employees of the Company in aggregate had the following interests in options to subscribe for shares of the Company under the Share Option Scheme. Each option gives the holder the right to subscribe for one ordinary share of the Company of HK\$0.10 each.

Grantees	Date of grant of share options	Exercise period of share options	Exercise price per share HK\$	Notes HK\$	Number of	Number of	Number of	Number of	Number of	Number of
					share options as at 1 January 2016	share options granted during the year	share options exercised during the year	share options cancelled during the year	share options lapsed during the year	share options as at 31 December 2016
<b>Directors</b>										
Zhang Yongyi	10 January 2013	10 January 2014 to 9 January 2016	3.878	2,11	500,000	—	—	—	500,000	—
	12 May 2014	12 May 2015 to 11 May 2020	5.200	5,16	244,000	—	—	244,000	—	—
	24 April 2015	24 April 2016 to 23 April 2021	1.820	5,17	480,000	—	—	480,000	—	—
	1 April 2016	1 April 2017 to 31 March 2022	0.800	5,19	—	900,000	—	—	—	900,000
				Subtotal:	1,224,000	900,000	—	724,000	500,000	900,000
Zhu Xiaoping	10 January 2013	10 January 2014 to 9 January 2016	3.878	2,11	500,000	—	—	—	500,000	—
	12 May 2014	12 May 2015 to 11 May 2020	5.200	5,16	244,000	—	—	244,000	—	—
	24 April 2015	24 April 2016 to 23 April 2021	1.820	5,17	480,000	—	—	480,000	—	—
	1 April 2016	1 April 2017 to 31 March 2022	0.800	5,19	—	900,000	—	—	—	900,000
				Subtotal:	1,224,000	900,000	—	724,000	500,000	900,000
Wang Mingcai	10 January 2013	10 January 2014 to 9 January 2016	3.878	2,11	250,000	—	—	—	250,000	—
	12 May 2014	12 May 2015 to 11 May 2020	5.200	5,16	244,000	—	—	244,000	—	—
	24 April 2015	24 April 2016 to 23 April 2021	1.820	5,17	480,000	—	—	480,000	—	—
	1 April 2016	1 April 2017 to 31 March 2022	0.800	5,19	—	900,000	—	—	—	900,000
				Subtotal:	974,000	900,000	—	724,000	250,000	900,000
Luo Lin	19 January 2012	19 January 2013 to 18 January 2016	1.072	1,6	66,667	—	—	—	66,667	—
	18 June 2012	18 June 2013 to 17 June 2016	1.160	1,8	1,266,667	—	—	—	1,266,667	—
	10 January 2013	10 January 2014 to 9 January 2017	3.878	1,11	86,667	—	—	—	—	86,667
	21 June 2013	21 June 2014 to 20 June 2019	5.742	4,12	796,000	—	—	—	—	796,000
	12 May 2014	12 May 2015 to 11 May 2020	5.200	4,16	80,000	—	—	80,000	—	—
	24 April 2015	24 April 2016 to 23 April 2021	1.820	4,17	2,100,000	—	—	2,100,000	—	—
	2 December 2016	2 December 2017 to 1 December 2022	1.110	4,20	—	2,216,000	—	—	—	2,216,000
				Subtotal:	4,396,001	2,216,000	—	2,180,000	1,333,334	3,098,667

## Directors' Report

Grantees	Date of grant of share options	Exercise period of share options	Exercise price per share HK\$	Notes HK\$	Number of share options as at 1 January 2016	Number of share options granted during the year	Number of share options exercised during the year	Number of share options cancelled during the year	Number of share options lapsed during the year	Number of share options as at 31 December 2016
Wu Di	19 January 2012	19 January 2013 to 18 January 2016	1.072	1,6	300,000	—	—	—	300,000	—
	18 June 2012	18 June 2013 to 17 June 2016	1.160	1,8	68,000	—	—	—	68,000	—
	10 January 2013	10 January 2014 to 9 January 2017	3.878	1,11	400,000	—	—	—	—	400,000
	12 May 2014	12 May 2015 to 11 May 2020	5.200	4,16	434,000	—	—	434,000	—	—
	24 April 2015	24 April 2016 to 23 April 2021	1.820	4,17	860,000	—	—	860,000	—	—
	1 April 2016	1 April 2017 to 31 March 2022	0.800	4,19	—	1,500,000	—	—	—	1,500,000
				Subtotal:	2,062,000	1,500,000	—	1,294,000	368,000	1,900,000
Pi Zhifeng	19 January 2012	19 January 2013 to 18 January 2016	1.072	1,6	470,000	—	—	—	470,000	—
	10 January 2013	10 January 2014 to 9 January 2017	3.878	1,11	1,000,000	—	—	—	—	1,000,000
	12 May 2014	12 May 2015 to 11 May 2020	5.200	4,16	704,000	—	—	704,000	—	—
	24 April 2015	24 April 2016 to 23 April 2021	1.820	4,17	1,400,000	—	—	1,400,000	—	—
	1 April 2016	1 April 2017 to 31 March 2022	0.800	4,19	—	3,000,000	—	—	—	3,000,000
				Subtotal:	3,574,000	3,000,000	—	2,104,000	470,000	4,000,000
Employees in aggregate	19 January 2012	19 January 2013 to 18 January 2016	1.072	1,6	11,284,310	—	—	—	11,284,310	—
	16 April 2012	16 April 2013 to 15 April 2016	1.240	3,7	2,520,000	—	—	—	2,520,000	—
	18 June 2012	18 June 2013 to 17 June 2016	1.160	3,8	33,334	—	—	—	33,334	—
	22 November 2012	22 November 2013 to 21 November 2016	2.610	3,9	4,000,000	—	—	—	4,000,000	—
	28 December 2012	28 December 2013 to 27 December 2016	3.820	1,10	82,800	—	—	—	82,800	—
	10 January 2013	10 January 2014 to 9 January 2017	3.878	1,11	19,998,981	—	—	—	4,462,432	15,536,549
	21 June 2013	21 June 2014 to 20 June 2019	5.742	4,12	500,000	—	—	—	20,000	480,000
	28 June 2013	28 June 2014 to 27 June 2019	5.600	4,13	298,000	—	—	—	—	298,000
	16 August 2013	16 August 2014 to 15 August 2019	5.570	4,14	54,000	—	—	—	54,000	—
	20 November 2013	20 November 2014 to 19 November 2019	4.960	4,15	190,000	—	—	—	—	190,000
24 February 2016	24 February 2017 to 23 February 2022	0.740	4,18	—	112,800,000	—	—	8,360,000	104,440,000	
				Subtotal:	38,961,425	112,800,000	—	—	30,816,876	120,944,549
				Total:	52,415,426	122,216,000	—	7,750,000	34,238,210	132,643,216

## Directors' Report

### Notes:

1. The option period for the share options granted above commences on the date of grant and ends on the last day of forty-eight months counting respectively from the said date. The grantees are vested with, and entitled to exercise up to one-third of their share options during the option period commencing from each of first, second and third anniversaries of the date of grant.
2. The option period for the share options granted above commences on the date of grant and ends on the last day of thirty-six months counting respectively from the said date. The grantees are vested with, and entitled to exercise up to 50% of their share options during the option period commencing from each of first and second anniversaries of the date of grant.
3. The grantee may not exercise the options to subscribe for shares until after twelve months from the date of grant. If the grantee has worked for less than twelve months, all options of the grantee will lapse automatically and will no longer be exercisable. If the grantee has worked for thirty-six months or above, the grantee can exercise all options. If the grantee has worked for twelve months or above but less than thirty-six months, the number of effective options the grantee actually obtains is "the number of options granted X the number of working quarters of the grantee/12 (only the number of full quarters is counted)". The remaining options will lapse automatically. All options are entitled to be exercised before the fourth anniversaries of the date of grant.
4. The option period for the share options granted above commences on the date of grant and ends on the last day of seventy-two months counting respectively from the said date. The grantees are vested with, and entitled to exercise up to one-third of their share options during the option period commencing from each of first, second and third anniversaries of the date of grant.
5. The option period for the share options granted above commences on the date and ends on the last day of seventy-two months counting respectively from the said date. The grantees are vested with, and entitled to exercise up to 50% of their share options during the option period commencing from each of first and second anniversaries of the date of grant.
6. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$1.08\*.
7. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$1.28\*.
8. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$1.16\*.
9. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$2.60\*.
10. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$3.70\*.
11. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$3.54\*.
12. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$5.73\*.
13. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$5.47\*.
14. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$5.63\*.
15. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$4.99\*.
16. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$5.10\*.
17. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$1.73\*.
18. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$0.77\*.
19. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$0.81\*.
20. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK\$1.12\*.

\* Source from Bloomberg



## Directors' Report

### SUFFICIENCY OF PUBLIC FLOAT

Based on the information publicly available to the Company and within the knowledge of the Directors, the Company has maintained a sufficient public float in compliance with the requirement of the Listing Rules during the year and to the date of this Annual Report.

### ARRANGEMENTS TO ACQUIRE SHARES OR DEBENTURES

Save as disclosed under the section headed "Share Option Scheme" above, at no time during or at the end of the year was the Company or its subsidiaries a party to any arrangements which enabled the Directors (including their spouses or children under 18 years of age), to acquire benefits by means of acquisition of shares in, debentures of, the Company or any other body corporate.

### TAXATION

For the year ended 31 December 2016, no foreign shareholder who is not resident of the PRC is liable for individual or Enterprise Income Tax, Capital Gains Tax, Stamp Duty or Estate Duty of the PRC in relation to their holding of shares of the Company. Shareholders are urged to consult their tax advisers regarding the PRC, Hong Kong and other tax consequences of owing and disposing of the Company's shares.

### DONATION

For the year ended 31 December 2016, the Company contributed a total of RMB0.87 million as charitable and other donations. In the future, the Company will continue to fulfill its commitment to be an enterprise with sound social responsibilities.

### RELATED PARTY/CONTINUING CONNECTED TRANSACTIONS

The related party transactions for the year ended 31 December 2016 are set out in Note 35 to the Financial Statements of this Annual Report.

On 24 April 2013, the Company entered into a master mutual supply and purchase agreement (the "Master Agreement") with Schlumberger NV ("Schlumberger"), pursuant to which the Group agreed to supply products and services to Schlumberger and Schlumberger agreed to supply and procure its affiliates to supply to the Group products and services for a period of three financial years until 31 December 2016. Please refer to the announcement of the Company dated 24 April 2013 and the circular of the Company dated 16 May 2013 for further details.

On 23 December 2015, the Company and Schlumberger entered into the 2015 Master Agreement to renew the Master Agreement. The 2015 Master Agreement has a fixed term of three years commencing from 1 January 2016 to 31 December 2018. Please refer to the announcement of the Company dated 23 December 2015 for further details.

On 13 April 2016, the Company and Schlumberger entered into the Supplemental Agreement to revise the annual caps of the continuing connected transactions under the 2015 Master Agreement. Please refer to the announcement of the Company dated 13 April 2016 for further details.

Schlumberger is a substantial shareholder of the Company interested in approximately 17.37% of the issued share capital of the Company as at 31 December 2016. Accordingly, Schlumberger is a connected person of the Company for the purpose of the Listing Rules and the entering into of the 2015 Master Agreement between the Company and Schlumberger constituted continuing connected transactions for the Company under Chapter 14A of the Listing Rules.

## Directors' Report

As the applicable percentage ratios as defined under Rule 14.07 of the Listing Rules for the revised annual caps under the Supplemental Agreement on an annual basis will exceed 5%, the revision to the annual caps is subject to the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

The Supplemental Agreement to revise the annual caps was approved by the independent shareholders of the Company at an extraordinary general meeting of the Company held on 26 May 2016.

The transaction amounts pursuant to the Master Agreement during the financial year of 2016 were as follows:

	<i>RMB'000</i>	<i>US'000</i>
Supply of Products and Services by the Group to Schlumberger or Affiliates	562	85
Supply of Products and Services by Schlumberger or Affiliates to the Group	68,405	10,362

\* The translation of Renminbi amounts into US dollar amounts has been made at rate of RMB6.6013 to US\$1.00. The exchange rate is the average closing rate of each month end released by Bank of China in 2016.

The Independent Non-executive Directors have reviewed the continuing connected transactions set out above and have confirmed that they were entered into:

- (i) in the ordinary and usual course of business of the Group;
- (ii) on normal commercial terms or better; and
- (iii) according to the agreement governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

PricewaterhouseCoopers, the Company's auditors, were engaged to report on the Company's continuing connected transaction in accordance with Hong Kong Standard on Assurance Engagements 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information and with reference to Practice Note 740 Auditor's letter on Continuing Connected Transactions under the Hong Kong Listing Rules issued by the Hong Kong Institute of Certified Public Accountants. PricewaterhouseCoopers have issued their unqualified letter containing their findings and conclusions in respect of the continuing connected transactions disclosed above by the Company in accordance with Rule 14A.55 of the Listing Rules. A copy of the auditors' letter has been provided by the Company to the Stock Exchange.

## AMENDMENTS TO THE MEMORANDUM AND ARTICLES OF ASSOCIATION

There was no significant change in the Company's constitutional documents during the year ended 31 December 2016.

## AUDIT COMMITTEE

Pursuant to the requirements of the Code and the Listing Rules, the Company has established an audit committee (the "Audit Committee") comprising all three Independent Non-executive Directors, namely, Mr. Zhu Xiaoping (Chairman of the Audit Committee), Mr. Zhang Yongyi and Mr. Wang Mingcai. The Audit Committee has reviewed the audited financial statements of the Group for the year ended 31 December 2016.



## Directors' Report

### AUDITORS

The consolidated financial statements for the year ended 31 December 2016 have been audited by PricewaterhouseCoopers, who shall retire and, being eligible, offer themselves for reappointment at the forthcoming annual general meeting of the Company. A resolution for the reappointment of PricewaterhouseCoopers as auditor of the Company is to be proposed at the forthcoming annual general meeting of the Company.

By order of the Board

**Luo Lin**  
*Chairman*

27 March 2017

# PROFILES OF DIRECTORS AND SENIOR MANAGEMENT

## EXECUTIVE DIRECTORS

**LUO Lin (羅林)**, aged 50, is the Chairman and the founder of the Group. Prior to establishing the Group, Mr. Luo worked at the Tarim Basin and was the Deputy General Manager of a subsidiary of the Southwest Petroleum Bureau (西南石油局) responsible for marketing from 1992 to 1999. Mr. Luo has 23 years of experience in the petroleum industry. He has an Executive Master of Business Administration (EMBA) degree from Tsinghua University and a bachelor's degree in well bore engineering from Southwest Petroleum Institute (西南石油學院). Mr. Luo is also a certified lawyer and a chartered accountant in the PRC.

**WU Di (吳迪)**, aged 50, is an Executive Director of the Company. Mr. Wu joined the Group in 2010, and is now an Executive Vice President in charge of the business supporting and counselling. Prior to joining the Group, Mr. Wu was employed by China National Petroleum Corporation (CNPC) between 1990 and 2010 and was appointed as the Chief Geologist of the Development Business Department of Tarim Oilfield Company (塔里木油田分公司) and the Director of its Development Department. He has more than 27 years of experience in the petroleum industry. Mr. Wu has a master's degree in oil and gas field development engineering from China University of Petroleum, Beijing and a bachelor's degree in oil reservoir engineering from Southwest Petroleum Institute (西南石油學院), and is also a senior engineer with professorship.

**PI Zhifeng (皮至峰)**, aged 39, is the Executive Director and Chief Executive Officer of the Company, in charge of the overall business of the Group. Mr. Pi joined the Group in 2004, and was responsible for the management of strategies, business establishment and capital market. Prior to joining the Group, Mr. Pi was responsible for investment in China Chengxin Financial Consultancy Co., Ltd (中誠信財務顧問有限公司). Mr. Pi has a Master of Business Administration degree from the University of Chicago Booth School of Business in the U.S.

## NON-EXECUTIVE DIRECTOR

**John William CHISHOLM**, aged 62, is a Non-executive Director of the Company. Mr. Chisholm holds a Business Administration degree from Fort Lewis College. He is currently the chairman of the board of directors, president and chief executive officer of Flotek Industries, Inc. ("Flotek") (NYSE:FTK), a diversified global supplier of drilling and production products and services to the energy and mining industries. Mr. Chisholm founded Wellogix, Inc., a software development firm for the oil and gas industry that streamlines workflow, improves collaboration, expedites the intercompany exchange of enterprise data, and communicates complex engineered services. Mr. Chisholm also co-founded and served as president of ProTechnics, a service company dedicated to providing state-of-the-art completion diagnostic services to the energy industry, from 1985 until its sale to Core Laboratories in December of 1996. After leaving Core Laboratories as senior vice president of Global Sales and Marketing in 1998, he started Chisholm Energy Partners, an investment fund targeting mid-size energy service companies. Mr. Chisholm has served on the board of directors of NGSG, Inc. (NYSE:NGS), a company specializing in compression technology for the oil and gas industry, since December 2006. He serves on both the Compensation and Governance Committees of NGSG, Inc. Mr. Chisholm has also been selected to be on the editorial advisory board of Middle East Technology by the Oil and Gas Journal.

## Profiles of Directors and Senior Management

### INDEPENDENT NON-EXECUTIVE DIRECTORS

**ZHANG Yongyi (張永一)**, aged 81, is an Independent Non-executive Director of the Company. Mr. Zhang has extensive experience in the petroleum industry. Mr. Zhang was appointed as the Deputy General Manager of CNPC in 1992. Prior to this, he had taught in the Southwest Petroleum Institute (西南石油學院) for more than 32 years. Mr. Zhang was appointed as Chairman of the Supervisory Committee for State-owned Large and Medium Enterprises (國有大中型企業監事會主席) in 2000 and appointed by the State Council of the PRC as inspector (國務院稽察特派員) in 1998.

**ZHU Xiaoping (朱小平)**, aged 68, is the Independent Non-executive Director. Mr. Zhu has extensive experience in corporate finance and is currently an Accounting Professor of the Renmin University of China (中國人民大學). He served as the Director of the China Accounting Society (中國會計學會理事) and Director of the China Audit Society (中國審計學會理事). Mr. Zhu is also a Director of Linzhou Heavy Machinery Group Co., Ltd. (林州重機集團股份有限公司) listed on the Shenzhen Stock Exchange and China Resources Double-crane Pharmaceutical Co., Ltd. (華潤雙鶴藥業股份有限公司) listed on the Shanghai Stock Exchange.

**WANG Mingcai (王明才)**, aged 72, is the Independent Non-executive Director. Mr. Wang has extensive experience in the petroleum industry, and was the General Manager and Chairman of the board of directors of Sino-U.S. Oil Development Corporation (中美石油開發公司). Mr. Wang has previously worked as the Vice Chief Engineer of Exploring and Development Bureau of China National Petroleum Company (中國石油天然氣總公司). He also held positions such as Vice General Manager of China National Oil & Gas Exploration and Development Corporation (中國石油天然氣勘探開發公司), President of CNPC Venezuela Corporation (中油國際委內瑞拉公司), and Executive Director of Kunlun Energy Company Limited (昆侖能源有限公司), formerly named CNPC (Hong Kong) Limited (中國(香港)石油有限公司) (Stock Code: 0135), a company listed on the Main Board of the Stock Exchange.

### SENIOR MANAGEMENT

**FAN Yonghong (范永洪)**, aged 47, is the President of the Company, and is responsible for daily operations of the Company. Mr. Fan joined the Group in 2004, and was responsible for the setup of the well service business and the management of business clusters of the Group. Prior to joining the Group, Mr. Fan was employed by PetroChina Tarim Oilfield Company (中石油塔里木油田分公司) between 1991 and 2004. He has 25 years of experience in the petroleum industry. Mr. Fan has an Executive Master of Business Administration (EMBA) degree from China Europe International Business School (CEIBS) and graduated from China University of Petroleum, majoring in petroleum engineering.

**SHEN Haihong (沈海洪)**, aged 48, is an Executive Vice President of the Company, and is in charge of operation, quality control and QHSE management. Mr. Shen joined the Group in 2007, and was in charge of the tubular service cluster as well as operational management and operational support of the Group. Prior to joining the Group, Mr. Shen was employed by CNPC between 1991 and 2006 and was appointed as the deputy general manager of Toha Oilfield Drilling Company (吐哈石油鑽井公司), and as the deputy director of the Enterprises Department of Toha Directorate (吐哈指揮部企管處). He has more than 25 years of experience in the petroleum industry. Mr. Shen has a Master of Business Administration degree from Tsinghua University and a bachelor's degree in well bore engineering from Southwest Petroleum Institute (西南石油學院), and is also a senior engineer in well bore engineering.



## Profiles of Directors and Senior Management

**Yan Yonggang (嚴永剛)**, aged 34, is an Executive Vice President of the Company, and is in charge of the drilling technology cluster. Mr. Yan joined the Group in 2007, Mr. Yan has a bachelor's degree in Petroleum Engineering from Jiangnan Petroleum Institute (江漢石油學院).

**MA Jian (馬健)**, aged 49, is an Executive Vice President of the Company, and is in charge of the Middle East market, as well as supporting overseas integrations projects, EPC projects, overseas drilling business as well as marketing and key accounts work. Mr. Ma joined the Group in 2002, and was responsible for business development of the Group in the early stage, marketing in the domestic market and various management operations. Prior to joining the Group, Mr. Ma worked at Halliburton China from 2000 to 2002 as a Well Bore Projects Manager. From 1991 to 1999, he worked as a Petroleum Engineer at the drilling company in Jiangnan Oilfield (江漢油田鑽井工程處), and has 25 years of experience in the petroleum industry. Mr. Ma has a doctoral degree from China University of Petroleum and is a guest professor at Yangtze University (長江大學). Mr. Ma has a master's degree in business administration from Huazhong University of Science and Technology (華中科技大學) and a bachelor's degree in well bore engineering from Jiangnan Petroleum Institute (江漢石油學院).

**XU Hongjian (徐宏劍)**, aged 35, The financial controller of the company, is in charge of the Group's financial accounting, financial management, asset and capital management work; and is in charge of financial management headquarters, support budget management. Mr. Xu joined the Group in 2006 and was responsible for the financial work, risk control and marketing of the Group. Prior to joining the Group, from 2003 to 2006, Mr. Xu worked at Deloitte & Touche LLP and was engaged in financial audit. Mr. Xu holds a bachelor's degree in finance from Fudan University.

## COMPANY SECRETARY

**Dr. NGAI Wai Fung (魏偉峰)**, aged 55, is the Company Secretary of the Company. Dr. Ngai currently is the director and chief executive officer of SW Corporate Services Group Limited. Dr. Ngai has over 25 years' experience and knowledge in senior management and professional matters in listed companies, including IPO, Merger and Acquisition, corporate financing, internal control, governance and company secretary etc. Dr. Ngai is a fellow of the Hong Kong Institute of Chartered Secretaries and a fellow of the Institute of Chartered Secretaries and Administrators in the United Kingdom. He also is a member of the Hong Kong Institute of Certified Public Accountants and a fellow member of the Association of Chartered Certified Accountants in the United Kingdom. Dr. Ngai obtained a Doctorate in Finance from the Shanghai University of Finance and Economics, a Master's degree in Corporate Finance from the Hong Kong Polytechnic University, a Master's degree in Business Administration (MBA) from Andrews University of the United States and a Bachelor's degree (Honours) in Law from the University of Wolverhampton, the United Kingdom.

# CORPORATE GOVERNANCE REPORT

Since the listing of its shares on the Stock Exchange on 14 December 2007, the Company is committed to maintaining high standard of corporate governance and has adopted the code provisions (the "Code Provision(s)") under Appendix 14 to the Listing Rules as its own code. The Company has been in compliance with all the applicable Code Provisions (other than those deviating from the Code Provision A.2.1) for the year ended 31 December 2016.

Under the structure of the existing Board, there are three Executive Directors, one Non-executive Director and three Independent Non-executive Directors to ensure the independent and objective running of the Board, and the relevant Board committees play an important role in the Company's decision-making, monitoring and advisory work.

## CORPORATE GOVERNANCE STRUCTURE

As the core of corporate governance for the Company, the Board has distinct duties from those of the management. The Board is responsible for providing direction to and effective supervision of the management, while the management is in charge of executing established strategies and directions. Generally speaking, the Board is responsible for:

- formulating long term strategies of the Group and supervising their execution, its subsidiaries and associated companies;
- approval of operational plan and financial budget;
- approval of the relevant annual and interim results;
- reviewing and monitoring the risk management and internal control of the Group; and
- ensuring good corporate governance and compliance.

The Board authorised the management to execute established strategies and directions of the Group, the management is in charge of the Group's daily operation and reports to the Board. Accordingly, the Board has set out clear written guidelines, in particular, it clearly determined the scope of authority of the management, and those items requiring the Board's approval.

There are agreed procedures for the Directors, upon reasonable request, to seek independent professional advice at the Company's expense in appropriate circumstances.

## BOARD OF DIRECTORS

### Board Composition

The constitution of Board adheres strictly to the principle of ensuring balance, fairness and diversity in the backgrounds of our Board members, and the Board strives to recruit the most suitable candidates to lead the Group towards a rapid and healthy growth. As at the date of this Annual Report, the Board currently comprises three Executive Directors namely, Mr. Luo Lin, Mr. Wu Di and Mr. Pi Zhifeng, one Non-executive Director namely, John William Chisholm and three Independent Non-executive Directors namely, Mr. Zhang Yongyi, Mr. Zhu Xiaoping and Mr. Wang Mingcai. The Chairman of the Board is Mr. Luo Lin. The background of these Directors brings different expertise and experiences to the Board. The biographical details of all the Directors are set out under the section headed "Profiles of Directors and Senior Management" of this Annual Report.

## Corporate Governance Report

To the best knowledge of the Company, there is no relationship (including financial, business, family or other material relationship) among members of the Board.

### Board Diversity

The Board recognised the benefits of diversity in the Board in enhancing the Board's effectiveness. In this regard, the Board has adopted a Board Diversity Policy (the "Board Diversity Policy") in August 2013 which sets out the approach to achieve diversity on the Board. The Nomination Committee will give consideration to a number of factors as set out in the Board Diversity Policy when identifying suitably qualified candidates to become members of the Board, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, industry experience, skills, knowledge and length of service. The Board is considered well balanced and of a diverse mix appropriate for the needs of the Company. The Company will also take into account its own business model and specific needs from time to time to determine the optimal composition of the Board. The Nomination Committee will review the Board Diversity Policy on a regular basis to ensure its continued effectiveness.

### Chairman and Chief Executive Officer

Code Provision A.2.1 stipulates that the roles of chairman and chief executive should be separate and should not be performed by the same individual. The division of responsibilities between the chairman and chief executive should be clearly established and set out in writing. From 1 January 2016 to 3 February 2016, the Company has not separated the Chairman's and Chief Executive Officer's duties and Mr. Luo Lin served as both Chairman and Chief Executive Officer.

From 4 February 2016, Mr. Pi Zhifeng has been appointed as the Chief Executive Officer and Mr. Luo Lin only serve as the Chairman of the Company. As the Chairman of the Board of the Group, Mr. Luo Lin will continue to provide leadership for the Board of the Group to ensure that it performs its responsibilities and provide decision and supervision on development strategies, operational plans, financial control and human resources management of the Company; and Mr. Pi Zhifeng will be specifically responsible for the day-to-day management of the Group. With the roles of Chairman and Chief Executive Officer served by two individuals, the Company is in compliance with Code Provision A.2.1 from 4 February 2016.

### Independence of Independent Non-Executive Directors

The Company has received annual confirmation of independence from all the Independent Non-executive Directors pursuant to Rule 3.13 of the Listing Rules. Consequently, the Board is of the opinion that all the current Independent Non-executive Directors comply with the relevant guidelines set out in Rule 3.13 of the Listing Rules, thus the Company regards all the Independent Non-executive Directors as independent parties.

During the year, the Company has complied with the requirements of Rule 3.10 of the Listing Rules and has at least three Independent Non-executive Directors, including one Independent Non-executive Director, Mr. Zhu Xiaoping, with appropriate professional qualifications or accounting or related financial management expertise. Throughout the year, the Board has at least one-third in number of its members comprising Independent Non-executive Directors in compliance with Rule 3.10A of the Listing Rules.

All the Independent Non-executive Directors have served the Board since 17 November 2007. They serve as an Independent Non-executive Director for more than 9 years. During their years of appointment, Mr. Zhang Yongyi, Mr. Zhu Xiaoping and Mr. Wang Mingcai have demonstrated their ability to provide an independent view to the Company's matters. Notwithstanding their years of service as Independent Non-executive Directors, the Board is of the view that they are able to continue to fulfill their role as required and thus recommends them for re-election at the annual general meeting of the Company.

## Corporate Governance Report

### Appointment And Re-Election of The Directors

The term of the appointment for the Executive Directors and Non Executive Director are three years and for the Independent Non-executive Directors is one year. According to the Company's Articles of Association, at every annual general meeting of the Company, one-third of the current Directors shall retire from office by rotation (or if the number of the Directors is not three or a multiple of three, then the nearest but not less than one-third) provided that each Director (including those appointed for a specific term but not including those appointed to fill a casual vacancy or as an addition to the existing Board in accordance with Articles 114 and 115) must retire by rotation at least once every three years. The retiring Directors can be re-elected and continue to participate in the relevant meeting in the capacity as Director.

The newly appointed Directors will receive induction packages containing the duties and responsibilities of directors under the Listing Rules and other applicable rules and regulations.

The Company has arranged appropriate insurance cover to indemnify the Directors and officers of the Group for their potential liabilities incurred by them in discharging their duties.

### Corporate Governance Functions

The Board has adopted the written terms of reference on corporate governance functions in March 2012 so as to perform corporate governance functions effectively. The relevant authority and duties are clearly set out in its terms of reference which are summarized as follows:

- (a) To develop and review the Company's corporate governance policies and implementation on corporate governance;
- (b) To review and monitor the training and continuous professional development of Directors and senior management;
- (c) To review and monitor the Company's policies and implementation on compliance with legal and regulatory requirements;
- (d) To develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees and directors; and
- (e) To review the Company's compliance with the Code Provisions and disclosure in the Corporate Governance Report.

The following is a summary of the work performed by the Board on corporate governance functions during 2016:

- (a) Reviewed the Company's corporate governance policy and the implementation thereof;
- (b) Reviewed and monitored the code of conduct and compliance manual applicable to the Directors and employees;
- (c) Reviewed the Company's compliance with the Code Provisions; and
- (d) Reviewed the Board composition.

## Corporate Governance Report

### DIRECTORS' SECURITIES TRANSACTIONS

The Company has adopted the Model Code set out in Appendix 10 to the Listing Rules as its own code of practice for carrying out securities transactions by the Directors. After specific enquiry with all members of the Board, the Company confirms that all the Directors have fully complied with the required standards stipulated in the Model Code during the year.

### CONTINUOUS PROFESSIONAL DEVELOPMENT

During the year ended 31 December 2016, the Directors confirmed that they have complied with the Code Provision A.6.5 on Directors' training. During the year, all the Directors have participated in continuous professional development by attending seminars and/or reading materials on the following topics to develop and refresh their knowledge and skills and provided a record of training to the Company.

Name of Directors	Topics on training covered (Notes)	Hours spent
Mr. Luo Lin	C, L, R	7
Mr. Wu Di	C, L, R	7
Mr. Pi Zhifeng	C, L, R	7
Mr. John William Chisholm	C, L, R	2
Mr. Zhang Yongyi	C, L, R	7
Mr. Zhu Xiaoping	C, L, R	7
Mr. Wang Mingcai	C, L, R	7

Notes:

C: Corporate governance

L: Listing Rules updates

R: Other relevant regulatory updates

### BOARD/BOARD COMMITTEE MEETINGS AND GENERAL MEETINGS

The Company has set up the Audit Committee, Remuneration Committee and Nomination Committee on 17 November 2007 and set up QHSE (Quality, Health, Safety, Environment) committee on 21 January 2013. During the reporting year, the Company had convened 13 Board meetings, 2 Audit Committee meetings, 1 Remuneration Committee meeting, 1 Nomination Committee meeting and 1 QHSE committee meeting. Also, the Company had convened an Annual General Meeting during the reporting year.

## Corporate Governance Report

Attendances of meetings by the Directors during the year were set out in the table below:

Directors	Meeting attendance/number of meetings					
	Board Meeting	Audit Committee Meeting	Remuneration Committee Meeting	Nomination Committee Meeting	QHSE Committee Meeting	Annual General Meeting
<b>Executive Directors</b>						
Mr. Luo Lin (Chairman of the Board)	13/13	N/A	1/1	1/1	1/1	1/1
Mr. Wu Di	13/13	N/A	N/A	N/A	N/A	1/1
Mr. Pi Zhifeng (Chief Executive Officer)	13/13	N/A	N/A	N/A	1/1	1/1
<b>Non-executive Director</b>						
Mr. John William Chisholm (appointed on 2 November 2016)	2/2	N/A	N/A	N/A	N/A	N/A
<b>Independent Non-executive Directors</b>						
Mr. Zhang Yongyi	13/13	2/2	N/A	1/1	N/A	1/1
Mr. Zhu Xiaoping	13/13	2/2	1/1	N/A	N/A	1/1
Mr. Wang Mingcai	13/13	2/2	1/1	1/1	N/A	1/1

In addition to the Board Meetings for results announcement, which are held twice per year, the Company also holds Board Meetings every quarter (the "Quarterly Meetings") to better exercise the strategic and monitoring roles of the Board. Senior management is invited to attend to enhance Board and management communications. The Quarterly Meetings mainly focus on key issues in four areas, i.e. strategic work, operation status, financial operation and budgeting, and capital market. Each quarter, a summary report is made on these four areas in the previous quarter and discussions are conducted on the plans in these areas for the next quarter. During the year, the dates of holding the Quarterly Meetings were set out as follows:

	1st Quarterly Meeting	2nd Quarterly Meeting	3rd Quarterly Meeting	4th Quarterly Meeting
Date	14 January 2016	21 April 2016	17 July 2016	17 October 2016



## Corporate Governance Report

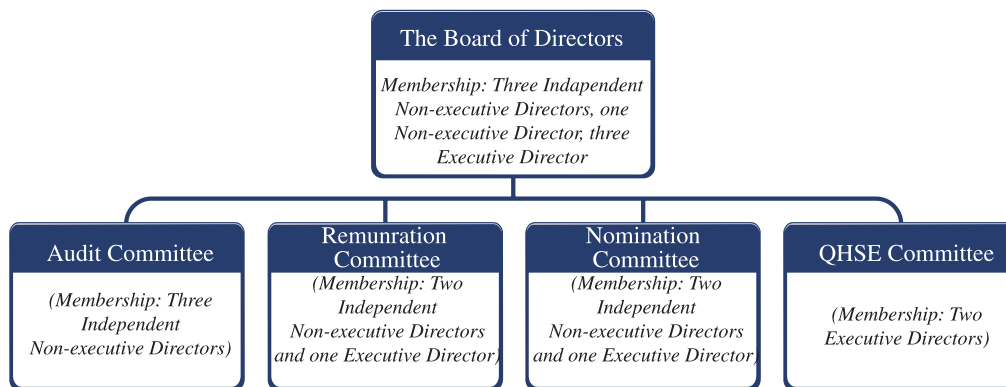
### MONTHLY MANAGEMENT REPORT

During the inter-sessional period, each Executive Director receives a copy of the financial report and the management report each month, and holds business meetings with the management to obtain information of monthly operating conditions, monitor business progress, and mentor the management with effective planning.

### BOARD COMMITTEES

The Board has established the Audit Committee, Remuneration Committee and Nomination Committee (all chaired by Independent Non-executive Director) with defined terms of reference (available on the Company's website) since the listing of the Company, which are on no less exacting terms than those set out in the Corporate Governance Code.

In addition, the Board has also established QHSE (Quality, Health, Safety, Environment) Committee on 21 January 2013.



Each Committee has authority to engage outside consultants or experts as it considers necessary to discharge the Committee's responsibilities. To further reinforce independence and effectiveness, all the Audit Committee members are the Independent Non-executive Directors, and the Nomination and Remuneration Committees have been structured with a majority of the Independent Non-executive Directors as members since their establishment in November 2007.

## Corporate Governance Report

### Audit Committee

The Company has set up the Audit Committee since 17 November 2007 which took effect upon listing of the Company.

There are three members in the Audit Committee, all of them are the Independent Non-executive Directors, namely Mr. Zhu Xiaoping, Mr. Zhang Yongyi and Mr. Wang Mingcai. Mr. Zhu Xiaoping is the Chairman of the Audit Committee. Mr. Zhu Xiaoping has appropriate professional qualifications or accounting or related financial management expertise as required under Rule 3.10 (2) of the Listing Rules. The authority and duties of this Committee are clearly set out in its terms of reference.

The major roles and functions of the Audit Committee are as follows:

- (a) To monitor the relationship between the Company and the external auditors, make proposals to the Board on the appointment, renewal and dismissal of the external auditors of the Group as well as the relevant remuneration and terms of appointment;
- (b) To review the Company's financial information; and
- (c) To oversee of the Company's financial reporting system, risk management and internal control procedures.

The Audit Committee held 2 meetings during 2016 and the following major matters were reviewed and discussed in the meetings:

- (a) Reviewed the Group's annual results of 2015 and the interim results of 2016 and made recommendations to the Board for approval;
- (b) Made recommendation on the re-appointment of the auditor; and
- (c) Reviewed the financial reporting system, risk management and the internal control system.

### Remuneration Committee

The Company has set up the Remuneration Committee since 17 November 2007 which took effect upon listing of the Company. The Remuneration Committee comprises two Independent Non-executive Directors, Mr. Wang Mingcai and Mr. Zhu Xiaoping, and one Executive Director, Mr. Luo Lin. Mr. Wang Mingcai is the Chairman of the Remuneration Committee. The authority and duties of this Committee are clearly set out in its terms of reference.

The major roles and functions of the Remuneration Committee are as follows:

- (a) To review and recommend the terms of remuneration, benefits, bonus and other allowances of the Directors and senior management;
- (b) To submit proposals to the Board on the remuneration policy and structure of all the Directors and senior management; and
- (c) To approve and monitor the execution of the Company's Share Option Scheme.

The Board has authority to approve the recommendations made by the Remuneration Committee.

The Remuneration Committee held 1 meeting during 2016 and reviewed the remuneration package of a newly appointed Non-executive Director.

## Corporate Governance Report

### Nomination Committee

The Company has set up the Nomination Committee since 17 November 2007 which took effect upon listing of the Company. The Nomination Committee is composed of two Independent Non-executive Directors, Mr. Zhang Yongyi and Mr. Wang Mingcai, and one Executive Director, Mr. Luo Lin. Mr. Zhang Yongyi is the Chairman of the Nomination Committee. The authority and duties of this Committee are clearly set out in its terms of reference.

The major roles and functions of the Nomination Committee are as follows:

- (a) To review the structure, number and composition and diversity of the Board and make recommendation to the Board on the policy and procedures for the nomination of Directors;
- (b) To identify individuals suitably qualified to become Board members and may select individuals nominated for directorship, and consider individuals on merit and against the objective criteria, with due regard for the benefits of diversity on the Board;
- (c) To make recommendations to the Board on the appointment or re-appointment of Directors, succession planning for Directors, in particular the chairman and the chief executive;
- (d) To review the independence of the Independent Non-executive Directors and submit proposals to the Board; and
- (e) To review the Board Diversity Policy in particular the measurable objectives contained therein to ensure their appropriateness and the progress made towards achieving those objectives will be ascertained.

The Nomination Committee held 1 meeting during 2016 and made recommendation to the board for the appointment of Non-executive Director.

## Corporate Governance Report

### QHSE (QUALITY, HEALTH, SAFETY, ENVIRONMENT) COMMITTEE

The Company set up the QHSE Committee on 21 January 2013. The QHSE Committee is composed of two Executive Directors, Mr. Luo Lin and Mr. Pi Zhifeng. Mr. Pi Zhifeng is the Chairman of the QHSE Committee. The QHSE Committee is tasked with the responsibilities of providing guidance and advice on the quality, health, safety and environment (QHSE) strategies of the Group. QHSE represents an important standard for oilfield services industry. The Company strives to introduce international standards to enhance its service level at home and abroad. The QHSE Committee meets at least once every year.

The major roles and functions of the QHSE Committee are as follows:

- (a) To assist the Board to review the current status of the Group's QHSE performance;
- (b) To assist the Board with oversight of the Group's QHSE management, reporting processes and systems;
- (c) To assist the Board to formulate the Group's QHSE plans and supervise its effective implementation; and
- (d) To make recommendations to the Board in respect of matters affecting the Group's QHSE standards.

The QHSE Committee held 1 meeting during the year to reviewing and discuss the Company's work on QHSE and planning the forthcoming work.

### REMUNERATION OF THE MEMBERS OF THE SENIOR MANAGEMENT BY BAND

Pursuant to Code B.1.5 of the Code Provisions, the remuneration of the members of the senior management by band for the year ended 31 December 2016 was set out below:

Remuneration band	Number of individuals
RMB100,001 to RMB500,000	1
RMB500,001 to RMB1,000,000	1
RMB1,000,001 to RMB1,500,000	1
RMB1,500,001 to RMB2,000,000	2

### ACCOUNTABILITY AND AUDIT

The Directors understand that they must assume the responsibility of preparing the financial accounts of each year. The Board was not aware of any material uncertainties relating to events or conditions that might cast significant doubt upon the Group's ability to continue as a going concern and the Board has prepared the financial statements on a going concern basis.

The declaration of duties by the Auditors of the Group on the Group's financial statements is contained on pages 77 and 83 of the Independent Auditor's Report.

## Corporate Governance Report

### AUDITOR'S REMUNERATION

An analysis of the remuneration for audit and non-audit services provided by the auditor appointed by the Group during the year is as follows:

	<b>2016 RMB '000</b>
Audit services	<b>6,030</b>
Non-audit services	<b>950</b>
Total:	<b>6,980</b>

### COMPANY SECRETARY

The Company Secretary is Dr. Ngai Wai Fung ("Dr. Ngai"), who has been appointed by the Board. Dr. Ngai is the director and chief executive officer of a corporate service provider, SW Corporate Services Group Limited. The primary corporate contact person at the Company is Mr. Pi Zhifeng, the Executive Director.

Dr. Ngai has taken no less than 15 hours of relevant professional training during the year ended 31 December 2016 in compliance with Rule 3.29 of the Listing Rules.

### RISK MANAGEMENT AND INTERNAL CONTROL

The Board acknowledges its responsibility to maintain effective risk management and internal control systems of the Company in order to manage rather than eliminate risks of failure to achieve business objectives, and to provide reasonable but not absolute assurance against material misstatement or loss.

The Company implemented various policies and procedures to ensure effective risk management at each aspect of its operation, including the provision of construction operations management, on-site inspection, surveying and sampling services, administration of daily operation, financial reporting and recording, compliance with applicable laws and regulations on environmental protection and workplace safety.

During the year, the Group had reviewed its internal control system. Based on the review, the Board was satisfied with the effectiveness of the current internal control system of the Group, including the adequacy of resources, staff qualifications and experience, training programmes and budget of the Group's activity and financial reporting function.

The Group has set up the Internal Audit Department, the Legal Department and the Quality Control Department in charge of the internal control and risk management duties. The Executive Directors of the Company receive internal financial report and management report every month for monitoring the operational progress of each business department and making reasonable planning.

The Group has put in place a set of policy for the disclosure of inside information which sets out the procedures and internal controls for the handling and dissemination of inside information in a timely manner and in compliance with the Securities and Futures Ordinance.

## Corporate Governance Report

### SHAREHOLDERS' RIGHTS

The Company encourages shareholders to attend shareholders' meetings. Directors, chairman of each of Audit Committee, Remuneration Committee, Nomination Committee (or a delegated member of the Committee), chairman of the independent board committee (if any) and management will attend the annual general meeting of the Company to answer queries about the Group's business.

In 2016, the Company had convened one annual general meeting (the "2016 AGM"). The 2016 AGM provided an ideal chance for communication between the Board and the shareholders. The Chairmen of the Board, Audit Committee, Remuneration Committee and Nomination Committee and the Company's external auditor were all present at the AGM held on 26 May 2016, to answer shareholders' inquiries.

### THE PROCEDURES FOR SHAREHOLDERS TO CONVENE AN EXTRAORDINARY GENERAL MEETING ("EGM")

Pursuant to the Article 79 of the Articles of Association of the Company, any two or more members of the Company or any one member of the Company which is a recognised clearing house (or its nominee (s)) holding at the date of the requisition not less than one-tenth of the paid up capital of the Company which carries the right of voting at general meetings of the Company shall deposit the written requisition at the principal office of the Company in Hong Kong, which is presently situated at unit 2109, Cosco Tower, 183 Queen's Road Central, Hong Kong, specifying the objects of the meeting and signed by the requisitioner(s) (the "Requisitionist(s)").

The request will be verified with the Company's branch share registrars in Hong Kong and upon their confirmation that the request is proper and in order, the company secretary of the Company will ask the Board to convene an EGM by serving sufficient notice in accordance with the statutory requirements to all the registered members. On the contrary, if the request has been verified is not in order, the shareholders will be advised of this outcome and accordingly, an EGM will not be convened as requested.

If within 21 days from the date of the deposit of the requisition the Board fails to proceed to convene such meeting to be held within a further 21 days, the Requisitionist(s) themselves or any of them representing more than one-half of the total voting rights of all of them, may convene a meeting in the same manner, as nearly as possible, as that in which meetings may be convened by the Board provided that any meeting so convened shall not be held after the expiration of three months from the date of deposit of the requisition, and all reasonable expenses incurred by the Requisitionist (s) as a result of the failure of the Board shall be reimbursed to them by the Company.

### THE PROCEDURES AND CONTACT DETAILS FOR PUTTING FORWARD PROPOSALS AT SHAREHOLDERS' MEETING

The annual general meeting and other general meetings provide an important opportunity for shareholders to express their views and the Company encourages and promotes shareholder attendance and participation at general meetings.

The Board members, in particular, the chairman or his delegates, appropriate members of management team and external auditors of the Company will attend annual general meetings to answer shareholders' questions.

Shareholders attending at the annual general meeting and other general meetings are allowed to have a reasonable opportunity to ask questions regarding the items on the meeting agenda, including but not limiting to questions to the external auditor regarding the conduct of the audit and the preparation and content of the auditor's report.

### CONSTITUTIONAL DOCUMENTS

There was no change in the Company's constitutional documents during the year ended 31 December 2016.



## Corporate Governance Report

### **THE PROCEDURES BY WHICH ENQUIRIES MAY BE PUT TO THE BOARD AND SUFFICIENT CONTACT DETAILS TO ENABLE THESE ENQUIRIES TO BE PROPERLY DIRECTED**

Shareholders, investors and members of the public should direct their questions about their shareholdings to the Company's Branch Share Registrar in Hong Kong. The contact details for the Share Registrar are:

Computershare Hong Kong Investor Services Limited 17M Floor, Hopewell Centre

183 Queen's Road East  
Wanchai, Hong Kong  
Telephone: (852) 2862 8628  
Fax: (852) 2865 0990  
Website: [www.computershare.com](http://www.computershare.com)

To contact the Company in relation to your query about the Company, the contact details are as follows:

Tel: (86 10) 5739 7584  
(852) 2907 7108  
Email: [ir@antonoil.com](mailto:ir@antonoil.com)

### **DISCLAIMERS**

*The information contained in the section headed "Shareholders' Rights" in this Annual Report is for reference only and does not represent and shall not be regarded as legal or professional advice to the shareholders. Shareholders should seek their own independent legal advice as to their rights as shareholders of the Company. The Company disclaims any and all liabilities and losses that may be incurred by the shareholders for using or relying on any information contained in the section headed "Shareholders' Rights" in this Annual Report.*

### **FINANCIAL CALENDAR 2017**

#### **Announcement of 2016 Results**

27 March 2017

#### **Last Day to Register for Attending 2017 Annual General Meeting**

22 May 2017

#### **2017 Annual General Meeting**

26 May 2017

# EMPLOYEE RELATIONS

## GROUP

In face of the tough market, the Group continued to implement the talent management and elimination system and the leave policy in 2016, reinforced the internal allocation of employees and allocated appropriate talents to positions in need to improve the efficiency of human resources utilization. Through the above channels, the Group effectively controlled the number of in-service employees to reduce human resource costs.

## SYSTEM

In 2016, the Group optimized the institutional framework, achieved resources sharing within the business sectors of well drilling, well completion and oil production built with product lines, improved the comprehensive strength of each business sector and the efficiency in organization and management of production, thus realized better synergetic development among different industries and reduced the cost with a greater emphasis on the construction of capabilities in connection with technical marketing; optimized the marketing framework in accordance with the operating objective and changes in the market, retained elites for doing on our own and directly conveyed pressure to reinforce business execution; further reduced the functional management body levels and management posts of all units, further optimized the configuration and increased the management efficiency; implemented the centralized management and control of supporting service units and reduced decentralized management departments and levels; managed the financial operation of business units in different regions in a timely manner and put more emphasis on capital and budget management. Through the above adjustments, the Group streamlined the management levels and post establishment to promote the best match for human resources and achieve the objective of cost reduction.

In December 2016, the Group was named 'The Best Model Enterprise in Human Resource of China' by 51 job for five consecutive years and won the individual award-'Best Model in Organization Development Strategy' for three consecutive years.

## RECRUITMENT AND DISCOVERY OF TALENTS

In 2016, under the circumstance of the normalization of low oil prices in the industry, the Group still insisted on the 'talent first' strategy, focused on recruiting leading and professional talents with global competence, supported the development of oversea business, and continued to enhance the force of local recruitment of oversea markets like Iraq and Pakistan, etc. Meanwhile, to further support the research and development and promotion of integrated technologies relating to production increase and cost reduction, the Group focused on the introduction of high-end technical talents.

## TRAINING

The Group insisted on the self-development of talents, built and gradually completed the Anton training system based on the establishment of "Anton College", expanded the sharing and using of the internal training resource and formed comparatively normative and systematic employee training method. At the same time, the Group focused on training international talents and senior project management talents to support the strategic development need of the Group.

## EMPLOYEE RELATIONSHIP

In 2016, to better implement the value of Anton Oil, encourage employees to be positive and work proactively and form a good working atmosphere, the Group continued to improve the manpower system and policies and established systems such as "About Strengthening Positive Encouragement and Paying Active Attention to Feedbacks" and implemented in the Group, which greatly improved the overall working atmosphere.

# ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## INTRODUCTION

### Ant on Oil

There is an awesome group of animals in nature which are though small and in obscurity, still they can adapt to any changes in environment with united cooperation, diligent work and persistent spirit no matter how severe the environment is, demonstrating a perennial spiritual motivation. This group is the ants and "Ant on Oil" is where the name of Anton Oilfield Services Group (hereinafter referred to as "Anton Oilfield Services" or "the Company") comes from. With "ant culture" as its cultural core, Anton Oilfield Services always adheres to the principles of honesty, integrity, law-abiding, dedication, enterprising, gratitude and repaying.

Accompanied by the synchronous development of the Company and the times, Anton Oilfield Services insists on strategic vision of becoming "the best privately-operated oilfield engineering technology partner in China and the best Chinese partner in the world" all the time. It is one of the tasks of enterprise development strategic vision that must be accomplished to actively perform corporate social responsibilities along with fast-growing performance. Anton Oilfield Services deeply understands that, as an oilfield engineering company with globalized scope of business, it faces more complicated and severe challenges from fields including environmental protection, social security and corporate governance. Therefore, it constantly makes efforts, summary, optimization and innovation and does everything to fight for a beautiful future where the enterprise, society and nature can develop harmoniously.

To actively perform corporate social responsibilities, Anton Oilfield Services keeps in contact with all interested parties, positively responds to the appeals of all interested parties and constantly improves the environmental, social and governance performance level. The report is the first publicly released environmental, social and governance (ESG) report of Anton Oilfield Services Group and it is in line with relevant provisions of Environmental, Social and Governance Reporting Guide noted in Appendix 27 of Listing Rules. Via this report, the Company hopes to disclose its working achievements in environmental, social and governance aspects made in 2016 and cope with the concerns of all interested parties.

## Environmental, Social and Governance Report

### 1. ESG MANAGEMENT SYSTEM

#### 1.1 ESG Concept and Management

Based on the corporate vision of “becoming a world’s leading oilfield technology service company in China”, Anton Oilfield Services adheres to the concept of sustainable development, attaches great importance to environmental protection, energy conservation, ecological harmony and staff caring, actively listens to the appeals of interested parties from all circles and positively gives feedback. While pursuing the goal of being in the lead in performance, services and technology, it also aspires to become a model in the performance of enterprise social responsibility among peer companies and make the greatest contribution to the promotion of harmonious development of the enterprise, society and nature.

#### 1.2 ESG Management Structure

To comprehensively implement the concept of sustainable development and efficiently promote the execution of corporate ESG management work, Anton Oilfield Services adopts its board of directors as the highest decision-making body of ESG management to provide strategic direction and guidance for overall ESG management work of the Company. Meanwhile, Anton Oilfield Services specifies and refines the management functions of all departments based on current management structure and conducts comprehensive but targeted management for all ESG levels through QHSE management headquarters, human resources headquarters, supply chain center, audit supervisory headquarters as well as brand and policy headquarters.

#### 1.3 Communication with and Response to Interested Parties

Anton Oilfield Services commits itself to keeping good communication with interested parties from all circles to promote the sustainable development of the Company in aspects of marketing operation, working environment, staff care, environmental protection, community participation, etc. through participation of interested parties from all circles.

To effectively identify main interested parties involved in corporate operation and their key appeals, Anton Oilfield Services conducts positive identification along with interested parties from all circles and establishes diversified communication approaches so as to establish a long-term effective communication mechanism with main interested parties from all circles.

## Environmental, Social and Governance Report

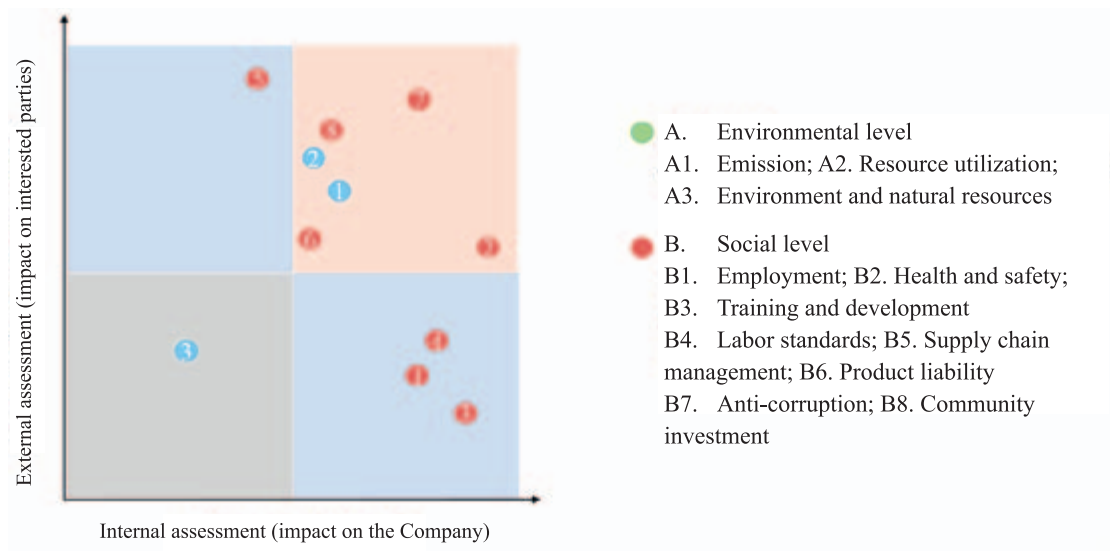
Interested parties	Party description	Communication mode
Government and regulatory authorities	Tax administration, environmental protection, safety and other departments, local government, CSRC and other direct management and regulatory authorities with permission to execute national or local laws and regulations	Major conference, policy consultation, case report, organization investigation, document exchanges, information disclosure, etc.
Investors and shareholders	Natural person with certain shares of Anton Oilfield Services	Annual general meeting and enterprise annual report
Employees	Personnel who have duly signed labor contract with Anton Oilfield Services and served for the businesses of Anton Oilfield Services for a long time	Employee satisfaction survey, employee activities, employee training, employee manual and corporate internal publications, etc.
Media	Newspapers, TV stations, network companies and other related media institutes which have established with legal cooperative relationship with Anton Oilfield Services	Business operation interviews, enterprise culture propaganda, special subject activities and other activities attended or participated in based on invitation
Suppliers	Enterprises, shops or self-employed businessmen supplying production materials, auxiliary materials and office necessities to Anton Oilfield Services	Supplier investigation, public tendering & bidding meetings, strategic cooperation talks, exchanges and visits, etc.
Customers	Organizations/persons that have duly signed contract with Anton Oilfield Services and acquired services from Anton Oilfield Services	Contract signing, business transaction, letter exchange, etc.
Surrounding communities of operation site	Communities of operation location, public society and non-profit organizations	Public benefit activities, community activities, volunteer activities, social undertaking support projects, etc.

Anton Oilfield Services understands the concerns and expectations of internal and external interested parties through communication with all interested parties by above means.

The topics to which internal interested parties concern most are occupational health, employee training and employee right and benefit and the topics to which external interested parties concern most are supply chain management, anti-corruption and community investment.

## Environmental, Social and Governance Report

See the figure (Matrix of Significance Assessment for ESG Key Topics of Anton Oilfield Services) below for specific concern extent of internal and external interested parties on ESG topics.



**Matrix of Significance Assessment for ESG Key Topics of Anton Oilfield Services**

## 2. ENVIRONMENTAL AND SOCIAL RESPONSIBILITIES OF THE COMPANY

Anton Oilfield Services always adheres to the corporate core value of QHSE and operation principle of "QHSE before Anton". With service quality as operating basis and HSE as development premise, Anton Oilfield Services regards "zero casualty, zero pollution, zero complaint and zero loss" as the vision of its global business QHSE and strives to become a model in the industry.

### 2.1 International Compliance Performance

#### Compliance Commitments

As the Company develops, the business scope of Anton Oilfield Services has spread all over the oil-producing regions nationwide and main overseas oil-producing regions. The Company has established field service bases in main oil-producing regions nationwide and the overseas businesses have formed an international business network orienting the Middle East, Central Asia, Africa and other international main oil-producing regions. To put the mission of "one can succeed if he/she can help others to succeed" into practice, Anton Oilfield Services promises to firmly abide by national and local laws and regulations of its operating locations and relevant regulations and respect local customs.



## Environmental, Social and Governance Report

### Identification of Laws and Regulations

As the basis of compliance operation, Anton Oilfield Services pays high attention to the identification and updates of laws, regulations and relevant standards. For domestic operation projects, the Company firmly abides by Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on Energy Conservation, Law of the People's Republic of China on Evaluation of Environmental Impacts, Law of the People's Republic of China on Prevention and Control of Water Pollution, Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes and other laws, regulations and standards, faithfully implements environmental impact assessment and resolutely carries out the "Three Simultaneities" system for environmental protection measures of construction project. For overseas operation projects, the Company actively identifies the laws, regulations, emission standards, requirements of international convention of operation project location, and keeps good communication with local regulatory authorities to practically understand the specific requirements of operation project location.

### System Guideline

Anton Oilfield Services formulates the Environmental Protection Management Procedure, Emergency Management Procedure, QHSE Life-saving Rules, Staff Position Manual and other management procedures as the guideline of compliance operation to regulate the emission and recycle of pollutants and anti-pollution emergency management during the operation and strengthen the environmental protection requirements of field operation. Meanwhile, it regularly reviews and updates environmental protection management system and ensures the system is practical, feasible and effective to provide compliance operation basis for domestic and overseas operation projects.

### System Management

Anton Oilfield Services establishes QHSE management system as the assurance of compliance operation in accordance with the requirements of ISO14001 and OHSAS18001 and sets up QHSE and management optimization headquarters in the group management level to conduct QHSE overall management throughout the whole operation process of the Company. To offset the impact of complex industrial structure on the implementation of QHSE management work, the Company set up corresponding QHSE management departments at all locations of domestic and overseas operation projects based on the scope of corporate business worldwide to realize contact and communication in work with QHSE and management optimization headquarters. It firmly implements QHSE Life-saving Rules, strictly controls the emission level of pollutants and comprehensively carries out environmental protection monitoring and supervision work to ensure the compliance operation of global business of the Company.

### Compliance Achievements

Anton Oilfield Services comprehensively identifies laws and regulations and explains applicable clauses to specify the system guideline and effective system management and conduct three-dimensional management for all domestic and overseas operation projects throughout the stages. During year 2016, there was no material non-compliance incident relating to energy conservation and environmental protection, and the Company duly performed its corporate environmental and social responsibilities.

## Environmental, Social and Governance Report

### 2.2 Clean Operation Service

Anton Oilfield Services insists on the clean production on the basis of worldwide compliance operation. It makes continuous innovation in system, technology and behavior management and further reduces the utilization of unnecessary resources and generation of emissions to strive to realize harmonious coexistence of enterprise benefit and natural environment.

#### Energy Conservation

As a large-scale oilfield technical services company with globalized scope of business, Anton Oilfield Services deeply understands its opportunities and challenges faced in energy utilization. It strives to fulfill its social responsibility for energy conservation and carries out several energy conservation measures based on Energy Conservation Law and energy conservation regulations of construction project location. Anton Oilfield Services believes in that the accumulation of small efforts will eventually lead to qualitative change.

<b>System</b>	Regulations for Office QHSE Management	In system aspect, require employees to save water, electricity and papers, adopt green travel and reduce energy utilization and greenhouse gas emission.
<b>Measures</b>	Green office Green travel	Carry out paperless office and control consumption of papers and other office supplies.  Assign special personnel to control the air conditioning temperature in all regions to avoid energy waste.  Control travel expenses, promote video teleconference, improve conference efficiency and reduce energy utilization arising from business travel.  Strictly follow the company's car use management, implement travel plan management and reduce fuel oil consumption.
	Optimization of operation procedure	Under the premise that the production is ensured, reasonably plan operation procedure and minimize the use time of equipment and vehicles for unnecessary operation to reduce the use of fuel and energy.

## Environmental, Social and Governance Report

### Emission Reduction

Anton Oilfield Services actively identifies the main emission sources of its operation within the scope of business worldwide, concludes that the exhaust gases and hazardous wastes during operation are the largest source of emissions during the whole operation, and propose targeted handling measures to minimize the impact of emissions produced during corporate operation on natural and social environment.



**Emission reduction measures**

Optimization of unit use time

Under the premise that normal production is ensured, reasonably arrange and control the operating time of diesel engine, air compressor and generator unit and reduce the emission of unit exhaust gas.

**Hazardous waste reduction measures**

Fuel oil standard control and supporting facilities of filtration equipment

Enhance the management during the purchase, use diesel that in line with international standard and use effective diesel filtration equipment to reduce the generation of nitrogen oxide, nitric oxide and sulfur oxide in exhaust gas emission.

Mud not-fall-to-the-ground treatment

Increase inputs and adopt mud not-fall-to-the-ground measures and treatment for waste mud, namely, pave impermeable membrane on site and pour mud directly into the environmental protection process tanks for harmless solidification treatment.

Systematic management of wastes

Implement safety classification of household refuse and industrial refuse at operation site and store them according to the classification, set up storage points for poisonous and hazardous solid wastes and pave impermeable membrane; hand spent lithium batteries over professional institutes for recovery processing.

## Environmental, Social and Governance Report

### 2.3 Ecological Environmental Protection

Based on own operation type and scope of operation, Anton Oilfield Services actively undertakes the corporate and personal duties and responsibilities for ecological environmental protection and has established a globalized ecological environmental protection principle with guiding concept of "protection first, prevention foremost and comprehensive treatment".

In aspect of systematic procedure, Anton Oilfield Services has established Environmental Protection Management Procedure and Emergency Management Procedure, regulating the emission, recycle and emergency measures of pollutants during operation, promoted them within scope of business worldwide and enhanced the environmental protection requirements for site operation; in aspect of energy utilization, it prefers to use clean energy; in aspect of equipment and process, it actively applies process and equipment with high resource utilization rate and low pollutant emission; in aspect of technological innovation, it strives to promote the waste comprehensive utilization technology and pollutant harmless treatment technology; in aspect of consciousness cultivation, it enhances employees' environmental protection consciousness by providing training of environmental protection laws, adopts a low-carbon and economical lifestyle, holds activities to save water, electricity and papers and reduce business travel to consciously fulfill environmental protection obligations.

In 2016, there was no ecological pollution incident caused by operation project of Anton Oilfield Services.

## 3. SOCIETY

### 3.1 Employment

#### 3.1.1 Safeguarding Rights & Interests of Employees

As an independent private oilfield technology service company, Anton Oilfield Services pursues the strategic goal of being "the best partner in privately-operated oilfield engineering technology field in China and the best Chinese partner in the world", and the core competitive advantage is that it has high-quality technical talents. To safeguard legitimate rights & interests of employees and meet the human resource management requirements, in accordance with the Labor Law of the People's Republic of China, Labor Contract Law of the People's Republic of China, Provisions of Beijing Municipality on Labor Contracts, Provisions of Beijing Municipality on Wage Payment and local laws and regulations for projects at home and abroad, Anton Oilfield Services has established relevant regulations in the aspects of salary & employment, recruitment & promotion, working hours, vacation, equal opportunities, diversification, anti-discrimination and other treatment and welfare with consideration for practical situation of the company, so as to ensure that there are laws to abide by and rules to follow in daily operation. In 2016, there were no major violations of laws and regulations of Anton Oilfield Services in regard to employment.

One of the biggest advantages of Anton Oilfield Services is workforce diversity, and employees from different countries and background with the same goal make progress together. Anton Oilfield Services will quicken the pace of globalization and recruit and employ talents around the world constantly. Besides, it encourages offering fair recruitment and equal employment opportunity to people worldwide and considers family factors for employees when making personnel arrangement or work arrangement, so as to guarantee a proper care of their families when they make contributions to the company. With continuous expansion of overseas business, more and more foreign employees join Anton Oilfield Services. For this, Anton Oilfield Services proposes a basic competency model of Anton's employees to standardize basic quality of global employees and maintain a relatively high behavior standard in its operation locations.

## Environmental, Social and Governance Report

Over nearly ten years, Anton Oilfield Services has developed its competent employees recognizing corporate culture with passion and professional quality since it carried out the "Trainee training Project" in 2007. Directional training is conducted for trainees along the development path according to three kinds of trainings including field engineer, production & manufacturing and functions, which provides exceptional talents for various posts.



With an increased demand for energy, Anton Oilfield Services needs more hardworking talents to meet the engineering and technical challenges the upstream oil & gas enterprises face. Moreover, Anton Oilfield Services establishes suitable career development channel for management posts, functional posts, R&D posts and field and operation posts to improve talent promotion mechanism constantly, make different promotion channels interconnected to cultivate high-quality comprehensive talents, continuously

cultivates and scouts for talents, promotes professional and technical talents, selling talents and management talents and provides excellent talents for globalization of the company. There are many options for employees, no matter whether they want to stick to the road of technology or go to other departments or countries. Anton Oilfield Services offers various jobs for employees so that they can prove their ability from the first day at work.

When promoting corporation development, Anton Oilfield Services pays close attention to welfare, rights and interests of employees. For this purpose, it has taken the following actions: help employees understand significant policies and systems by compiling employee manual and via WeChat and other channels and provide convenient channels for them to understand the company's policies, systems, welfare, work processes, etc.; pay various basic social insurances and provident fund for employees and safeguard their legitimate rights and interests; provide supplementary medical insurance and personal accident insurance at home and abroad; compile Regulations on Vacations for Employees of Anton Oilfield Services Group to offer various paid vacations to employees, and besides the statutory leave such as marriage leave, maternity leave, bereavement leave, statutory paid annual leave and sick/medical leave, provide supplement welfare such as holidays by turns for dispatched/on-site employees, home leave, supplementary annual leave, supplementary sick leave and serious disease leave, etc.

Meanwhile, Anton Oilfield Services creates a tolerant and diverse work environment and group atmosphere vigorously and regards the understanding and recognition of local historic culture as one of the required qualifications of assigned employees. Moreover, it arranges holidays for local employees during significant local holidays, organizes Chinese and foreign employees to have a get-together during significant local festivals and significant Chinese festivals to promote mutual understanding, mutual respect and mutual fusion among employees of different nationalities with different cultural background and beliefs.

## Environmental, Social and Governance Report



Anton Oilfield Services advocates a health concept. It has organized 10km long-distance race, tug-of-war competition, mountaineering activity, speech contest and many other activities for a long term to encourage employees to attach importance to physical exercise and health, and it advocates a balance between work and life to improve their recognition of corporate culture and a sense of belonging to the group. Anton Oilfield Services offers various ways of study and training, such as English study, training on custom cultures of different countries and job skills training, so as to offer opportunities to employees for a global vision. It also provides various welfares for employees including annual physical examination, assistance to the needy, relief for employees with serious disease, greetings for significant festivals and condolence for

major events as well as other related special welfares. In 2016, Anton Oilfield Services donated around RMB 200,000 to employees with cancer and the needy.

### 3.1.2 Enhancing Development of Training

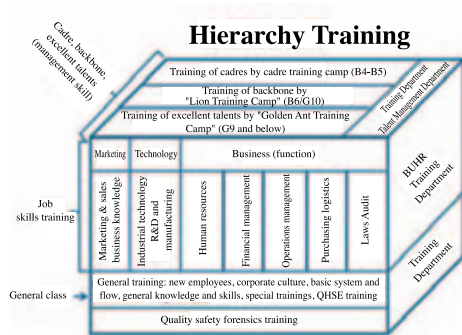
Anton Oilfield Services believes that talents are the most valuable wealth for oilfield service enterprises. "Anton is actually a human resource company", and rapid development of the company relies on rapid development and cultivation of talents. The company always carries through the management ideas of "rapid growth of talents, leading technology, four-in-one sunshine sales system and integrated service mode" and offers various training opportunities and create favorable career development environment for over 5000 employees. In 2016, Anton Oilfield Services focused on the establishment and improvement of QHSE training course system and developed and recorded 33 excellent courses, developed 15 major professional skill courses, 11 specialized QHSE courses, 7 general QHSE courses, stimulated and cultivated a specialized internal trainer team (34 trainers in total), improved QHSE strength of basic unit and enhance personnel competence. Besides, it appointed managers/business backbones as instructor to highlight key points and direction of management and to summarize the best practice of operation.



To ensure sustainable development of the company and its employees, Anton Oilfield Services follows the development concepts of "learning innovation, embracing everything that is useful, long-term strategy and rapid growth". It has carried out practical job trainings with rich content according to job requirements for employees and business development direction, cultivated many practical talents and integrated corporate culture to its training system, so as to promote the construction of corporate culture constantly and enterprise productivity.



## Environmental, Social and Governance Report



Anton Oilfield Services follows the general guideline of “relying mainly on internal training while making external training subsidiary” to carry out trainings of personnel at different levels and induction training of new college graduates in a deep-going way, coordinates training resources, innovates training means and intensifies training result evaluation, which effectively improves training effects. Meanwhile, it has established training & cultivation system. Through integrates general training, job skills training and management training combined with adult learning principles and 70-20-10 learning rule, effective employee cultivation is realized by training, on-the-job training, project operation, self-study and other

means. Under systematic talent training & cultivation control mechanism, employees at different levels can get more development opportunities and every employee can receive the required various trainings and supports for success on their career path.

To develop overseas business faster and better, Anton Oilfield Services select excellent grass-roots employees for professional language training. Though all participating employees one-year specializing learning, they can be improved remarkably in language competence. Besides, participating employees share their learning experience internally, laying a solid foundation for improving language proficiency of all employees, advancing “going-out” development and being qualified international talents.



Moreover, Anton Oilfield Services has established “QHSE online training system” for employees around the world to obtain the latest learning courses in time and to learn over and over again for a solid foundation.

Combined with practical situation, Anton Oilfield Services constantly strengthens the construction of training system. In 2016, it spent RMB 1.53 million on training, and around 1,500 employees participated in various trainings.

## Environmental, Social and Governance Report

### 3.1.3 Ensuring Occupational Health

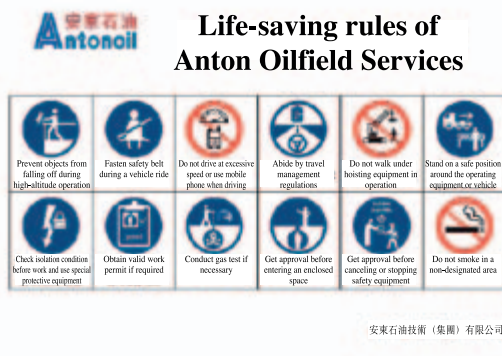
Anton Oilfield Services implements the QHSE guideline of "life, environment, client and excellence". Under any circumstances, it is committed to offering a healthy and safe work environment for its employees and regards protection of their life safety as the most important point.

#### Compliance Operation

Anton Oilfield Services pays high attention to occupational health and safety of its employees and strictly abides by occupational health and safety laws and regulations of countries and regions where it operates. Every year, headquarters and subsidiaries of Anton Oilfield Services actively recognizes relevant laws and regulations of countries and regions where it operates, periodically carries out compliance evaluation and takes effective rectification measures for problems to promote and ensure orderly compliance operation of various production and operating activities. In 2016, there were no major violations of Anton Oilfield Services in occupational health and safety.

#### Management System

In accordance with OHSAS18001, Anton Oilfield Services has established a well-developed and effective occupation health safety management system. It also compiles Risk Management Procedure, Occupational Health Management Procedure and other related procedures to recognize hazard sources and conduct risk analysis and evaluation of links that may affect healthy and safety in production and operation, grades risks according to risk possibility and severity of consequences and prepares control measures and emergency plans, so as to reduce and avoid health and safety accidents as far as possible. Besides, the headquarters organizes every unit to compile over 300 technical standards, equipment operation specifications and standard work flows, and prepare various preventive measures and warnings for various risks during operation to ensure that employees conduct inspection and operation as per relevant work flows and standards, so as to strengthen operation process control and management and guarantee the safety of employees.



*Life-saving rules: life-saving rules are 12 concise safety procedures which are easy to understand, memorize and implement and compiled by Anton Oilfield Services according to industrial experience and own risks and aiming at 12 high-risk operations in work.*

## Environmental, Social and Governance Report

### Health Training



*Anton Oilfield Services strictly executed the laws, regulations, rules and operation procedures with respect to safety production and occupational disease prevention & treatment, guided the employees get aware of occupational disease hazard and safety risk factors of their posts and let them master the knowledge for preventing and controlling occupational hazard and safety risk and improve their self-protection consciousness.*



*The Company invited experts to make speech about health and first-aid every year, organized the internal QHSE trainer to carry out training for Health Management so as to spread the knowledge with regard to mental health, food health and physical health.*



*The Company organized case share activities every month to analyze direct and indirect causes of typical accidents and share the rectification and improvement measures to avoid the repetition of problems.*

*In 2016, the Company organized all staff to implement and perform the newly revised Safety Law as well as strengthen the awareness of employees with respect to safety.*

## Environmental, Social and Governance Report

### 3.1.4 Abiding by Labor Standards

While implementing personnel management systems, Anton Oilfield Services strictly obeyed Labor Law of the People's Republic of China and Labor Contract Law of the People's Republic of China as well as the relevant laws, regulations and rules in the business country, and sign labor contract with employees in accordance with the principle of "equal consultation and good faith".

Strictly observe Regulations on Child Labor Avoidance and international labor laws, and prohibit hiring child labor in global business areas; establish online recruitment approval procedure as per the internal Recruitment Manual and ensure the procedures are followed strictly; obey the domestic and foreign business laws, regulations and rules and let the personnel system in compliance with local regulations; implement the national Regulations Concerning the Labor Protection of Female Staff and Workers and make special protection for female staff with regard to the rights and welfares for pregnancy, fertility, and lactation period instead of lowering salary, dismissing, or terminating labor or employment contract during those periods, and at the same time ensure that female staff are not under looked down; observe the national Labor Dispatch Regulations, apply labor dispatching employment for the temporary, auxiliary and replaceable posts with dispatching ratio under strict control based on the requirements of Labor Dispatch Regulations; moreover, use diversified employments structure including labor outsourcing, foreign labor employment, and labors sent aboard, and treat the employees of different countries, nationalities, gender, religious faith and culture background with fairness and justice.



**Activities on Women's Day**

The Company paid much importance on the labor-capital relationship. We actively obeyed the regulations of relevant labor laws and guarantee the labor's interests of employees, having dedicated ourselves to create a high-quality, safe and stable working environment, ensuring the safety and health of the working sites, and taking good care of physical and mental health for employees. In 2016, Anton Oilfield Services was free of serious violations against laws and regulations with respect to labors and also was not informed about human right infringement, forced labor events or infringement of staff's benefit.

## Environmental, Social and Governance Report

### 3.2 Business Conventions

#### 3.2.1 Management of Supply Chain

Anton Oilfield Services continued to improve the management level for the supply chain, and implemented all-process management mechanism to suppliers during the admittance, monitoring process, approval and repaying procedures. With the development and deep cooperation with suppliers, Anton Oilfield Services successively understood the importance role of itself to the suppliers with respect to the social responsibility management of enterprises. In addition to quality, price and service level, Anton Oilfield Services also values the supplier's performance of social responsibility. Anton Oilfield Services is willing to work together with suppliers to create green supply chain environment.

In 2016, in order to further optimize the supplier management system, Anton Oilfield Services perfected and upgraded the original Supplier Management Rules, formulated and issued Supplier Management Procedure to provide standardized requirements and clear the detailed admittances of suppliers and especially enhance the assessment and management on their QHSE performance by warning the nonconforming suppliers for rectification and stopping cooperation with the suppliers who are still nonconforming after rectification.

#### 3.2.2 Product Responsibility

Anton Oilfield Services has the version to "become an international leading oilfield technology service company in China". In order to make the dream come true, Anton Oilfield Services has always try hard to help customers, increase the additional value of service, lower the cost for development of global energy, and promote the prosperous development of the industry and society. Relying on field operation, research and design of the technical group of Anton Oilfield Services, the Group has always been devoted itself into developing new products, services and solutions so as to help customers to increase performance with safe and environmental methods.

##### **Promoting Service Quality**

Anton Oilfield Services enhanced its active quality management and control system and developed innovative services, improved the complete working standard, vigorously promoted the integrated general contract service, so as to lower the cost of customers while promoting service quality, as well as promote the customers' satisfaction. Besides, the company developed customers' satisfaction investigation and callback to analyze the deficiency and monitor the quality of product and technical service, as also formulate preventive measures and carry out supervision.

Meanwhile, Anton Oilfield Services established and perfected the quality management system, as formulate and perform the requirements of relevant quality management system like Rules on Quality Management of the Group Company and All-process Management Rules for Project Operation, ensure passing the certification of ISO 9001, API 5CT, API 7-1, API Q1 and API 11D1 based on the system internal/external audit and management review to maintain the suitability, effectiveness and operability of the system.

##### **Protecting Intellectual Property**

Anton Oilfield Services established a technical innovation system combining the group research institute and industry-university-research system to meet the demand of customers about technical service and promote customer's satisfaction.

In 2016, the Group invested RMB16.5 million, obtaining 34 patents of invention and 12 patents of utility model with domestic authorities, obtaining a batch of important achievements and patents based on constant technical accumulation and innovation. The scientific achievements played an important for during production, with significant and obvious benefits.

## Environmental, Social and Governance Report

### Keeping Customer's Secrets

Anton Oilfield Services insisted "transparent marketing" adhering to the idea of honesty and fair transactions and attaching much importance on obtaining and maintaining trust from customers.

Anton Oilfield Services formulated the relevant policies and management rules on keeping secret and information materials, requiring all departments to perform Rules on Confidentiality Management of the Group Company (Trial) strictly. All staff need to sign confidentiality agreement before taking work, and shall pay attention to protect the information resources of customers in daily work, protect the customer's information from unauthorized access, use and leakage, and ensure that the customer's information and business data are used preferably as limited by the authorized commercial use and only acquired by employees who are deemed to know.

### Creating Brand Image



Based on the continuous improvement of pilot group and after establishment and promotion of brand groups in 2016, Anton Oilfield Services owns 2 gold groups and 3 silver groups in total. All departments established brand groups actively, in which totally 28 groups applied for brand groups and 5 groups passed the review; and after this project, the group members has greatly improved their spiritual altitude, brand awareness, technical capacity, safety consciousness, group cooperation on onsite standard establishment.

The 47th Houston International Petroleum, Petrochemical, Natural Gas Exhibition was opened on May 2nd, Anton Oilfield Services debuted in the main pavilion for the first time to demonstrate and publicize the service and products of the Company together with the four oilfield services companies. Fan Yonghong, the president and chief technical offers and Liu Enlong, the executive vice-president, received customers on behalf of the Anton Group.





## Environmental, Social and Governance Report

### 3.2.3 Anti-corruption

Adhering to “loyal to the company, honestly and self-discipline, maintaining confidentiality and coping with overall situation”, Anton Oilfield Services and its staff are against corruption, bribery and cheating in any forms. In 2016, Anton Oilfield Services was not informed any significant breaches of laws and regulations with respect to anti-corruption.

The staff followed the idea of “help others for success and make oil production simpler” and obeyed Enterprise Culture Manual of Anton Oilfield Services, creating economic benefits for customers with advanced technologies and high-quality services, and keeping long-terms strategic cooperation with customers for mutual benefit and win-win situation. The Company paid much attention on the relationship with suppliers and customers and stuck to integrity. In the reporting period, Anton Oilfield Services established an interflow channel for information supervision and carried out bidding work in a just, fair and open way, and correct the violation of process and procedures timely. No breaches of honesty work of management personnel were found in this period.

### 3.2.4 Social Benefits

Anton Oilfield Services fulfilled the idea of “achieve success through helping others”, committed itself into performing social responsibilities and helping people in need.

Anton Oilfield Services recruited its employees with 80% from colleges, having invested more than ten million on cooperation with colleges and universities since its establishment with regard to establishment of employer brand in college, and school-level student activities and scientific research projects of cooperative academies so as to attract more excellent students to join the Company.

Every summer holiday, Anton Oilfield Services will select and invite some excellent students of the cooperative universities to take part in “Anton’s Summer Camp” and let them take part in and experience abundant activities (including professional training, enterprise practice and team competition). The Company establishes a communication platform for student to help them get a deep understanding of Anton Oilfield Services which will make good for them on employment in the future.

#### **Cases of Public Welfare Programs**

In the below is the prizes obtained by Anton Oilfield Services about programs for public good in 2016:

- 1 Donated to South-South Education Foundation on December 20th, 2016
- 2 Funded “CCTV Campus Arabic Contest”
- 3 Funded “Simulative Employment Contest of Xi’an Shiyou University”
- 4 Signed cooperation agreement with China University of Petroleum (Beijing), Northeast Petroleum University, Southwest Petroleum University, Yangtze University, Beijing No. 80 High School, and Capital Normal University High School and established “Anton Scholarships” to award the excellent students.

# INDEPENDENT AUDITOR'S REPORT



羅兵咸永道

## INDEPENDENT AUDITOR'S REPORT TO THE SHAREHOLDERS OF ANTON OILFIELD SERVICES GROUP

*(incorporated in the Cayman Islands with limited liability)*

### OPINION

*What we have audited*

The consolidated financial statements of Anton Oilfield Services Group (the "Company") and its subsidiaries (the "Group") set out on pages 84 to 156, which comprise:

- the consolidated balance sheet as at 31 December 2016;
- the consolidated income statement for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated cash flow statement for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

### Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2016, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

### BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Independence

We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ("IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code.

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# INDEPENDENT AUDITOR'S REPORT



羅兵咸永道

**INDEPENDENT AUDITOR'S REPORT  
TO THE SHAREHOLDERS OF  
ANTON OILFIELD SERVICES GROUP (Continued)**  
*(incorporated in the Cayman Islands with limited liability)*

## KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters identified in our audit are summarised as follows:

- Impairment of property, plant and equipment
- Provision for inventories

Key Audit Matter	How our audit addressed the Key Audit Matter
<p><b>Impairment of property, plant and equipment</b></p> <p>Refer to note 6 Property, plant and equipment to the consolidated financial statements.</p> <p>As at 31 December 2016, the carrying amounts of property, plant and equipment amounted to RMB2,272 million, representing 34% of the Group's total assets. The Group has material balances of property, plant and equipment related to two cash generating units ("CGU") of the Group which incurred losses during the year.</p> <p>Management has performed assessment to determine the recoverable amounts of these CGU, being the higher of value in use and fair value less cost of disposal. Such assessment involved complex and subjective judgements and assumptions, such as future cash flow projections which include forecast revenue, forecast gross margin and discount rates.</p> <p>Because of the significance of the carrying amounts of the property, plant and equipment as at 31 December 2016, together with the application of significant management judgement with the use of various assumptions including forecast revenue, forecast margin and discount rates in estimating the recoverability of such carrying amounts, we had identified this as a key audit matter.</p>	<p>In addressing this matter, we had performed the following procedures:</p> <ul style="list-style-type: none"> <li>• We understood the process and internal controls of identifying impairment indicators, and the process of impairment assessment.</li> <li>• We assessed management's determination of the CGUs based on our understanding of the Group's operation.</li> <li>• With respect to the impairment assessment of the CGU where value in use was adopted, we performed the following:               <ul style="list-style-type: none"> <li>(i) tested the consistency and assessed the reasonableness of the data used and reviewed management's key assumptions adopted in the discounted cash flow projections, primarily in relation to:                   <ul style="list-style-type: none"> <li>- the forecast revenue and forecast gross margin, by comparing with the budget and historical financial data of the CGU.</li> <li>- the discount rate, by comparing the underlying assumptions adopted against external market data and published information of comparable companies.</li> </ul> </li> <li>(ii) We evaluated management's sensitivity analysis on the key assumptions, to ascertain the extent to which adverse changes, both individually and in aggregate, will affect the outcome of the impairment assessment.</li> </ul> </li> </ul>

# INDEPENDENT AUDITOR'S REPORT



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**INDEPENDENT AUDITOR'S REPORT  
TO THE SHAREHOLDERS OF  
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## KEY AUDIT MATTERS *(Continued)*

Key Audit Matter	How our audit addressed the Key Audit Matter
	<ul style="list-style-type: none"> <li>(iii) We checked mathematical accuracy of the relevant discounted cash flow projections.</li> <li>• With respect to the impairment assessment of the CGU where fair value less cost of disposal was adopted, we performed the following:               <ul style="list-style-type: none"> <li>(i) obtained the estimation of fair value less cost of disposal prepared by management which was referenced to the sales and purchase agreement relating to the disposal of the CGU subsequent to the year end and understood the detailed terms.</li> <li>(ii) compared the carrying amounts against the fair value less cost of disposal.</li> </ul> </li> </ul>

Based on our work, we found the assumptions adopted and judgements applied by management were supported by the evidence we gathered and consistent with our understanding.

# INDEPENDENT AUDITOR'S REPORT



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**INDEPENDENT AUDITOR'S REPORT  
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## KEY AUDIT MATTERS *(Continued)*

Key Audit Matter	How our audit addressed the Key Audit Matter
<p><b>Provision for inventories</b></p> <p>Refer to note 12 Inventories to the consolidated financial statements.</p> <p>Inventory is carried at the lower of cost and net realisable value, being selling price less estimated selling costs or contract sales amount where applicable, impairment provision is made to write down the inventories to its net realisable value.</p> <p>As at 31 December 2016, the carrying amounts of inventories amounted to RMB781 million, representing 12% of the Group's total assets, with the provision RMB119 million.</p> <p>Because of the significance of the carrying amount of inventories as at 31 December 2016, together with the estimation of the realisable value, we had identified this as a key audit matter.</p>	<p>In addressing this matter, we had performed the following procedures:</p> <ul style="list-style-type: none"> <li>We understood the Group's policy and the process of estimating provision for inventories.</li> <li>We observed physical condition of inventories during stock count to identify if any inventories was slow-moving, damage or obsolete.</li> <li>In respect of finished goods, work-in-progress and raw materials, we evaluated, on a sample basis, the assumptions in estimating future selling prices and selling expenses by reference to most recent sales transactions.</li> <li>In respect of project-in-progress and project materials relating to on-going projects, we evaluated, on a sample basis, the assumptions in estimating total budgeted cost to completion and comparing such with related contract sales amount.</li> </ul> <p>Based on our work, we found the assumptions adopted and judgements applied by management were supported by the evidence we gathered and consistent with our understanding.</p>

# INDEPENDENT AUDITOR'S REPORT



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**INDEPENDENT AUDITOR'S REPORT  
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## OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises the information included in the "Management Discussions and Analysis" and "Profiles of Directors and Senior Management" (but does not include the consolidated financial statements and our auditor's report thereon), which we obtained prior to the date of this auditor's report, and "About Antonoil", "Financial Summary", "Financial Highlight", "Chairman's Statement", "Corporate Information", "Directors' Report", "Corporate Governance Report", "Employee Relations" and "Environmental, Social and Governance Report", which are expected to be made available to us after that date.

Our opinion on the consolidated financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

When we read "About Antonoil", "Financial Summary", "Financial Highlight", "Chairman's Statement", "Corporate Information", "Directors' Report", "Corporate Governance Report", "Employee Relations" and "Environmental, Social and Governance Report", if we conclude that there is a material misstatement therein, we are required to communicate the matter to the Audit Committee and take appropriate action considering our legal rights and obligations.

## RESPONSIBILITIES OF DIRECTORS AND AUDIT COMMITTEE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Audit Committee is responsible for overseeing the Group's financial reporting process.



# INDEPENDENT AUDITOR'S REPORT



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**INDEPENDENT AUDITOR'S REPORT  
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**AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS** *(Continued)*

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

# INDEPENDENT AUDITOR'S REPORT



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ANTON OILFIELD SERVICES GROUP** *(Continued)*  
*(incorporated in the Cayman Islands with limited liability)*

## **AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS** *(Continued)*

From the matters communicated with Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is:

LEONG Kin Bong

**PricewaterhouseCoopers**

*Certified Public Accountants*

Hong Kong, 27 March 2017

(If there is any inconsistency between the English and Chinese version of this independent auditor's report, the English version shall prevail.)

# CONSOLIDATED BALANCE SHEET

As at 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

	Note	As at 31 December 2016	2015
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment	6	<b>2,272,223</b>	2,355,538
Land use rights	7	<b>47,994</b>	59,893
Intangible assets	8	<b>415,155</b>	379,538
Investments accounted for using the equity method	10	<b>3,592</b>	4,000
Prepayments and other receivables	14	<b>103,929</b>	132,693
Other non-current assets	11	<b>62,000</b>	67,255
Deferred income tax assets	22	<b>52,334</b>	64,659
		<b>2,957,227</b>	3,063,576
<b>Current assets</b>			
Inventories	12	<b>781,165</b>	834,223
Trade and notes receivables	13	<b>1,297,995</b>	1,284,354
Prepayments and other receivables	14	<b>725,295</b>	373,603
Restricted bank deposits	15	<b>381,325</b>	158,246
Term deposits with initial terms of over three months	15	<b>11,011</b>	11,000
Cash and cash equivalents	15	<b>507,263</b>	458,158
		<b>3,704,054</b>	3,119,584
<b>Total assets</b>		<b>6,661,281</b>	6,183,160

## Consolidated Balance Sheet (Continued)

As at 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

	Note	As at 31 December 2016	2015
<b>EQUITY</b>			
<b>Capital and reserves attributable to equity holders of the Company</b>			
Share capital	16	<b>226,578</b>	207,629
Reserves	17	<b>1,318,307</b>	1,686,397
		<b>1,544,885</b>	1,894,026
<b>Non-controlling interests</b>		<b>432,012</b>	65,586
<b>Total equity</b>		<b>1,976,897</b>	1,959,612
<b>LIABILITIES</b>			
<b>Non-current liabilities</b>			
Long-term bonds	18	<b>1,694,940</b>	1,584,635
Long-term borrowings	19	<b>89,506</b>	—
Accruals and other payables	21	<b>715,453</b>	—
Deferred income tax liabilities	22	<b>4,318</b>	4,375
		<b>2,504,217</b>	1,589,010
<b>Current liabilities</b>			
Short-term borrowings	19	<b>739,642</b>	675,000
Current portion of long-term bonds	18	<b>—</b>	199,514
Current portion of long-term borrowings	19	<b>61,723</b>	—
Trade and notes payables	20	<b>705,089</b>	580,348
Accruals and other payables	21	<b>629,747</b>	1,154,958
Current income tax liabilities		<b>43,966</b>	24,718
		<b>2,180,167</b>	2,634,538
<b>Total liabilities</b>		<b>4,684,384</b>	4,223,548
<b>Total equity and liabilities</b>		<b>6,661,281</b>	6,183,160

The notes on page 90 to 156 are an integral part of these consolidated financial statements.

The consolidated financial statements were approved by the Board of Directors on 27 March 2017 and were signed on its behalf.

Chairman  
Luo Lin

Executive Director  
Pi Zhifeng

# CONSOLIDATED INCOME STATEMENT

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

	Note	Year ended 31 December	
		2016	2015
Revenue	23	<b>1,617,675</b>	1,833,006
Cost of sales	24	<b>(1,073,784)</b>	(1,250,315)
<b>Gross profit</b>		<b>543,891</b>	582,691
Other gains	25	<b>68,967</b>	20,689
Selling expenses	24	<b>(110,838)</b>	(137,463)
Administrative expenses	24	<b>(337,816)</b>	(338,951)
Research and development expenses	24	<b>(16,455)</b>	(18,916)
Sales tax and surcharges	24	<b>(4,553)</b>	(15,576)
<b>Operating profit</b>		<b>143,196</b>	92,474
Interest income	26	<b>2,508</b>	4,409
Finance expenses	26	<b>(175,887)</b>	(259,179)
Finance costs, net	26	<b>(173,379)</b>	(254,770)
Share of loss of associate	10	<b>(408)</b>	—
Share of loss of joint ventures	10	<b>—</b>	(1,042)
<b>Loss before income tax</b>		<b>(30,591)</b>	(163,338)
Income tax expense	28	<b>(67,081)</b>	(31,910)
<b>Loss for the year</b>		<b>(97,672)</b>	(195,248)
<b>Loss attributable to:</b>			
Equity holders of the Company		<b>(160,450)</b>	(194,731)
Non-controlling interests		<b>62,778</b>	(517)
		<b>(97,672)</b>	(195,248)
<b>Loss per share for loss attributable to the equity holders of the Company for the year (expressed in RMB per share)</b>			
- Basic	29	<b>(0.0720)</b>	(0.0878)
- Diluted	29	<b>(0.0720)</b>	(0.0878)

The notes on page 90 to 156 are an integral part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

	Note	Year ended 31 December	
		2016	2015
<b>Loss for the year</b>		<b>(97,672)</b>	(195,248)
<b>Other comprehensive income, net of tax:</b>			
<i>Items that may be reclassified to profit or loss</i>			
Net investment hedge	17	<b>(87,827)</b>	(54,110)
Currency translation differences	17	<b>48,590</b>	65,035
<b>Other comprehensive income for the year, net of tax</b>		<b>(39,237)</b>	10,925
<b>Total comprehensive income for the year</b>		<b>(136,909)</b>	(184,323)
<b>Total comprehensive income attributable to:</b>			
- Equity holders of the Company		<b>(211,530)</b>	(183,806)
- Non-controlling interests		<b>74,621</b>	(517)
		<b>(136,909)</b>	(184,323)

The notes on page 90 to 156 are an integral part of these consolidated financial statements.



# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

	Note	Attributable to the equity holders of the Company							Non-controlling interests	Total equity
		Share capital	Share premium	Capital reserve	Statutory reserve	Retained earnings	Other reserves	Total		
<b>Balance at 1 January 2015</b>		206,879	448,921	379,159	77,756	966,822	(25,646)	2,053,891	94,865	2,148,756
<b>Comprehensive income</b>										
Loss for the year		—	—	—	—	(194,731)	—	(194,731)	(517)	(195,248)
<b>Other comprehensive income</b>										
Net investment hedge		—	—	—	—	—	(54,110)	(54,110)	—	(54,110)
Currency translation differences		—	—	—	—	—	65,035	65,035	—	65,035
<b>Total comprehensive income</b>		—	—	—	—	(194,731)	10,925	(183,806)	(517)	(184,323)
<b>Transactions with owners in their capacity as owners</b>										
Share option scheme	16(a)(i)	—	—	14,571	—	—	—	14,571	—	14,571
Share option exercised	16(a)(i)	750	11,982	(3,362)	—	—	—	9,370	—	9,370
Dividends	30	—	—	—	—	—	—	—	(28,762)	(28,762)
<b>Total transactions with owners, recognised directly in equity</b>		750	11,982	11,209	—	—	—	23,941	(28,762)	(4,821)
<b>Balance at 31 December 2015</b>		207,629	460,903	390,368	77,756	772,091	(14,721)	1,894,026	65,586	1,959,612
<b>Balance at 1 January 2016</b>		<b>207,629</b>	<b>460,903</b>	<b>390,368</b>	<b>77,756</b>	<b>772,091</b>	<b>(14,721)</b>	<b>1,894,026</b>	<b>65,586</b>	<b>1,959,612</b>
<b>Comprehensive income</b>										
Loss for the year		—	—	—	—	(160,450)	—	(160,450)	62,778	(97,672)
<b>Other comprehensive income</b>										
Net investment hedge		—	—	—	—	—	(72,052)	(72,052)	(15,775)	(87,827)
Currency translation differences		—	—	—	—	—	20,972	20,972	27,618	48,590
<b>Total comprehensive income</b>		—	—	—	—	(160,450)	(51,080)	(211,530)	74,621	(136,909)
<b>Transactions with owners in their capacity as owners</b>										
Issue of ordinary shares	16(a)(ii)	19,365	175,835	—	—	—	—	195,200	—	195,200
Share option scheme	16(a)(i)	—	—	15,431	—	—	—	15,431	—	15,431
Acquisition of additional interest in a subsidiary	33	—	—	—	—	—	3,178	3,178	(29,161)	(25,983)
Changes in ownership interests in subsidiaries without change of control	34	—	—	—	—	—	379,034	379,034	320,966	700,000
Recognition of put option	34	—	—	—	—	—	(700,000)	(700,000)	—	(700,000)
Disposal of a subsidiary		—	—	(27,060)	—	—	—	(27,060)	—	(27,060)
Dissolve of a subsidiary		—	—	—	(856)	—	—	(856)	—	(856)
Repurchase and cancellation of shares	16(a)(iii)	(416)	(2,122)	—	—	—	—	(2,538)	—	(2,538)
<b>Total transactions with owners, recognised directly in equity</b>		<b>18,949</b>	<b>173,713</b>	<b>(11,629)</b>	<b>(856)</b>	<b>—</b>	<b>(317,788)</b>	<b>(137,611)</b>	<b>291,805</b>	<b>154,194</b>
<b>Balance at 31 December 2016</b>		<b>226,578</b>	<b>634,616</b>	<b>378,739</b>	<b>76,900</b>	<b>611,641</b>	<b>(383,589)</b>	<b>1,544,885</b>	<b>432,012</b>	<b>1,976,897</b>

The notes on page 90 to 156 are an integral part of these consolidated financial statements.

# CONSOLIDATED CASH FLOW STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

	Note	Year ended 31 December	
		2016	2015
<b>Cash flows from operating activities</b>			
Net cash inflows from operations	31	<b>148,674</b>	407,797
Interest paid		<b>(181,660)</b>	(194,812)
Interest received		<b>2,508</b>	4,409
Income tax paid		<b>(35,565)</b>	(59,992)
Net cash (used in)/generated from operating activities		<b>(66,043)</b>	157,402
<b>Cash flows from investing activities</b>			
Purchase of property, plant and equipment		<b>(473,354)</b>	(174,448)
Proceeds from disposal of property, plant and equipment		<b>16,549</b>	79,498
Purchase of land use rights		<b>—</b>	(180)
Purchase of intangible assets		<b>(38,267)</b>	(35,208)
Disposal of subsidiaries	25	<b>77,000</b>	—
Investment in an associate	10	<b>(4,000)</b>	—
Increase in term deposits		<b>(11)</b>	(2,990)
Net cash used in investing activities		<b>(422,083)</b>	(133,328)
<b>Cash flows from financing activities</b>			
Proceeds from short-term borrowings		<b>1,027,292</b>	841,236
Repayments of short-term borrowings		<b>(962,650)</b>	(860,148)
Proceeds from long-term borrowings		<b>180,093</b>	—
Repayments of long-term borrowings		<b>(28,864)</b>	—
Repayments of long-term bonds		<b>(200,000)</b>	(300,000)
Repurchase of long-term bonds		<b>(6,776)</b>	(8,521)
Proceeds from disposal of interests in a subsidiary without loss of control		<b>357,000</b>	—
Cash paid to non-controlling interests for additional interest in a subsidiary		<b>(21,825)</b>	—
Proceeds from share options exercised		<b>—</b>	9,370
Dividends distribution		<b>(17,367)</b>	(11,395)
Repurchase of own shares	16(a)(iii)	<b>(2,538)</b>	—
Issue of shares	16(a)(ii)	<b>195,200</b>	—
Net cash generated from/(used in) financing activities		<b>519,565</b>	(329,458)
<b>Net increase/(decrease) in cash and cash equivalents</b>			
Cash and cash equivalents at beginning of the year		<b>458,158</b>	759,751
Exchange gain on cash and cash equivalents		<b>17,666</b>	3,791
<b>Cash and cash equivalents at end of the year</b>		<b>507,263</b>	458,158

The notes on page 90 to 156 are an integral part of these consolidated financial statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 1. GENERAL INFORMATION

Anton Oilfield Services Group (the "Company") was incorporated in the Cayman Islands on 3 August 2007 as an exempted company with limited liability under the Companies Law of Cayman Islands. The address of its registered office is PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

The Company is an investment holding company. The Company and its subsidiaries (the "Group") are mainly engaged in providing oilfield technology services, manufacturing and trading of related products in the People's Republic of China (the "PRC") and other oversea countries. The Company listed its shares on the Main Board of The Stock Exchange of Hong Kong Limited on 14 December 2007.

The directors regard Pro Development Holdings Corp., a company incorporated in British Virgin Islands as the ultimate holding company of the Company, which is controlled by Mr. Luo Lin, the Company's controlling shareholder.

These consolidated financial statements have been approved for issue by the Board of Directors on 27 March 2017.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

### 2.1 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRS"). The consolidated financial statements have been prepared under the historical cost convention.

The preparation of the financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.1 Basis of preparation *(Continued)*

#### Changes in accounting policy and disclosures

##### *(a) New and amended standards adopted by the Group*

The following amendments to standards have been adopted by the Group for the first time for the financial year beginning on or after 1 January 2016:

- Clarification of acceptable methods of depreciation and amortisation – Amendments to IAS 16 and IAS 38,
- Annual improvements to IFRSs 2012 – 2014 cycle, and
- Disclosure initiative – amendments to IAS 1.

The adoption of these amendments did not have any impact on the current period or any prior period and is not likely to affect future periods.

##### *(b) New standards and interpretations not yet adopted*

A number of new standards and amendments to standards and interpretations are effective for annual periods beginning after 1 January 2016 and have not been applied in preparing these consolidated financial statements. None of these is expected to have a significant effect on the consolidated financial statements of the Group, except the following set out below:

IFRS 9, "Financial instruments", addresses the classification, measurement and recognition of financial assets and financial liabilities. The complete version of IFRS 9 was issued in July 2014. It replaces the guidance in IAS 39 that relates to the classification and measurement of financial instruments. IFRS 9 retains but simplifies the mixed measurement model and establishes three primary measurement categories for financial assets: amortised cost, fair value through OCI and fair value through P&L. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. Investments in equity instruments are required to be measured at fair value through profit or loss with the irrevocable option at inception to present changes in fair value in OCI not recycling. There is now a new expected credit losses model that replaces the incurred loss impairment model used in IAS 39. For financial liabilities there were no changes to classification and measurement except for the recognition of changes in own credit risk in other comprehensive income, for liabilities designated at fair value through profit or loss. IFRS 9 relaxes the requirements for hedge effectiveness by replacing the bright line hedge effectiveness tests. It requires an economic relationship between the hedged item and hedging instrument and for the "hedged ratio" to be the same as the one management actually use for risk management purposes.

IFRS 9 must be applied for financial years commencing on or after 1 January 2018. Based on the transitional provisions in the completed IFRS 9, early adoption in phases was only permitted for annual reporting periods beginning before 1 February 2015. After that date, the new rules must be adopted in their entirety. The Group does not intend to adopt IFRS 9 before its mandatory date.

Contemporaneous documentation is still required but is different to that currently prepared under IAS 39. The standard is effective for accounting periods beginning on or after 1 January 2018. Early adoption is permitted. The Group is yet to assess IFRS 9's full impact.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

#### 2.1 Basis of preparation *(Continued)*

##### Changes in accounting policy and disclosures *(Continued)*

###### *(b) New standards and interpretations not yet adopted (Continued)*

IFRS 15, "Revenue from contracts with customers" deals with revenue recognition and establishes principles for reporting useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers. Revenue is recognised when a customer obtains control of a good or service and thus has the ability to direct the use and obtain the benefits from the good or service. The standard replaces IAS 18 "Revenue" and IAS 11 "Construction contracts" and related interpretations. IFRS 15 is effective for annual periods beginning on or after 1 January 2018 and earlier application is permitted. At this stage, the Group is not able to estimate the impact of the new rules on the Group's financial statements. The Group will make more detailed assessments of the impact over the next twelve months.

IFRS 15 is mandatory for financial years commencing on or after 1 January 2018. At this stage, the Group does not intend to adopt the standard before its effective date.

IFRS 16, "Leases" addresses the definition of a lease, recognition and measurement of leases and establishes principles for reporting useful information to users of financial statements about the leasing activities of both lessees and lessors. A key change arising from IFRS 16 is that most operating leases will be accounted for on balance sheet for lessees. The standard replaces IAS 17 "Leases", and related interpretations. The new standard is mandatory for financial years commencing on or after 1 January 2019. At this stage, the Group does not intend to adopt the standard before its effective date.

There are no other IFRS or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Group.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.2 Subsidiaries

#### 2.2.1 Consolidation

A subsidiary is an entity (including a structured entity) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

##### *(a) Business combination*

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

The Group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of acquiree's identifiable net assets.

Acquisition-related costs are expensed as incurred.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measurement are recognised in profit or loss.

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in accordance with IAS 39 in profit or loss. Contingent consideration that is classified as equity is not remeasured, and its subsequent settlement is accounted for within equity.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognised and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in the income statement.

Intra-Group transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. When necessary, amounts reported by subsidiaries have been adjusted to conform with the Group's accounting policies.



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.2 Subsidiaries *(Continued)*

#### 2.2.1 Consolidation *(Continued)*

*(b) Changes in ownership interests in subsidiaries without change of control*

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions – that is, as transactions with the owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

#### 2.2.2 Separate financial statements

Investments in subsidiaries are accounted for at cost less impairment. Cost also includes direct attributable costs of investment. The results of subsidiaries are accounted for by the Company on the basis of dividend and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving dividends from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

### 2.3 Associates

An associate is an entity over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investments in associates include goodwill identified on acquisition. Upon the acquisition of the ownership interest in an associate, any difference between the cost of the associate and the Group's share of the net fair value of the associate's identifiable assets and liabilities is accounted for as goodwill.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate.

The Group's share of post-acquisition profit or loss is recognised in the statement of profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income with a corresponding adjustment to the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

#### 2.3 Associates *(Continued)*

The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognises the amount adjacent to 'share of profit of investments accounted for using equity method' in the income statement.

Profits and losses resulting from upstream and downstream transactions between the Group and its associate are recognised in the Group's financial statements only to the extent of unrelated investor's interests in the associates. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

Gain or losses on dilution of equity interest in associates are recognised in the income statement.

#### 2.4 Joint arrangements

The Group has applied IFRS 11 to all joint arrangements. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint ventures), the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealised gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

#### 2.5 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the chief executive officer, executive vice presidents and directors who make strategic decisions.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

#### 2.6 Foreign currency translation

##### (a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "Functional Currency"). The financial statements are presented in Renminbi ("RMB"), which is the Company's functional and the Group's presentation currency.

##### (b) Transactions and balances

Foreign currency transactions are translated into the Functional Currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the consolidated income statement, except when deferred in other comprehensive income as qualifying, cash flow hedges and qualifying net investment hedge.

##### (c) Group companies

The results and financial position of all the Group entities (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- (i) assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
- (ii) income and expenses for each consolidated income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- (iii) all resulting exchange differences are recognised in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. Exchange differences arising are recognised in other comprehensive income.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.6 Foreign currency translation *(Continued)*

#### (d) Disposal of foreign operation and partial disposal

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over joint ventures that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the equity holders of the Company are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognised in profit or loss. For all other partial disposals (that is, reductions in the Group's ownership interest in associates or joint ventures that do not result in the Group losing significant influence or joint control) the proportionate share of the accumulated exchange difference is reclassified to profit or loss.

### 2.7 Property, plant and equipment

Property, plant and equipment, other than construction in progress, are stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Construction-in-progress represents property, plant and equipment under construction and is stated at cost. This includes the costs of construction, machinery and other expenditures necessary for the purpose of preparing the construction-in-progress for its intended use and those borrowing costs incurred before the assets ready for intended use that are eligible for capitalisation. Construction-in-progress is not depreciated until such time as the relevant asset is completed and ready for its intended use.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.7 Property, plant and equipment *(Continued)*

Depreciation of property, plant and equipment is calculated using the straight-line method except for drill pipes are depreciated using unit-of-production method, to allocate their costs to their residual values over their estimated useful lives, as follows:

	<b>Estimated useful life</b>
Buildings	5-50 years
Machinery and equipment	5-10 years
Motor vehicles	5-10 years
Furniture, fixtures and others	5 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.10).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within "other gains, net", in the consolidated income statement.

### 2.8 Land use rights

Land use rights represent upfront prepayments made for the land use rights and leasehold land located in the PRC, which are classified as operating lease, and are expensed in the consolidated income statement on a straight-line basis over the periods of the leases or when there is impairment, the impairment is expensed in the consolidated income statement.

### 2.9 Intangible assets

#### (a) Goodwill

Goodwill arises on the acquisition of subsidiaries, and represents the excess of the consideration transferred over the Group's interest in net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree and the fair value of the non-controlling interest in the acquiree.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units ("CGUs"), or Groups of CGUs, that is expected to benefit from the synergies of the combination. Each unit or Group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of the CGU containing the goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs to sell. Any impairment is recognised immediately as an expense and is not subsequently reversed.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.9 Intangible assets *(Continued)*

#### (b) Computer software

Computer software are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised over their estimated useful lives of 5 years.

#### (c) Patents

Patents are initially recorded at actual cost incurred to acquire and amortised on a straight-line basis over their estimated useful lives, ranging from 3 to 10 years. Development costs that are directly attributable to the design, development and application of patents are recognised as intangible assets when the following criteria are met:

- It is technically feasible to complete the patents so that it will be available for use;
- Management intends to complete the patents and use or sell it;
- There is an ability to use or sell the patents;
- It can be demonstrated how the patents will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the patents are available; and
- The expenditure attributable to the patents during its development can be reliably measured.

Directly attributable costs that are capitalised as part of the patent include material costs, patent development employee costs and an appropriate portion of relevant overheads. Other development expenditures that do not meet these criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

### 2.10 Impairment of non-financial assets

Intangible assets that have an indefinite useful life or intangible assets not ready to use are not subject to amortisation and are tested annually for impairment. Assets that are subject to depreciation or amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.11 Financial assets

#### 2.11.1 Classification

The Group classifies its financial assets as loans and receivables. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after the end of the reporting period which are classified as non-current assets. The Group's loans and receivables comprise "term deposits with initial terms of over three months", "restricted bank deposits", "trade and notes receivables", part of "prepayments and other receivables" and "cash and cash equivalents" in the balance sheet.

#### 2.11.2 Recognition and measurement

Regular way purchases and sales of financial assets are recognised on the trade-date - the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Loans and receivables are subsequently carried at amortised cost using the effective interest method.

#### 2.11.3 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.11 Financial assets *(Continued)*

#### 2.11.4 Impairment of financial assets

##### *Assets carried at amortised cost*

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or Group of financial assets is impaired. A financial asset or a Group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or Group of financial assets that can be reliably estimated.

Evidence of impairment may include indications that the debtors or a Group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation, and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

For loans and receivables category, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced and the amount of the loss is recognised in the consolidated income statement. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group may measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss is recognised in the consolidated income statement.

### 2.12 Hedging activities

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

##### *Net investment hedge*

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income. The gain or loss relating to the ineffective portion is recognised in profit or loss.

Gains and losses accumulated in equity are included in the profit or loss when the foreign operation is partially disposed of or sold.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.13 Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted average method. The cost of finished goods and work in progress comprises design costs, raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

### 2.14 Trade and other receivables

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of business. If collection of trade and other receivables is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

### 2.15 Cash and cash equivalents

In the consolidated cash flow statement, cash and cash equivalents include cash in hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less.

### 2.16 Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

### 2.17 Trade payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.18 Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the consolidated income statement over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

### 2.19 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

### 2.20 Current and deferred income tax

The tax expense for the period comprises current and deferred tax. Tax is recognised in the consolidated income statement, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case the tax is also recognised in other comprehensive income or directly in equity, respectively.

#### (a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company's subsidiaries, joint ventures and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.20 Current and deferred income tax *(Continued)*

#### (b) Deferred income tax

##### *Inside basis differences*

Deferred income tax is recognised, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

##### *Outside basis differences*

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and joint ventures, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets are recognised on deductible temporary differences arising from investments in subsidiaries, and joint arrangements only to the extent that it is probable the temporary difference will reverse in the future and there is sufficient taxable profit available against which the temporary difference can be utilised.

#### (c) Offsetting

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.21 Employee benefits

#### (a) Pension and other social obligations

The Group has various defined contribution plans for pensions, housing fund and other social obligations in accordance with the local conditions and practices in the municipalities and provinces in which they operate. A defined contribution plan is a pension and/or other social benefits plan under which the Group pays fixed contributions into a separate publicly administered pension and/or other social insurance plan on mandatory bases. The Group will have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees benefits relating to employee service in the current and prior periods. The contributions are recognised as employee benefit expenses when incurred.

#### (b) Share-based compensation

The Group operates a number of equity-settled share-based compensation plans, under which the Group receives services from employees as consideration for equity instruments (options) of the Group. The fair value of the employee services received in exchange for the grant of the options is recognised as an expense. The total amount to be expensed is determined by reference to the fair value of the options granted at the grant date:

- Including any market performance conditions;
- Excluding the impact of any service and non-market performance vesting conditions (for example, profitability, sales growth targets and remaining an employee of the entity over a specified time period); and
- Including the impact of any non-vesting conditions (for example, the requirement for employees to save).

Non-market vesting conditions are included in assumptions about the number of options that are expected to vest. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each reporting period, the Group revises its estimates of the number of options that are expected to vest based on the non-marketing vesting conditions. It recognises the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity.

The cash subscribed for the shares issued when the options are exercised is credited to share capital (nominal value) and share premium, net of any directly attributable transaction costs.

The grant by the Company of options over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity in the parent entity accounts.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.22 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable, and represents amounts receivable for goods and services supplied, stated net of value-added tax, returns, rebates and discounts.

The Group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the Group and specific criteria have been met for each of the Group's activities as described below. The Group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

#### (a) Sales of goods

Revenue associated with the sales of goods is recognised when the title to the goods, such as drilling tools, tubing and casing, has been passed to the customer, which is at the date when the customer receives and accepts the goods and collectability of the related receivables is reasonably assured.

#### (b) Sales of services

Sales of services are recognised in the accounting period in which the services are rendered.

### 2.23 Interest income

Interest income is recognised on a time-proportion basis using the effective interest method.

### 2.24 Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the period of the lease.

The Group leases certain property, plant and equipment. Leases of property, plant and equipment where the Group has substantially all the risks and rewards of ownership are classified as sale and leasebacks. Sale and leasebacks are capitalised at the lease's commencement at the lower of the fair value of the leased property and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges. The corresponding rental obligations, net of finance charges, are included in other long-term payables. The interest element of the finance cost is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under sale and leasebacks is depreciated over the shorter of the useful life of the asset and the lease term.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

### 2.25 Government grants

Grants from the government are recognised at fair value where there is reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants related to cost are deferred and recognised in the income statement over the period necessary to match them with the related costs that they are intended to compensate.

### 2.26 Dividend distribution

Dividend distribution to the Company's shareholders is recognised as a liability in the Group's financial statements in the period in which the dividends are approved by the Company's shareholders.

## 3. FINANCIAL RISK MANAGEMENT

### 3.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including currency risk and fair value interest rate risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain risk exposure.

#### (a) Market risk

##### (i) Foreign exchange risk

The Group mainly operates in the PRC with most of the transactions denominated and settled in RMB, while the Group also has purchases from and sales to overseas. During the year ended 31 December 2016, the Group developed its businesses overseas with most of the transactions denominated and settled in US dollar ("US\$"). Foreign exchange risk also arise from certain bank deposits and borrowings denominated in US\$. The Group is exposed to foreign currency exchange risk primarily with respect to US\$.

As at 31 December 2016, if RMB had strengthened/weakened by 3% against the US\$ with all other variables held constant, loss before income tax for the year would have been RMB25,220,000 lower/higher mainly as a result of foreign exchange gains/losses on translation of US\$-denominated cash and cash equivalent, trade receivables, other payables and long-term bonds.

As at 31 December 2015, if RMB had strengthened/weakened by 3% against the US\$ with all other variables held constant, loss before income tax for the year would have been RMB33,194,000 higher/lower mainly as a result of foreign exchange losses/gains on translation of US\$-denominated cash and cash equivalent, trade receivables, other payables and long-term bonds.



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 3. FINANCIAL RISK MANAGEMENT *(Continued)*

#### 3.1 Financial risk factors *(Continued)*

##### (a) Market risk *(Continued)*

###### (ii) *Cash flow and fair value interest rate risk*

The Group's interest rate risk arises from long-term bonds, long-term borrowings and short-term borrowings. Borrowings obtained at variable rates expose the Group to cash flow interest rate risk which is partially offset by cash held at variable rates. Long-term bonds obtained at fixed rates expose the Group to fair value interest rate risk.

As at 31 December 2016, if interest rates on floating interest borrowings at that date had been higher/lower 100 basic points (31 December 2015: 100 basic points), loss before income tax for the year would have been RMB6,390,000 (2015: RMB5,294,000) higher/lower.

##### (b) Credit risk

The Group has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. The Group's historical experience in collection of trade and other receivables falls within the recorded allowance and the directors are of the opinion that adequate provision for uncollectible receivables has been made in the financial statements.

A considerable portion of sales were made to the several major oilfield operators of the PRC and their affiliates, which are state-owned entities with good credit reputation, therefore the trade receivables of the Group had concentration risk (Note 5). Most of the Group's cash and cash equivalents were placed with state-owned banks in the PRC and Hong Kong, the relevant credit risk is relatively low.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 3. FINANCIAL RISK MANAGEMENT *(Continued)*

#### 3.1 Financial risk factors *(Continued)*

##### (c) Liquidity risk

The liquidity risk of the Group is controlled by maintaining sufficient cash and cash equivalents, which is generated primarily from operating and financing activities.

The table below analyses the Group's financial liabilities that will be settled on a net basis into relevant maturity Groupings based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

<b>As at 31 December 2016</b>	<b>Within 1 year</b>	<b>1-2 years</b>	<b>Over 2 years</b>
Short-term borrowings	<b>763,696</b>	—	—
Long-term borrowings	<b>73,273</b>	<b>54,955</b>	<b>40,954</b>
Trade and notes payables	<b>705,089</b>	—	—
Accruals and other payables	<b>499,375</b>	—	<b>715,453</b>
Long-term bonds	<b>120,294</b>	<b>1,724,213</b>	—
	<b>2,161,727</b>	<b>1,779,168</b>	<b>756,407</b>

<b>As at 31 December 2015</b>	<b>Within 1 year</b>	<b>1-2 years</b>	<b>Over 2 years</b>
Short-term borrowings	700,300	—	—
Trade and notes payables	580,348	—	—
Accruals and other payables	987,344	—	—
Current portion of long-term bonds	214,600	—	—
Long-term bonds	120,781	120,781	1,731,194
	2,603,373	120,781	1,731,194

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 3. FINANCIAL RISK MANAGEMENT *(Continued)*

#### 3.2 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as total borrowings divided by total capital. Total borrowings include borrowings, bonds, non-current portion of accruals and other payables and trade and notes payables, as shown in the consolidated balance sheet. Total capital is calculated as equity, as shown in the consolidated balance sheet, plus total borrowings.

The gearing ratios 31 December 2016 and 2015 are as follows:

	<b>As at 31 December 2016</b>	2015
Total borrowings	<b>4,030,407</b>	3,039,497
Total equity	<b>1,976,897</b>	1,959,612
Total capital	<b>6,007,304</b>	4,999,109
Gearing ratio	<b>67%</b>	61%

#### 3.3 Fair value estimation

The carrying amounts of long-term borrowings and long-term bonds approximated their fair values as the fluctuation of comparable interest rates with similar terms is relatively low.

##### Liabilities

	<b>Carrying value</b>	<b>Fair value</b>
Long-term borrowings	89,506	82,432
Long-term bonds	1,694,940	1,932,902
	<b>1,784,446</b>	<b>2,015,334</b>

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

#### (a) Impairment of property, plant and equipment and intangible assets

Property, plant and equipment and intangible assets are stated at cost or cost less depreciation or amortisation. The carrying amounts are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. Except for some very special cases, it's incredibly difficult for the Group to estimate an asset's fair value less costs of disposal, which made the Group accept value in use as the recoverable amount. In estimating the recoverable amounts of assets, various assumptions, including future cash flow projections to be associated with forecast revenue, forecast gross margin and discount rates, are made. If future events do not correspond to such assumptions, the recoverable amounts will need to be revised, and this may have an impact on the Group's financial position and results of operations.

#### (b) Impairment of inventory

Inventories are reviewed for impairment whenever events or changes in circumstances cause their carrying amounts to exceed their recoverable amounts. The determination of recoverable amount of the inventories requires the use of estimates. The Group's management determined the recoverable amount of inventories.

#### (c) Estimated impairment of goodwill

The Group tests annually whether goodwill has suffered any impairment in accordance with the accounting policy stated in Note 2.10. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations require the use of estimates. Details of the key assumption used by the management in goodwill impairment assessment are set out in Note 8.

#### (d) Impairment of trade receivables

The Group's management makes provision for doubtful debts based on the assessment of the recoverability of trade receivables with reference to the extent and duration that the amount will be recovered. Provisions are applied to trade and other receivables where events or changes in circumstances indicate that the balances may not be collectible. The identification of doubtful debts requires the use of judgment and estimates. Where the expectation is different from the original estimate, such difference will impact the carrying value of receivables and doubtful debt expenses in the period in which such estimate has been changed.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS *(Continued)*

#### (e) Income taxes

The Group is subject to income taxes in different jurisdictions. Significant judgement is required in determining the worldwide provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred income tax assets and liabilities in the period in which such determination is made.

For temporary differences which give rise to deferred income tax assets, the Group has assessed the likelihood that the deferred income tax assets could be recovered. Deferred income tax assets mainly relate to deductible tax losses and provision for impairment of receivables and inventories not yet deductible for tax purposes. Deferred income tax assets are recognised based on the Group's estimates and assumptions that they will be recovered from taxable income arising from continuing operations in the foreseeable future.

The Group believes it has recorded adequate current tax provision and deferred income taxes based on the prevailing tax rules and regulations and its current best estimates and assumptions. In the event that future tax rules and regulations or related circumstances change, adjustments to current and deferred income taxation may be necessary which would impact the Group's results or financial position.

### 5. SEGMENT INFORMATION

The chief executive officer, executive vice presidents and directors are the Group's chief operating decision-makers. Management has determined the operating segments based on the information reviewed by the chief operating decision makers for the purposes of allocating resources and assessing performance.

The Group's reportable segments are entity or group of entities that offer different products and services, which is the basis by which the chief operating decision makers make decisions about resources to be allocated to the segments and assesses their performance. Financial information of these entities has been separated to present discrete segment information to be reviewed by the chief operating decision makers.

The chief operating decision makers assess performance of three reportable segments: drilling technology, well completion and oil production services.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 5. SEGMENT INFORMATION *(Continued)*

The measurement of profit or loss, assets and liabilities of the operating segments are the same as those described in the summary of significant accounting policies. The chief operating decision makers evaluate the performance of the operating segments based on profit or loss before income tax expense, depreciation and amortisation, interest income, finance expenses, share of loss of joint ventures, share-based payments and asset impairment provisions ("EBITDA"). The corporate overheads and corporate assets are the general management expenses and assets incurred and held by the headquarters of the Group.

	Drilling technology	Well completion	Oil production services	Total
<b>For the year ended 31 December 2016</b>				
Revenue (Note)	437,451	751,129	429,095	1,617,675
<b>EBITDA</b>	<b>141,747</b>	<b>303,467</b>	<b>198,044</b>	<b>643,258</b>
Depreciation and amortisation	(55,962)	(116,256)	(15,191)	(187,409)
Asset impairment provision of				
– Inventories	(72,089)	(3,562)	(21,830)	(97,481)
– Trade and other receivables	(8,809)	(4,142)	(113)	(13,064)
Interest income	2	288	—	290
Finance expenses, net	(1,508)	(10,162)	(2,696)	(14,366)
Income tax expense	(3,696)	(23,111)	(40,274)	(67,081)
<b>For the year ended 31 December 2015</b>				
Revenue (Note)	651,965	778,425	402,616	1,833,006
<b>EBITDA</b>	<b>184,417</b>	<b>314,184</b>	<b>156,790</b>	<b>655,391</b>
Depreciation and amortisation	(61,515)	(102,617)	(23,853)	(187,985)
Asset impairment provision of				
– Goodwill	—	—	(26,325)	(26,325)
– Inventories	—	(11,607)	—	(11,607)
– Trade and other receivables	(1,630)	(619)	(7,472)	(9,721)
Interest income	1	782	—	783
Finance expenses, net	(4,929)	50	—	(4,879)
Share of loss of joint ventures	(1,042)	—	—	(1,042)
Income tax expense	(6,017)	(13,987)	(11,906)	(31,910)

Note: Sales between segments are carried out at terms mutually agreed between relevant Group entities. The revenue from external parties reported to the chief operating decision makers is measured in a manner consistent with that in the income statement.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

**5. SEGMENT INFORMATION** (Continued)

	Drilling technology	Well completion	Oil production services	Total
<b>As at 31 December 2016</b>				
<b>Total assets</b>	<b>1,904,963</b>	<b>2,713,884</b>	<b>540,618</b>	<b>5,159,465</b>
Total assets include:				
Capital expenditures	<b>110,804</b>	<b>76,147</b>	<b>17,312</b>	<b>204,263</b>
<b>As at 31 December 2015</b>				
<b>Total assets</b>	1,567,491	2,841,241	211,503	4,620,235
Total assets include:				
Investments in joint ventures	4,000	—	—	4,000
Capital expenditures	96,586	207,303	7,645	311,534

Disclosure of liabilities has not been included here because these liabilities balances are not allocated to segments.

**A reconciliation of total EBITDA to total loss before income tax is provided as follows:**

	Year ended 31 December	
	2016	2015
<b>EBITDA for reportable segments</b>	<b>643,258</b>	655,391
Corporate overheads	<b>(361,819)</b>	(577,953)
Depreciation	<b>(177,196)</b>	(168,983)
Amortisation	<b>(10,213)</b>	(19,002)
Asset impairment provision	<b>(110,545)</b>	(47,653)
Interest income	<b>290</b>	783
Finance expenses, net	<b>(14,366)</b>	(4,879)
Share of loss of joint ventures	<b>—</b>	(1,042)
<b>Loss before income tax</b>	<b>(30,591)</b>	(163,338)



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 5. SEGMENT INFORMATION (Continued)

Reportable segments' assets are reconciled to total assets as follows:

	<b>As at 31 December 2016</b>	2015
<b>Assets for reportable segments</b>	<b>5,159,465</b>	4,620,235
Corporate assets for general management	<b>1,501,816</b>	1,562,925
<b>Total Assets</b>	<b>6,661,281</b>	6,183,160

The Group allocates revenue on the basis of the location in which the sales are originated.

#### Geographical Information

	<b>Revenue Year ended 31 December</b>		<b>Non-current Assets As at 31 December</b>	
	<b>2016</b>	2015	<b>2016</b>	2015
PRC	<b>751,532</b>	1,072,081	<b>2,292,719</b>	2,568,906
Iraq	<b>628,230</b>	552,086	<b>495,129</b>	410,435
Other countries	<b>237,913</b>	208,839	<b>169,379</b>	84,235
<b>Total</b>	<b>1,617,675</b>	1,833,006	<b>2,957,227</b>	3,063,576

#### Client information

For the year end 31 December 2016, revenues of approximately RMB413,368,000 (2015: RMB531,561,000) were derived from two external customers, which contributed 17.01% and 8.54% (2015: 15.87% and 13.13%) to the total revenue respectively. These revenues were mainly attributable to drilling technology and oil production services segments.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

**6. PROPERTY, PLANT AND EQUIPMENT**

	Buildings	Machinery and equipment	Motor vehicles	Furniture, fixtures and others	Construction-in-progress	Total
<b>As at 1 January 2015</b>						
Cost	270,445	1,837,610	67,634	69,741	523,410	2,768,840
Accumulated depreciation	(41,501)	(363,434)	(36,822)	(33,701)	—	(475,458)
Net book value	228,944	1,474,176	30,812	36,040	523,410	2,293,382
<b>Year ended 31 December 2015</b>						
Opening net book value	228,944	1,474,176	30,812	36,040	523,410	2,293,382
Additions	2,345	136,024	5,196	17,878	186,481	347,924
Transfer in/(out)	5,850	134,825	—	9,905	(150,580)	—
Depreciation charge	(11,125)	(171,522)	(9,161)	(14,958)	—	(206,766)
Disposals	(14,651)	(10,181)	(909)	(3,884)	(49,377)	(79,002)
Closing net book value	211,363	1,563,322	25,938	44,981	509,934	2,355,538
<b>As at 31 December 2015</b>						
Cost	257,860	2,051,811	63,693	88,584	509,934	2,971,882
Accumulated depreciation	(46,497)	(488,489)	(37,755)	(43,603)	—	(616,344)
Net book value	211,363	1,563,322	25,938	44,981	509,934	2,355,538
<b>Year ended 31 December 2016</b>						
Opening net book value	<b>211,363</b>	<b>1,563,322</b>	<b>25,938</b>	<b>44,981</b>	<b>509,934</b>	<b>2,355,538</b>
Additions	<b>5,464</b>	<b>18,689</b>	<b>115</b>	<b>598</b>	<b>125,802</b>	<b>150,668</b>
Transfer in/(out)	<b>138,678</b>	<b>209,217</b>	<b>—</b>	<b>1,482</b>	<b>(365,604)</b>	<b>(16,227)</b>
Depreciation charge	<b>(10,387)</b>	<b>(180,361)</b>	<b>(6,822)</b>	<b>(9,884)</b>	<b>—</b>	<b>(207,454)</b>
Disposals	<b>(2,986)</b>	<b>(3,573)</b>	<b>(4,328)</b>	<b>(239)</b>	<b>(3,541)</b>	<b>(14,667)</b>
Disposal of a subsidiary	<b>(29,412)</b>	<b>(217)</b>	<b>—</b>	<b>(45)</b>	<b>—</b>	<b>(29,674)</b>
Currency translation differences	<b>3,171</b>	<b>13,554</b>	<b>568</b>	<b>985</b>	<b>15,761</b>	<b>34,039</b>
Closing net book value	<b>315,891</b>	<b>1,620,631</b>	<b>15,471</b>	<b>37,878</b>	<b>282,352</b>	<b>2,272,223</b>
<b>As at 31 December 2016</b>						
Cost	<b>366,205</b>	<b>2,244,519</b>	<b>46,491</b>	<b>87,774</b>	<b>282,352</b>	<b>3,027,341</b>
Accumulated depreciation	<b>(50,314)</b>	<b>(623,888)</b>	<b>(31,020)</b>	<b>(49,896)</b>	<b>—</b>	<b>(755,118)</b>
Net book value	<b>315,891</b>	<b>1,620,631</b>	<b>15,471</b>	<b>37,878</b>	<b>282,352</b>	<b>2,272,223</b>

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

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### 6. PROPERTY, PLANT AND EQUIPMENT *(Continued)*

During the year ended 31 December 2016, the depreciation charges of the Group were recorded in cost of sales with an amount of RMB155,575,000 (2015: RMB165,887,000), selling, general and administrative expenses with an amount of RMB27,827,000 (2015: RMB14,632,000), cost of inventories which remained unsold as at year end with an amount of RMB24,052,000 (2015: RMB26,247,000) and respectively.

As at 31 December 2016, long-term borrowings were secured with certain equipment of net book value amounted to RMB197,726,000 (31 December 2015: Nil) (Note 19(a)).

As at 31 December 2016, the Group's buildings of net book value of RMB29,285,000 (2015: RMB32,078,000) were pledged as counter-guarantee for short-borrowings of RMB80,000,000 (2015: RMB80,000,000). The Group's equipment of the net book value of RMB155,310,000 were pledged as security for short-borrowings of RMB150,000,000 (2015: The Group's building of the net book value of RMB15,998,000 were pledged as security for short-borrowings of RMB100,000,000) (Note 19(b)).

As at 31 December 2016, the Group's buildings of net book value of RMB164,660,000 (2015: Nil) were pledged as security of undrawn bank borrowing facilities (Note 19(d)).

During the year ended 31 December 2016, no borrowing costs were capitalised in property, plant and equipment (2015: Nil).

### 7. LAND USE RIGHTS

#### As at 1 January 2015

Cost	66,852
Accumulated amortisation	(5,803)

Net book value	61,049
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#### Year ended 31 December 2015

Opening net book value	61,049
Additions	180
Amortisation charge	(1,336)

Closing net book value	59,893
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#### As at 31 December 2015

Cost	67,032
Accumulated amortisation	(7,139)

Net book value	59,893
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#### Year ended 31 December 2016

Opening net book value	59,893
Disposal of subsidiaries	(10,700)
Amortisation charge	(1,199)

Closing net book value	47,994
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#### As at 31 December 2016

Cost	56,332
Accumulated amortisation	(8,338)

Net book value	47,994
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## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 7. LAND USE RIGHTS (Continued)

Land use rights represent the Group's prepayments for the leasehold land located in the PRC which are held on leases with remaining terms of 10 to 50 years.

As at 31 December 2016, no land use rights (31 December 2015: net book value of RMB11,066,000) were pledged as counter-guarantee for short-term borrowing (Note 19(b)).

As at 31 December 2016, land use rights with a net book value of RMB27,329,000 (2015: Nil) were pledged as security of undrawn bank borrowing facilities (Note 19(d)).

### 8. INTANGIBLE ASSETS

	Patents	Goodwill	Computer software	Total
<b>As at 1 January 2015</b>				
Cost	183,257	268,329	41,623	493,209
Accumulated amortisation and impairment	(79,063)	—	(21,757)	(100,820)
Net book value	104,194	268,329	19,866	392,389
<b>Year ended 31 December 2015</b>				
Opening net book value	104,194	268,329	19,866	392,389
Additions	25,558	—	10,243	35,801
Impairment provision	—	(26,325)	—	(26,325)
Amortisation charge	(14,187)	—	(8,140)	(22,327)
Closing net book value	115,565	242,004	21,969	379,538
<b>As at 31 December 2015</b>				
Cost	208,815	268,329	51,866	529,010
Accumulated amortisation	(93,250)	(26,325)	(29,897)	(149,472)
Net book value	115,565	242,004	21,969	379,538
<b>Year ended 31 December 2016</b>				
Opening net book value	<b>115,565</b>	<b>242,004</b>	<b>21,969</b>	<b>379,538</b>
Additions	<b>31,468</b>	—	<b>20,332</b>	<b>51,800</b>
Disposal of a subsidiary	<b>(290)</b>	—	—	<b>(290)</b>
Amortisation charge	<b>(13,337)</b>	—	<b>(2,556)</b>	<b>(15,893)</b>
Closing net book value	<b>133,406</b>	<b>242,004</b>	<b>39,745</b>	<b>415,155</b>
<b>As at 31 December 2016</b>				
Cost	<b>239,993</b>	<b>268,329</b>	<b>72,198</b>	<b>580,520</b>
Accumulated amortisation	<b>(106,587)</b>	<b>(26,325)</b>	<b>(32,453)</b>	<b>(165,365)</b>
Net book value	<b>133,406</b>	<b>242,004</b>	<b>39,745</b>	<b>415,155</b>

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 8. INTANGIBLE ASSETS (Continued)

An operating segment-level summary of the goodwill allocation is presented below.

As at 31 December 2016 and 2015	Drilling technology	Well completion	Total
Shandong Precede Petroleum Technology Co., Ltd. (山東普瑞思德石油技術有限公司, "Shandong Precede")	—	132,486	132,486
Screen business	—	106,886	106,886
Anton Machinery and Meter Testing Co., Ltd. (安東儀器儀表檢測服務有限公司, "Anton Testing", formerly 四川誠量檢測服務有限公司)	2,632	—	2,632
	<b>2,632</b>	<b>239,372</b>	<b>242,004</b>

Goodwill is allocated to the cash-generating units of the Group identified according to their operations.

The recoverable amount of an operating segment is determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. The Company expects cash flow beyond the five-year period will be similar to that if the fifth year based on existing production capacity. Cash flows beyond the five-year period are extrapolated using zero growth rates. Based on the assessments, no goodwill was impaired.

The key assumptions used for value-in-use calculations in 2016 are as follows:

As at 31 December 2016	Shandong Precede	Screen business	Anton Testing
Gross margin	46.25%	20.20%	18.84%
Discount rate	14.12%	14.12%	16.00%

As at 31 December 2015	Shandong Precede	Screen business	Anton Testing
Gross margin	33.13%	21.60%	20.00%
Discount rate	13.72%	13.72%	14.49%

Management determined budgeted gross margin based on past performance and its expectations of market development. The discount rates used are pre-tax and reflect specific risks relating to the relevant business.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

### 9. SUBSIDIARIES

#### (a) Material non-controlling interests

The total non-controlling interest as at 31 December 2016 was RMB432,012,000 (31 December 2015: RMB65,586,000), of which RMB396,557,000 was attributed to Anton Oilfield Services DMCC ("DMCC") (31 December 2015: Nil) and RMB33,712,000 (31 December 2015: RMB32,936,000) was attributed to Anton Tong'ao Technological Products Co., Limited ("Anton Tong'ao"). The non-controlling interests in respect of other subsidiaries are not material.

Set out below are the summarised financial information for each subsidiary that has non-controlling interests that are material to the Group.

#### Summarised balance sheet

	DMCC		Anton Tong'ao	
	As at 31 December 2016	2015	As at 31 December 2016	2015
Current Assets	<b>2,789,353</b>	1,600,805	<b>471,540</b>	319,496
Liabilities	<b>(1,987,920)</b>	(738,100)	<b>(483,741)</b>	(356,529)
Total current net assets/(liabilities)	<b>801,433</b>	862,705	<b>(12,201)</b>	(37,033)
Non-current Assets	<b>495,136</b>	410,435	<b>349,319</b>	366,398
Liabilities	<b>—</b>	—	<b>—</b>	—
Total non-current net assets	<b>495,136</b>	410,435	<b>349,319</b>	366,398
Net assets	<b>1,296,569</b>	1,273,140	<b>337,118</b>	329,365
Net assets attributable to non-controlling interests	<b>396,557</b>	—	<b>33,712</b>	32,936

#### Summarised income statement

	DMCC		Anton Tong'ao	
	Year ended 31 December 2016	2015	Year ended 31 December 2016	2015
Revenue	<b>1,180,020</b>	1,099,041	<b>203,138</b>	225,525
Profit before income tax	<b>379,176</b>	263,427	<b>10,660</b>	18,829
Income tax expense	<b>(51,869)</b>	(28,897)	<b>(2,906)</b>	(3,260)
Post-tax profit	<b>327,307</b>	234,530	<b>7,754</b>	15,569
Other comprehensive income	<b>129,706</b>	44,166	<b>—</b>	—
Total comprehensive income	<b>457,013</b>	278,696	<b>7,754</b>	15,569
Total comprehensive income allocated to non-controlling interests	<b>75,591</b>	—	<b>775</b>	1,557
Dividends paid to non-controlling interests	<b>—</b>	—	<b>—</b>	3,894

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

**9. SUBSIDIARIES** *(Continued)***(a) Material non-controlling interests** *(Continued)***Summarised cash flows**

	<b>DMCC</b>		<b>Anton Tong'ao</b>	
	<b>Year ended 31 December 2016</b>	2015	<b>Year ended 31 December 2016</b>	2015
<b>Cash flows from operating activities</b>				
Cash generated from operations	<b>128,406</b>	203,594	<b>60,382</b>	65,418
Interest paid	<b>—</b>	—	<b>(3,021)</b>	(3,000)
Income tax paid	<b>(44,404)</b>	(28,897)	<b>(3,474)</b>	(1,446)
Net cash generated from operating activities	<b>84,002</b>	174,697	<b>53,887</b>	60,972
Net cash used in investing activities	<b>(70,939)</b>	(49,699)	<b>(63,496)</b>	(34,626)
Net cash used in financing activities	<b>—</b>	—	<b>—</b>	(38,945)
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>13,063</b>	124,998	<b>(9,609)</b>	(12,599)
Cash and cash equivalents at beginning of year	<b>233,287</b>	99,182	<b>17,380</b>	29,945
Exchange gains on cash and cash equivalents	<b>10,007</b>	9,107	<b>259</b>	34
Cash and cash equivalents at end of year	<b>256,357</b>	233,287	<b>8,030</b>	17,380

The information above is the amount before inter-company eliminations.



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

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### 9. SUBSIDIARIES (Continued)

(b) The following is a list of principal subsidiaries the Company directly or indirectly holds equity interests as at 31 December 2016:

Company name	Place and date of incorporation	Registered capital	Equity interest held by the Group	Principal activities
<b>Directly held:</b>				
Anton Oilfield Services Company Limited	Hong Kong, 17 August 2014	HK\$100	100%	Investment holding
<b>Indirectly held:</b>				
Anton Oilfield Services (Group) Co., Ltd. (安東石油技術(集團)有限公司, "Anton Oil")	Beijing, the PRC, 28 January 2002	US\$131,000,000	100%	Oilfield services and sales of equipment
Xinjiang Tong'ao Oilfield Services Co., Ltd. (新疆通奧油田技術服務有限公司, "Xinjiang Tong'ao")	Xinjiang Uygur Autonomous Region, the PRC, 21 February 2002	RMB51,000,000	100%	Oilfield services
Anton Tong'ao	Xinjiang Uygur Autonomous Region, the PRC, 15 December 2005	RMB90,000,000	90%	Manufacturing of rod casing
Shandong Precede	Shandong Province, the PRC, 2 September 2008	RMB12,000,000	100%	Oilfield services and sales of equipment
Anton International FZE ("Anton Dubai")	The United Arab Emirates, 12 April 2009	US\$7,300,000	100%	Oilfield services

## Notes to the Consolidated Financial Statements

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(Amounts expressed in thousands of RMB, unless otherwise stated)

**9. SUBSIDIARIES** (Continued)**(b) The following is a list of principal subsidiaries the Company directly or indirectly holds equity interests as at 31 December 2016:** (Continued)

Company name	Place and date of incorporation	Registered capital	Equity interest held by the Group	Principal activities
<b>Indirectly held:</b> (Continued)				
Sichuan Anton Oil Gas Engineering and Technology Services Co., Ltd. (四川安東油氣工程技術服務有限公司, "Sichuan Anton")	Sichuan Province, the PRC, 14 July 2009	RMB50,000,000	100%	Oilfield services and sales of equipment
DMCC	The United Arab Emirates, 28 March 2011	US\$54,462,150	60%	Oilfield services
Sichuan Tongsheng Drilling Technology Co., Ltd. (四川通盛鑽探工程有限公司, "Sichuan Tongsheng")	Sichuan Province, the PRC, 13 February 2012	RMB5,000,000	100%	Construction and drilling services, sales of drilling product
Xinjiang Anton Oilfield Services Co., Ltd. (新疆安東石油技術服務有限責任公司, "Xinjiang Anton")	Xinjiang Uygur Autonomous Region, the PRC, 24 February 2012	RMB30,000,000	100%	Oilfield services
Anton New Material (Suining) Co., Ltd. (安東新材料(遂寧)有限公司, "Suining Material")	Sichuan Province, the PRC, 6 June 2012	RMB10,000,000	100%	Oilfield services and sales of proppant

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 10. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

The amounts recognised in the balance sheet are as follows:

	As at 31 December 2016	2015
Associate (a)	3,592	—
Joint ventures (b)	—	4,000
	<b>3,592</b>	4,000

#### (a) Investments in associate

	2016	2015
As at 1 January	—	—
Addition	4,000	—
Share of loss	(408)	—
As at 31 December	<b>3,592</b>	—

Company name	Place and date of incorporation	Registered capital	Equity interest held by the Group	Principal activities
Xinjiang PengAn Energy Technology Co., Ltd. (新疆鹏安能源科技有限责任公司, "Xinjiang PengAn")	Xinjiang Uygur Autonomous Region, the PRC, 22 January 2016	RMB200,000,000	40%	Oilfield technology consulting service and sales of equipment

Xinjiang PengAn is an unlisted limited liability company.

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(Amounts expressed in thousands of RMB, unless otherwise stated)

**10. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD** *(Continued)***(a) Investments in associate** *(Continued)*

The following amounts represent 100% of the assets and liabilities, and sales and results of the associate.

	<b>As at 31 December 2016</b>	2015
<b>Assets:</b>		
Non-current assets	<b>993</b>	—
Current assets	<b>8,153</b>	—
	<b>9,146</b>	—
<b>Liabilities:</b>		
Non-current liabilities	—	—
Current liabilities	<b>166</b>	—
	<b>166</b>	—
<b>Net assets</b>	<b>8,980</b>	—
<b>Revenue</b>	—	—
<b>Loss after income tax</b>	<b>(1,020)</b>	—

There are no contingent liabilities relating to the Group's interest in the associate.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 10. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD *(Continued)*

#### (b) Investments in joint ventures

	2016	2015
As at 1 January	4,000	5,042
Share of loss	—	(1,042)
Disposal of a joint venture (i)	(4,000)	—
As at 31 December	—	4,000

Note:

- (i) On 10 May 2016, the Group disposed all its equity interests in Northern Heavy Anton Machinery Manufacturing Co., Ltd. ("Northern Heavy") to the joint venture partner, with the consideration of cash RMB1 and a waiver of RMB4,549,000 trade payables due to Northern Heavy. The disposal gain of RMB549,000 was recognised in other gains (Note 25).
- (ii) The following is the joint venture held by the Group as at 31 December 2016:

Company name	Place and date of incorporation	Registered capital	Equity interest held by the Group	Principal activities
Tongzhou Integration Oilfield Technology Co., Ltd. (同舟一體化油田技術有限公司, "TIPM")	Sichuan Province, the PRC, 24 December 2012	US\$12,000,000	40%	Oilfield technology consulting service and sales of production equipment

TIPM is an unlisted limited liability company established in the PRC.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 10. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD *(Continued)*

#### (b) Investments in joint ventures *(Continued)*

The following amounts represent 100% of the assets and liabilities, and sales and results of the joint ventures.

	<b>As at 31 December 2016</b>	2015
<b>Assets:</b>		
Non-current assets	—	96,558
Current assets	<b>2,789</b>	118,562
	<b>2,789</b>	215,120
<b>Liabilities:</b>		
Non-current liabilities	—	—
Current liabilities	<b>2,063</b>	209,564
	<b>2,063</b>	209,564
<b>Net assets</b>	<b>726</b>	5,556
<b>Revenue</b>	—	24,298
<b>Gain/(Loss) after income tax</b>	<b>17</b>	(52,108)

There are no contingent liabilities relating to the Group's interest in the joint ventures.

### 11. OTHER NON-CURRENT ASSETS

	<b>As at 31 December 2016</b>	2015
Long-term lease prepayment	<b>62,000</b>	67,255

As at 31 December 2016, long-term lease prepayment represents prepayment for lease of logistics base, which will be amortised in 6 years.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

### 12. INVENTORIES

	<b>As at 31 December 2016</b>	2015
Raw materials	<b>26,975</b>	23,270
Work-in-progress	<b>885</b>	—
Finished goods	<b>50,433</b>	88,346
Project materials and spare parts	<b>409,410</b>	421,842
Project-in-progress	<b>412,179</b>	324,549
Total original cost	<b>899,882</b>	858,007
Less: provision for obsolescence	<b>(118,717)</b>	(23,784)
	<b>781,165</b>	834,223

Movements of provision for inventory obsolescence during the year are analysed as follows:

	<b>2016</b>	2015
As at 1 January	<b>(23,784)</b>	(12,177)
Addition	<b>(115,313)</b>	(11,607)
Reversal	<b>17,832</b>	—
Write-off	<b>2,548</b>	—
As at 31 December	<b>(118,717)</b>	(23,784)

### 13. TRADE AND NOTES RECEIVABLES

	<b>As at 31 December 2016</b>	2015
Trade receivables, net (a)		
– from related parties (Note 35(c))	<b>6,252</b>	8,463
– others	<b>1,234,665</b>	1,190,260
	<b>1,240,917</b>	1,198,723
Notes receivable (d)	<b>57,078</b>	85,631
	<b>1,297,995</b>	1,284,354



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 13. TRADE AND NOTES RECEIVABLES (Continued)

Note:

(a) Ageing analysis of gross trade receivable at the respective balance sheet dates is as follows:

	As at 31 December 2016		
	Gross amount	Impairment	Net value
1 - 6 months	824,673	—	824,673
6 months - 1 year	223,805	—	223,805
1 - 2 years	162,754	(2,494)	160,260
2 - 3 years	38,500	(10,958)	27,542
Over 3 years	32,011	(27,374)	4,637
	<b>1,281,743</b>	<b>(40,826)</b>	<b>1,240,917</b>

	As at 31 December 2015		
	Gross amount	Impairment	Net value
1 - 6 months	742,882	—	742,882
6 months - 1 year	344,038	—	344,038
1 - 2 years	104,856	(5,704)	99,152
2 - 3 years	15,367	(3,241)	12,126
Over 3 years	23,292	(22,767)	525
	<b>1,230,435</b>	<b>(31,712)</b>	<b>1,198,723</b>

(i) As at 31 December 2016, trade receivables with amount of RMB1,048,478,000(31 December 2015: RMB1,086,920,000) aged within one year, which were neither past due nor impaired according to the Group's credit policy.

(ii) The Group's past-due trade receivables were those receivables aged over one year. As at 31 December 2016, trade receivables with net value amounting to RMB192,439,000 (31 December 2015: RMB111,803,000) were past due but not impaired. For the past-due trade receivables without impairment, management considered such long ageing items were receivable from customers with good cooperation and no default history, therefore the risk of impairment was low.

(b) Most of the trade receivables are with credit terms of within one year, except for retention money which would be collected one year after the completion of the services. The maximum exposure to credit risk at the reporting date is the carrying value of the receivables.

As at 31 December 2016, trade receivables with amount of RMB221,824,000 (31 December 2015: Nil) were pledged as security for short-term borrowings amounted to RMB199,642,000(31 December 2015: Nil) (Note 19(b)).

(c) Movements of impairment of trade receivables are as follows:

	2016	2015
As at 1 January	(31,712)	(21,991)
Additions	(10,591)	(11,432)
Reversal	—	1,711
Dispose of a subsidiary	11	—
Write-off	1,466	—
As at 31 December	<b>(40,826)</b>	<b>(31,712)</b>

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 13. TRADE AND NOTES RECEIVABLES *(Continued)*

Note: *(Continued)*

- (d) Notes receivables are all bank acceptance bills with maturity dates within six months. As at 31 December 2016, no notes receivables was pledged as security for short-term borrowings. (As at 31 December 2015, notes receivables with amount RMB10,000,000 were pledged as security for short-term borrowings amounted to RMB10,000,000.) (Note 19(b))
- (e) Trade and notes receivables were denominated in the following currencies:

	As at 31 December 2016	2015
RMB	724,205	925,071
US\$	569,320	359,283
Others	4,470	—
	<b>1,297,995</b>	1,284,354

### 14. PREPAYMENTS AND OTHER RECEIVABLES

	As at 31 December 2016	2015
<b>Current</b>		
Advances to suppliers	122,193	104,154
Other receivables	167,499	171,204
Amounts due from related parties (Note 35(c))	345,474	—
Value-added tax recoverable	90,129	98,245
	<b>725,295</b>	373,603
<b>Non-current</b>		
Value-added tax recoverable	103,929	132,693

Ageing analysis of prepayments and other receivables at the respective balance sheet dates are as follows:

	As at 31 December 2016	2015
1 - 6 months	578,394	156,657
6 months - 1 year	64,155	144,377
1 - 2 years	46,332	30,504
2 - 3 years	18,032	20,020
Over 3 years	22,714	23,904
	<b>729,627</b>	375,462
Less: allowance for impairment (a)	<b>(4,332)</b>	(1,859)
Prepayments and other receivables, net	<b>725,295</b>	373,603

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

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### 14. PREPAYMENTS AND OTHER RECEIVABLES (Continued)

(a) Movements of allowance for impairment are as follows:

	2016	2015
<b>As at 1 January</b>	<b>(1,859)</b>	(1,859)
Additions	<b>(2,673)</b>	—
Reversal	<b>200</b>	—
<b>As at 31 December</b>	<b>(4,332)</b>	(1,859)

### 15. CASH AND BANK

	As at 31 December	
	2016	2015
Restricted bank deposits (a)	<b>381,325</b>	158,246
Term deposits with initial terms of over three months (b)	<b>11,011</b>	11,000
Cash and cash equivalents		
– Cash on hand	<b>2,633</b>	2,393
– Deposits in bank	<b>504,630</b>	455,765
	<b>899,599</b>	627,404

- (a) As at 31 December 2016, bank deposits amounting to RMB381,325,000 (31 December 2015: RMB158,246,000) were held as securities for letter of guarantee and for issuance of notes payable.
- (b) As at 31 December 2016, term deposits with initial terms of over three months were bank deposits bearing interest rate at 1.50% per annum (31 December 2015: 2.01% per annum), with original maturity of 180 days.
- (c) Cash and bank were denominated in the following currencies:

	As at 31 December	
	2016	2015
RMB	<b>362,409</b>	323,818
US\$	<b>412,189</b>	259,647
HK\$	<b>90,470</b>	14,329
Others	<b>34,531</b>	29,610
	<b>899,599</b>	627,404

## Notes to the Consolidated Financial Statements

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### 16. SHARE CAPITAL AND SHARE OPTIONS

#### (a) Share capital

Ordinary shares issued and fully paid:	Number of shares issued and fully paid of HK\$0.1 each (thousands)	Share capital	
		HK\$'000	RMB'000
As at 1 January 2015	2,211,635	221,164	206,879
Exercise of share options (i)	9,487	948	750
As at 31 December 2015	2,221,122	222,112	207,629
Issued of new shares (ii)	221,620	22,162	19,365
Repurchase and cancellation (iii)	(4,926)	(493)	(416)
As at 31 December 2016	2,437,816	243,781	226,578

Note:

(i) Share options

During the year end 31 December 2016, options to subscribe for 122,216,000 shares at the exercise price ranging from HK\$0.74 to HK\$1.1 (2015: 49,500,000 shares at the exercise price ranging of HK\$1.82) have been conditionally granted to certain key employees and three independent non-executive directors. 2,700,000 shares granted to independent non-executive directors have a 2-year vesting period, 50% exercisable per year and the other 119,516,000 shares have a 3-year vesting period, 33.33% exercisable per year, on the premises of achieving the performance conditions of the Group set out in the share option scheme. The options are exercisable from the first anniversary of the service commencement date and have an option period of 6 years.

Movements in the number of share options outstanding and their related weighted average exercise prices are as follows:

	Average exercise price in HK\$ per share	Number of share options (thousands)
<b>As at 1 January 2015</b>		82,913
Granted (on 24 April 2015)	1.820	49,500
Exercised		(9,487)
Forfeited		(8,843)
Cancelled		(17,968)
Lapsed		(43,700)
<b>As at 31 December 2015</b>		52,415
Granted (on 24 February 2016)	0.740	112,800
Granted (on 1 April 2016)	0.800	7,200
Granted (on 2 December 2016)	1.100	2,216
Forfeited		(18,779)
Cancelled		(1,950)
Expired		(21,259)
<b>As at 31 December 2016</b>		132,643

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016  
(Amounts expressed in thousands of RMB, unless otherwise stated)

### 16. SHARE CAPITAL AND SHARE OPTIONS (Continued)

#### (a) Share capital (Continued)

Note: (Continued)

(i) Share options (Continued)

Share options outstanding (in thousands) at the end of the year have the following expiry dates and exercise prices:

Expiry date	Exercise price HK\$ per share	Number of share options (thousands) As at 31 December 2016
9 January 2017	3.878	17,023
21 June 2019	5.742	1,276
27 June 2019	5.600	298
19 November 2019	4.960	190
23 February 2022	0.740	104,440
31 March 2022	0.800	7,200
2 December 2022	1.100	2,216
		132,643

The exercise price of the granted options is equal to the highest of (i) the closing price of the shares of the Company in the daily quotation sheet issued by the Stock Exchange on the date of grant; (ii) the average closing price of the shares as stated in the daily quotation sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant; and (iii) the par value of the shares. Options are conditional on the employee completing one to three years' service (the vesting period) and have a contractual option term of six years. The Group has no legal or constructive obligation to repurchase or settle the options in cash.

As of 31 December 2016, out of the 132,643,000 options (31 December 2015: 52,415,000 options), 18,787,000 options (31 December 2015: 44,665,000 options) were exercisable. No options were exercised in 2016, and options exercised in 2015 resulted in 9,487,000 shares being issued at a weighted average price of HK\$ 1.25 each. The related weighted average share price at the time of exercise was HK1.71 per share in 2015.

The fair value of the options granted during the year ended 31 December 2016 is determined using the Binomial Option Pricing Model. The major assumptions used in the pricing model for options granted in 2016 were the exercise price shown above, and the other parameters are shown below:

Parameters	Options granted in 2016	Options granted in 2015
Share price as of the valuation date (HK\$)	<b>0.74-1.10</b>	1.82
Expected dividend yield	<b>0%</b>	0%
Forfeiture rate	<b>0.36%-0.40%</b>	0.68%
Maturity years	<b>3.35-3.70</b>	6.0
Risk free rate	<b>0.95%-1.25%</b>	1.10%
Annualised volatility	<b>58.25%-54.67%</b>	52.64%

The weighted average fair value of options granted during the year determined using the Binomial valuation model was HK\$0.75 per option (2015: HK\$1.82 per option). The volatility measured at the standard deviation of continuously compounded share returns is derived from historical volatility of the share price over the last 6 years.

The total expense recognised in the consolidated income statement for the year ended 31 December 2016 for share options amounted to RMB15,431,000 (31 December 2015: RMB 14,571,000), with a corresponding amount credited in capital reserve (Note 17).

## Notes to the Consolidated Financial Statements

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### 16. SHARE CAPITAL AND SHARE OPTIONS *(Continued)*

#### (a) Share capital *(Continued)*

Note: *(Continued)*

- (ii) On 3 December 2016, the Company entered into a subscription agreement with a third party pursuant to which the third party agreed to subscribe 221,620,000 new shares at HK\$1.008 per share. The subscription was completed on 25 December 2016.
- (iii) During the year ended 31 December 2016, the Company repurchased 4,926,000 of its own shares on the Hong Kong Stock Exchange, which were then all cancelled. The total amount paid to acquire these shares was RMB 2,538,000 and deducted from share capital and share premium.

### 17. RESERVES

	Share premium	Capital reserve	Statutory reserve(b)	Retained earnings	Other reserves	Total
<b>As at 1 January 2015</b>	448,921	379,159	77,756	966,822	(25,646)	1,847,012
Loss for the year	—	—	—	(194,731)	—	(194,731)
Net investment hedge (a)	—	—	—	—	(54,110)	(54,110)
Exchange differences	—	—	—	—	65,035	65,035
Share option scheme (Note 16(i))	—	14,571	—	—	—	14,571
Share option exercised (Note 16(a))	11,982	(3,362)	—	—	—	8,620
<b>As at 31 December 2015</b>	460,903	390,368	77,756	772,091	(14,721)	1,686,397
Loss for the year	—	—	—	(160,450)	—	(160,450)
Net investment hedge (a)	—	—	—	—	(72,052)	(72,052)
Currency translation differences	—	—	—	—	20,972	20,972
Issue of ordinary shares (Note 16(a)(ii))	175,835	—	—	—	—	175,835
Repurchase and cancellation of shares (Note 16(a)(iii))	(2,122)	—	—	—	—	(2,122)
Share option scheme (Note 16(i))	—	15,431	—	—	—	15,431
Acquisition of additional interest in a subsidiary (Note 33)	—	—	—	—	3,178	3,178
Changes in ownership interests in subsidiaries without change of control (Note 34)	—	—	—	—	379,034	379,034
Recognition of put option (Note 21)	—	—	—	—	(700,000)	(700,000)
Disposal of a subsidiary	—	(27,060)	—	—	—	(27,060)
Dissolve of a subsidiary	—	—	(856)	—	—	(856)
<b>As at 31 December 2016</b>	634,616	378,739	76,900	611,641	(383,589)	1,318,307

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 17. RESERVES (Continued)

Note:

#### (a) Net investment hedge

During the year ended 31 December 2016, a proportion of the Group's US\$ denominated long-term bonds amounting to US\$ 196,162,000 (2015: US\$ 142,885,000) has been designated as hedging instrument for the US\$ denominated net investment in the Group's overseas subsidiaries. For the year ended 31 December 2016, foreign exchange translation loss of RMB72,052,000 (2015: RMB54,110,000) on the hedging instrument was recognised in other comprehensive income as deduction in other reserves.

#### (b) Statutory reserves

Subsidiaries incorporated in the PRC shall appropriate 10% of their annual statutory net profit (after offsetting any prior years' losses) to the statutory reserve fund account in accordance with the PRC Company Law and their articles of association. When the balance of such reserve fund reaches 50% of each entity's share capital, any further appropriation is optional. The statutory reserve fund can be utilised to offset prior years' losses or increase capital after approval. However, except for offsetting prior years' losses, the statutory reserve fund must be maintained at a minimum of 25% of share capital after such usage.

### 18. LONG-TERM BONDS

Issue date	Par value	Coupon rate	As at 31 December 2016	As at 31 December 2015	Effective interest rate
7 August 2013 (a)	RMB 200 million	7.30%	—	199,514	7.74%
31 October 2013 (b)	US\$ 247 million	7.50%	<b>1,694,940</b>	1,584,635	8.31%
Subtotal			<b>1,694,940</b>	1,784,149	
Less: Current portion			—	(199,514)	
			<b>1,694,940</b>	1,584,635	

Note

- (a) Anton Oil, a subsidiary of the Company, issued RMB200 million 7.30% medium-term notes at par value on 7 August 2013. The bonds mature in 3 years from the issue date at their nominal value, which have been fully repaid in August 2016.
- (b) The Company issued US\$ 250 million 7.50% senior notes at par value on 31 October 2013, in which US\$ 3 million were repurchased during the year ended 31 December 2016. The bonds mature in 5 years from the issue date at their nominal value. Interest is payable on a semi-annually basis. As at 31 December 2016, interest payable amounted to approximately RMB19.0 million (31 December 2015: RMB 19.0 million).

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(Amounts expressed in thousands of RMB, unless otherwise stated)

### 19. BORROWINGS

	As at 31 December			
	2016		2015	
	Amount	Interest Rate	Amount	Interest Rate
<b>Long-term borrowing</b>				
- Secured				
- RMB denominated (a)	<b>151,229</b>	<b>5.94%</b>	—	—
Less: Current portion	<b>(61,723)</b>		—	
	<b>89,506</b>		—	
<b>Short-term bank borrowings</b>				
- Unsecured				
- RMB denominated	<b>310,000</b>	<b>5.22%-6.09%</b>	425,000	4.35%-7.5%
- Secured				
- RMB denominated (b)	<b>429,642</b>	<b>5.0025%-6.50%</b>	190,000	4.35%-5.865%
<b>Other borrowings - secured</b>				
- RMB denominated (c)	—		60,000	6.305%
	<b>739,642</b>		675,000	

(a) As at 31 December 2016, secured long-term borrowings represented borrowings from Minsheng Financial Leasing Co., Ltd., a third party, which will mature in 3 years, with equipment of net book value amounted to RMB197,726,000 pledged as security (Note 6).

(b) As at 31 December 2016, secured short-term bank borrowings of RMB80,000,000 were guaranteed by Beijing Zhongguancun Sci-tech Guaranty Co., Ltd. (北京中關村科技擔保有限公司), a third party, with the Group's buildings with a net book value of RMB29,285,000 pledged as counter-guarantee (Note 6). Secured short-term bank borrowings of RMB150,000,000 were secured by the equipment of net book value amounted to RMB155,310,000 (Note 6). Secured short-term bank borrowings of RMB199,642,000 were secured by trade receivables amounted to RMB221,824,000 (Note 13(b)).

As at 31 December 2015, secured bank borrowings of RMB80,000,000 were guaranteed by Beijing Zhongguancun Sci-tech Guaranty Co., Ltd. (北京中關村科技擔保有限公司), a third party, with the Group's buildings with a net book value of RMB32,078,000 (Note 6) and land use rights with a net book value of RMB11,066,000 (Note 7) pledged as counter-guarantee. Secured bank borrowings of RMB100,000,000 were secured by the building of Antonoil with a net book value of RMB15,998,000 (Note 6). Secured bank borrowings of RMB 10,000,000 were secured by note receivable with the value of RMB 10,000,000 (Note 13(d)).

(c) As at 31 December 2015, other borrowings represented a loan borrowed by Anton Oil from Beijing City Cultural Technology Leasing Share Limited (北京市文化科技融資租賃股份有限公司), with the Group's machinery and equipment with a net book value of RMB 130,185,000 pledged as security (Note 6).

(d) As at 31 December 2016, the undrawn bank borrowing facilities of the Group approximated RMB 80 million (31 December 2015: RMB 670 million), with maturity dates up to 2 June 2017, including RMB 50,000,000 with the Group's buildings of net book value amounting to RMB164,660,000 (Note 6) and land use rights with a net book value of RMB 27,329,000 (Note 7) pledged as security.



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### 20. TRADE AND NOTES PAYABLES

	<b>As at 31 December 2016</b>	2015
Trade payables		
– related parties (Note 35(c))	<b>95,757</b>	52,283
– others	<b>306,873</b>	390,779
Notes payables	<b>302,459</b>	137,286
	<b>705,089</b>	580,348

Ageing analysis of trade and notes payables at the respective balance sheet dates is as follows:

	<b>As at 31 December 2016</b>	2015
Less than 1 year	<b>620,858</b>	458,070
1 - 2 years	<b>59,225</b>	102,960
2 - 3 years	<b>19,491</b>	13,386
Over 3 years	<b>5,515</b>	5,932
	<b>705,089</b>	580,348

Trade and notes payable were denominated in the following currencies:

	<b>As at 31 December 2016</b>	2015
RMB	<b>622,484</b>	544,399
US\$	<b>82,321</b>	35,949
Others	<b>284</b>	—
	<b>705,089</b>	580,348

### 21. ACCRUALS AND OTHER PAYABLES

	<b>As at 31 December 2016</b>	2015
<b>Current</b>		
Advance from customers	<b>16,855</b>	14,953
Payroll and welfare payable	<b>44,333</b>	59,888
Taxes other than income taxes payable	<b>63,364</b>	73,908
Payables to equipment vendors	<b>415,636</b>	831,243
Dividend payable	<b>11,753</b>	29,120
Interest payable	<b>24,054</b>	25,300
Rental payable	<b>4,979</b>	11,217
Others	<b>48,773</b>	109,329
	<b>629,747</b>	1,154,958
<b>Non-current</b>		
Liability arising from put option of non-controlling interest (Note 34)	<b>715,453</b>	—

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 22. DEFERRED INCOME TAX

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

	<b>As at 31 December 2016</b>	2015
Deferred tax assets:		
- Deferred tax asset to be recovered after more than 12 months	<b>50,763</b>	64,499
- Deferred tax asset to be recovered within 12 months	<b>1,571</b>	160
	<b>52,334</b>	64,659
Deferred tax liabilities:		
- Deferred tax liabilities to be settled after more than 12 months	<b>4,261</b>	4,318
- Deferred tax liabilities to be settled within 12 months	<b>57</b>	57
	<b>4,318</b>	4,375

Deferred tax assets:

	<b>Taxable losses</b>	<b>Impairment provision of receivables and inventories</b>	<b>Total</b>
<b>As at 1 January 2015</b>	51,572	5,769	57,341
Credited to the consolidated income statement	3,794	3,524	7,318
<b>As at 31 December 2015</b>	55,366	9,293	64,659
Debited to the consolidated income statement	(8,206)	(4,119)	(12,325)
<b>As at 31 December 2016</b>	47,160	5,174	52,334

Deferred income tax assets are recognised to the extent that the realisation of the related tax benefit through future taxable profits is probable. As at 31 December 2016, the Group did not recognise deferred income tax assets of RMB34,000,000 (31 December 2015: RMB42,861,000) in respect of accumulated losses amounting to RMB184,798,000 (31 December 2015: RMB193,402,000) that can be carried forward against taxable income as the losses are considered as unrecoverable in 5 years.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 22. DEFERRED INCOME TAX *(Continued)*

Deferred tax liabilities:

	Acquisition of subsidiaries	Withholding tax on investment income	Capitalised borrowing costs	Total
<b>As at 31 December 2014</b>	38	3,253	677	3,968
(Credited)/debited to the consolidated income statement	(11)	464	(46)	407
<b>As at 31 December 2015</b>	27	3,717	631	4,375
Credited to the consolidated income statement	(11)	—	(46)	(57)
<b>As at 31 December 2016</b>	16	3,717	585	4,318

As at 31 December 2016, deferred income tax liabilities of RMB30,407,000 (31 December 2015: RMB39,987,000) have not been recognised for the withholding tax relating to the unremitted earnings of subsidiaries. Deferred income tax liability is not recognised where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

### 23. REVENUE

	Year ended 31 December	
	2016	2015
Sales of goods	<b>250,470</b>	254,970
Provision of services	<b>1,367,205</b>	1,578,036
	<b>1,617,675</b>	1,833,006

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For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 24. EXPENSE BY NATURE

Operating profit is arrived at after charging the following:

	Year ended 31 December	
	2016	2015
Materials and services purchased	<b>700,999</b>	848,575
Staff costs	<b>371,726</b>	470,483
In which:		
- Salaries and other staff expenses	<b>356,295</b>	455,912
- Share-based compensation	<b>15,431</b>	14,571
Depreciation	<b>183,402</b>	180,519
Amortisation	<b>11,735</b>	20,212
Sales tax and surcharges	<b>4,553</b>	15,576
Auditor's remuneration		
- Audit and related services	<b>6,030</b>	5,330
- Service in connection with a transaction	<b>950</b>	—
Other operating expenses	<b>264,051</b>	220,526
In which:		
- impairment of receivables	<b>13,064</b>	9,721
- impairment of inventories	<b>97,481</b>	11,607
- impairment of goodwill	<b>—</b>	26,325
<b>Total operating cost</b>	<b>1,543,446</b>	1,761,221

### 25. OTHER GAINS, NET

	Year ended 31 December	
	2016	2015
Government grants and subsidies	<b>14,861</b>	18,470
Gains on disposal of a subsidiary (a)	<b>62,616</b>	—
Loss on dissolve of a subsidiary (b)	<b>(717)</b>	—
Gains on disposal of a joint venture (Note 10(b)(i))	<b>549</b>	—
Gains on disposal of property, plant and equipment	<b>2,737</b>	496
Donation	<b>(874)</b>	(85)
Others	<b>(10,205)</b>	1,808
	<b>68,967</b>	20,689

(a) On 1 March, 2016, the Group disposed its 100% equity interests in its subsidiary, Beijing Anton Petroleum Machinery Co., Ltd. to a third party. The Group received cash consideration amounting to RMB77,000,000 and recognised a gain amounting to RMB 62,616,000.

(b) On 19 January, 2016, Beijing Huarui Mei'er Petroleum Technology Co., Ltd, a wholly-owned subsidiary of the Group, was dissolved and a loss amounting to RMB717,000 was recognised.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 26. FINANCE COSTS, NET

	Year ended 31 December	
	2016	2015
Interest expenses		
– on bank borrowings	<b>(48,776)</b>	(44,308)
– on bonds	<b>(140,697)</b>	(145,858)
– on put option of non-controlling interest	<b>(15,453)</b>	—
Exchange gain/(loss), net	<b>34,939</b>	(56,201)
Others	<b>(5,900)</b>	(12,812)
Finance costs	<b>(175,887)</b>	(259,179)
Total finance costs	<b>(175,887)</b>	(259,179)
Interest income	<b>2,508</b>	4,409
	<b>(173,379)</b>	(254,770)

### 27. STAFF COSTS

	Year ended 31 December	
	2016	2015
Wages, salaries and allowances	<b>295,035</b>	370,183
Housing subsidies (a)	<b>6,753</b>	20,036
Contributions to pension plans (b)	<b>23,390</b>	49,501
Share option costs		
– equity settled share-based payment (Note 16(a)(i))	<b>15,431</b>	14,571
Welfare and other expenses	<b>31,117</b>	16,192
	<b>371,726</b>	470,483

(a) Housing subsidies mainly include the Group's contributions to government-sponsored housing funds, at rates ranging from 5% to 12% of the employees' salaries for the Group's Chinese employees in the PRC.

(b) This represents the Group's contributions to defined contribution plans or schemes organised by relevant government authorities or authorised entities in accordance with the requirements in the locations where the Group operates.

The Group has no other material obligations for the payment of pensions and other post-retirement benefits of employees or retirees other than those disclosed above.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 27. STAFF COSTS (Continued)

(c) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year include two (2015: two) directors whose emoluments are reflected in the analysis shown in Note 38. The emolument payable to the other three (2015: three) individuals during the year are as follows:

	<b>Year ended 31 December</b>	
	<b>2016</b>	2015
Basic salaries, housing allowances, other allowances and benefits-in-kind	<b>4,637</b>	5,283
Contributions to pension schemes	<b>143</b>	136
	<b>4,780</b>	5,419

The emoluments fell within the following bands:

	<b>Number of individuals</b>	
	<b>2016</b>	2015
Emoluments bands		
RMB Nil - RMB1,000,000	—	—
RMB1,000,000 - RMB1,500,000	<b>1</b>	—
RMB1,500,000 - RMB2,000,000	<b>2</b>	3
	<b>3</b>	3

(d) During the years ended 31 December 2016 and 2015, no directors or the five highest paid individuals of the Group waived any emoluments and no emoluments were paid by the Group to any of the directors or the five highest paid individuals of the Group as an inducement to join or upon joining the Group or as compensation for loss of office.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### 28. INCOME TAX EXPENSE

	Year ended 31 December	
	2016	2015
Current income tax		
– PRC enterprise income tax	<b>2,734</b>	9,588
– Iraq corporate income tax	<b>51,869</b>	28,897
– Others	<b>210</b>	336
Deferred income tax (Note 22)	<b>12,268</b>	(6,911)
	<b>67,081</b>	31,910

The Company is incorporated in the Cayman Islands as an exempted company with limited liability under the Companies Law of the Cayman Islands and, accordingly, is exempted from payment of Cayman Islands income tax.

PRC enterprise income tax ("EIT") is provided on the basis of estimated taxable profits of PRC established subsidiaries at applicable tax rate of 25% in 2016 (2015: 25%), based on the relevant PRC tax laws and regulations, except for certain subsidiaries which are taxed at preferential tax rates of 15% and 12.5%. These subsidiaries have been granted a preferential rate of 15% as high technology enterprises or as enterprises set up in western area of the PRC. Certain entities qualifies for a tax holiday of 2-year exemption and 3-year 50% reduction, pursuant to Caishui [2008] No.1.

The corporate income tax of Iraq entities is levied at the higher of 7% on the total turnover, or 35% on the net taxable profit.

The taxation of the Group's loss before income tax differs from the theoretical amount that would arise using applicable tax rates of the Group companies as follows:

	Year ended 31 December	
	2016	2015
Loss before income tax	<b>(30,591)</b>	(163,338)
Tax calculated at applicable tax rates	<b>21,577</b>	(2,462)
Income not subject to taxation	<b>(2,000)</b>	(9,446)
Expenses not deductible for taxation purposes	<b>1,828</b>	8,012
Additional deduction of research and development expense	<b>(799)</b>	(834)
Taxable losses for which no deferred income tax asset was recognised	<b>34,000</b>	35,894
Withholding tax from overseas income	<b>—</b>	464
Reversal of the deferred tax assets from prior years	<b>12,325</b>	—
Others	<b>150</b>	282
	<b>67,081</b>	31,910

## Notes to the Consolidated Financial Statements

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### 29. LOSS PER SHARE

#### (a) Basic

Basic loss per share is calculated by dividing the loss attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year.

	<b>Year ended 31 December</b>	
	<b>2016</b>	2015
Loss attributable to equity holders of the Company (RMB'000)	<b>(160,450)</b>	(194,731)
Weighted average number of ordinary shares in issue (thousands of shares)	<b>2,227,365</b>	2,219,077
Basic loss per share (expressed in RMB per share)	<b>(0.0720)</b>	(0.0878)

#### (b) Diluted

For the year ended 31 December 2016 and 2015, the Group made a loss therefore the effect of share options was anti-dilutive and is ignored from the calculation of diluted loss per share. The diluted loss per share is calculated in the same way with basic loss per share.

### 30. DIVIDENDS

No dividend has been declared in respect of the financial year ended 31 December 2016 (2015: Nil).



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

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### 31. NOTES TO THE CONSOLIDATED CASH FLOW STATEMENT

(a) Reconciliation of loss for the year to net cash inflows generated from operations:

	<b>Year ended 31 December</b>	
	<b>2016</b>	<b>2015</b>
Loss for the year	<b>(97,672)</b>	(195,248)
Adjustments for:		
Property, plant and equipment		
– depreciation charge	<b>183,402</b>	180,519
– gain on disposals	<b>(2,737)</b>	(496)
Amortisation of land use rights and intangible assets	<b>11,735</b>	20,212
Amortisation of prepaid operating lease payment	<b>5,255</b>	21,300
Addition of impairment of receivables	<b>13,064</b>	9,721
Addition of impairment of inventories	<b>97,481</b>	11,607
Disposal of a joint venture	<b>(549)</b>	—
Gain on goodwill impairment charge	<b>—</b>	26,325
Charge of share option scheme	<b>15,431</b>	14,571
Gain on disposal of a subsidiary	<b>(62,616)</b>	—
Loss on dissolve of a subsidiary	<b>717</b>	—
Share of loss of an associate/joint venture	<b>408</b>	1,042
Net foreign exchange (gain)/loss	<b>(34,939)</b>	56,201
Interest income	<b>(2,508)</b>	(4,409)
Interest expenses on put option	<b>15,453</b>	—
Interest expenses on bank borrowings and bonds	<b>189,473</b>	190,166
Income tax expense	<b>67,081</b>	31,910
Changes in working capital:		
Inventories	<b>(13,072)</b>	(107,655)
Trade and notes receivables	<b>(132,969)</b>	294,095
Prepayments and other receivables and value-added tax recoverable	<b>34,406</b>	(50,836)
Trade and notes payables	<b>169,145</b>	(114,404)
Accruals and other payables	<b>(84,236)</b>	109,112
Restricted bank deposits	<b>(223,079)</b>	(85,936)
Net cash inflows from operations	<b>148,674</b>	407,797

## Notes to the Consolidated Financial Statements

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(Amounts expressed in thousands of RMB, unless otherwise stated)

### 32. COMMITMENTS

#### (a) Capital commitments

Capital commitments related to investments in property, plant and equipment at the balance sheet date but not yet provided for in the balance sheets were as follows:

	<b>As at 31 December 2016</b>	2015
Contracted but not provided for	<b>27,546</b>	49,778

#### (b) Operating lease commitments - where the Group is the lessee

The Group leases various offices and warehouses under non-cancellable operating lease agreements.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	<b>As at 31 December 2016</b>	2015
No later than 1 year	<b>6,673</b>	7,534
1 to 5 years	<b>24,311</b>	28,885
Over 5 years	<b>5,993</b>	13,284
	<b>36,977</b>	49,703

### 33. TRANSACTIONS WITH NON-CONTROLLING INTERESTS

#### Acquisition of additional interest in a subsidiary

On 21 July 2016, Anton Oil acquired an additional 25% of the issued shares of Shandong Precede for a purchase consideration of RMB25,983,000. The carrying amount of the non-controlling interests in Shandong Precede on the date of acquisition was RMB29,161,000. The Group recognised a decrease in non-controlling interests of RMB29,161,000 and an increase in other reserves of RMB3,178,000.

## Notes to the Consolidated Financial Statements

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### 34. DISPOSAL OF INTEREST IN A SUBSIDIARY WITHOUT LOSS OF CONTROL

On 16 May 2016, the Company, Anton International and DMCC entered into an agreement with China Oil HBP Science & Technology Co., Ltd. ("the Partner"), a third party, and Hong Kong Huihua Global Technology Limited (the "Purchaser"), a wholly-owned subsidiary of the Partner, pursuant to which Anton International will transfer 40% interest in DMCC to the Purchaser at a consideration of RMB700,000,000. DMCC was an indirect wholly-owned subsidiary of the Company on the date of disposal. The Partner is a company incorporated in the PRC and is principally engaged in Engineering Procurement Construction ("EPC") business. The transaction was approved by an extraordinary general meeting of the Company held on 26 July 2016. The Group recognised an increase in non-controlling interests by RMB320,966,000 and an increase in equity attributable to owners of the Company of RMB379,034,000. The effect of changes in the ownership interest of DMCC on the equity attributable to owners of the Company during the year is summarised as follows:

	As at 31 December 2016	2015
Carrying amount of interests disposed of	<b>(320,966)</b>	—
Consideration received	<b>700,000</b>	—
Gain on disposal recognised within equity	<b>379,034</b>	—

Pursuant to the agreement, the Purchaser has the right to request Anton International to repurchase the 40% equity interest at the original price with a premium of interest at 10% per annum if DMCC failed to fulfil the profit commitments as prescribed in the agreement. Therefore the Group recognised a financial liability amounting to RMB700,000,000 by debiting to other reserve, bearing interest at 10% per annum (Note 21).

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### 35. RELATED PARTY TRANSACTIONS

Parties are considered to be related if one party has the ability, directly or indirectly, control the other party or exercise significant influence over the other party in making financial and operation decisions. Parties are also considered to be related if they are subject to common control. Members of key management of the Group are also considered as related parties.

#### (a) The following companies are related parties of the Group during the year ended 31 December 2016:

Names of related parties	Nature of relationship
Northern Heavy	Joint venture invested by Antonoil (till 10 May 2016)
TIPM	Joint venture invested by Anton Oil
China Oil HBP Science & Technology Co., Ltd. ("China Oil HBP")	Minority shareholders of DMCC
Beijing HBP Energy Technology Co., Ltd ("HBP Beijing")	Minority shareholders of DMCC
Xinjiang PengAn	Associate invested by Anton Oil
China Nanhai Magcobar Mud Co., Ltd. ("Nanhai Magcobar")	Controlled by the same ultimate parent company of Schlumberger NV ("SLB NV")
Schlumberger Oilfield China ("SLB China")	Controlled by the same ultimate parent company of SLB NV
Smith Drilling Equipment (Changzhou) Ltd. ("Smith Drilling")	Controlled by the same ultimate parent company of SLB NV
Dowell Schlumberger (Western) S.A. ("Dowell SLB")	Controlled by the same ultimate parent company of SLB NV
Schlumberger Technologies (Beijing) Ltd. ("SLB Beijing")	Controlled by the same ultimate parent company of SLB NV
Schlumberger Reservoir Products FZE ("SLB FZE")	Controlled by the same ultimate parent company of SLB NV
SCP Oilfield Company ("SCP")	Controlled by the same ultimate parent company of SLB NV
Schlumberger Technologies (Shandong) Ltd. ("SLB Shandong")	Controlled by the same ultimate parent company of SLB NV
Schlumberger Technologies (Chengdu) Ltd. ("SLB Chengdu")	Controlled by the same ultimate parent company of SLB NV
SCHLUMBERGER LOGELCO INC ("SMITH KZ")	Controlled by the same ultimate parent company of SLB NV
Schlumberger Technology Corporation ("SLB Tech")	Controlled by the same ultimate parent company of SLB NV

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**35. RELATED PARTY TRANSACTIONS** (Continued)**(b) Transactions with related parties**

	<b>Year ended 31 December</b>	
	<b>2016</b>	<b>2015</b>
<b>Purchases of goods or services</b>		
Northern Heavy	—	4,938
Nanhai Magcobar	<b>12,361</b>	21,730
SLB China	<b>44,179</b>	25,228
SLB Beijing	—	316
Smith Drilling	<b>3,195</b>	12,057
SLB Chengdu	<b>901</b>	—
HBP Beijing	<b>13,094</b>	—
SMITH KZ	<b>5,883</b>	—
SLB Tech	<b>1,886</b>	—
	<b>81,499</b>	64,269
<b>Sales of goods</b>		
SLB China	<b>157</b>	4,253
Northern Heavy	—	503
SLB Beijing	—	11
Xinjiang PengAn	<b>8,295</b>	—
SLB Shandong	<b>392</b>	—
SLB Chengdu	<b>13</b>	—
	<b>8,857</b>	4,767

Goods are sold and purchased based on the price lists in force and terms that would be available to third parties.

## Notes to the Consolidated Financial Statements

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**35. RELATED PARTY TRANSACTIONS** (Continued)**(c) Balances with related parties**

	<b>As at 31 December</b>	
	<b>2016</b>	2015
<b>Trade and notes receivables</b> (Note 13)		
SLB China	<b>634</b>	3,463
TIPM	<b>—</b>	5,000
Xinjiang PengAn	<b>5,618</b>	—
	<b>6,252</b>	8,463
<b>Trade and notes payable</b> (Note 20)		
Northern Heavy	<b>—</b>	4,072
Nanhai Magcobar	<b>17,970</b>	22,101
SLB China	<b>59,571</b>	12,886
SLB Beijing	<b>262</b>	262
Smith Drilling	<b>3,406</b>	12,962
SLB Chengdu	<b>1,454</b>	—
HBP Beijing	<b>13,094</b>	—
	<b>95,757</b>	52,283
<b>Prepayments and other receivables</b> (Note 14)		
SLB Chengdu	<b>13</b>	—
Xinjiang PengAn	<b>479</b>	—
SLB Tech	<b>1,982</b>	—
China Oil HBP	<b>343,000</b>	—
	<b>345,474</b>	—
<b>Accruals and other payables</b>		
SLB FZE	<b>6,947</b>	16,473
Northern Heavy	<b>—</b>	519
China Oil HBP (Note 21)	<b>715,453</b>	—
	<b>722,400</b>	16,992

Balances with related parties were unsecured, non-interest bearing and had no fixed repayment terms except for payable to China Oil HBP.

## Notes to the Consolidated Financial Statements

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### 35. RELATED PARTY TRANSACTIONS *(Continued)*

#### (d) Key management compensation

	<b>Year ended 31 December</b>	
	<b>2016</b>	2015
Salaries and other short-term employee benefits	<b>16,641</b>	15,757
Pension scheme	<b>471</b>	520
Share-based payments	<b>4,579</b>	7,350
	<b>21,691</b>	23,627

### 36. EVENTS AFTER THE REPORTING PERIOD

On 15 December 2016, the Company entered into a subscription agreement with an independent third party pursuant to which the independent third party agreed to subscribe 221,619,604 new shares of the Company at HK\$1.0080 per share. The subscription shares represent approximately 9.09% of the existing issued share capital of the Company and approximately 8.33% of the Company's issued share capital as enlarged by the subscription. The subscription was completed on 25 January 2017.

In February 2017, the Group entered into an agreement with Mr. Liu Dong and Sichuan Anzheng Education Consulting Services Co., Ltd., both independent third parties, whereby the Group will transfer its entire equity interest in Anton New Material (Suining) Co., Ltd., a wholly-owned subsidiary of the Group, together with cash of RMB37,360,000 and a waiver of the long-term lease prepayment of RMB46,000,000, in exchange for 80% equity interest in Suining Anzheng Investment Co., Ltd. (the "Transaction"), an entity wholly owned by Sichuan Anzheng Education Consulting Services Co., Ltd.. As of the date of these financial statements are approved for issue, the Transaction has not been completed.

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**37. BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY**

	<b>As at 31 December 2016</b>	2015
<b>Assets</b>		
<b>Non-current assets</b>		
Intangible assets	—	661
Investments in subsidiaries	<b>5,147,843</b>	5,062,028
	<b>5,147,843</b>	5,062,689
<b>Current assets</b>		
Trade and notes receivables	<b>50,833</b>	47,582
Prepayments and other receivables	<b>1,372</b>	604
Restricted bank deposits	—	166
Cash and cash equivalents	<b>49,957</b>	5,827
	<b>102,162</b>	54,179
<b>Total assets</b>	<b>5,250,005</b>	5,116,868
<b>Equity and liabilities</b>		
<b>Equity</b>		
Share capital	<b>226,578</b>	207,629
Other reserves (a)	<b>2,850,555</b>	2,903,791
<b>Total equity</b>	<b>3,077,133</b>	3,111,420
<b>Liabilities</b>		
<b>Non-current liabilities</b>		
Long-term bonds	<b>1,694,940</b>	1,584,635
<b>Current liabilities</b>		
Accruals and other payables	<b>477,932</b>	420,813
	<b>477,932</b>	420,813
<b>Total liabilities</b>	<b>2,172,872</b>	2,005,448
<b>Total equity and liabilities</b>	<b>5,250,005</b>	5,116,868

The balance sheet of the Company was approved by the Board of Directors on 27 March 2017 and was signed on its behalf.

*Chairman*  
Luo Lin

*Executive Director*  
Pi Zhifeng



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For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

**37. BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY** *(Continued)***(a) Reserve movement of the Company**

	Share premium	Capital reserve	Accumulated losses	Total
<b>At 1 January 2015</b>	448,921	2,979,069	(343,745)	3,084,245
Loss for the year	—	—	(203,645)	(203,645)
Share option scheme	—	14,571	—	14,571
Share option exercised	11,982	(3,362)	—	8,620
<b>At 31 December 2015</b>	460,903	2,990,278	(547,390)	2,903,791
<b>At 1 January 2016</b>	<b>460,903</b>	<b>2,990,278</b>	<b>(547,390)</b>	<b>2,903,791</b>
Loss for the year	—	—	(242,380)	(242,380)
Share option scheme	—	15,431	—	15,431
Issued of ordinary shares	175,835	—	—	175,835
Repurchase and cancellation of shares	(2,122)	—	—	(2,122)
<b>At 31 December 2016</b>	<b>634,616</b>	<b>3,005,709</b>	<b>(789,770)</b>	<b>2,850,555</b>



## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

**38. BENEFITS AND INTERESTS OF DIRECTORS** (Continued)**(a) Directors' and chief executive's emoluments** (Continued)

For the year ended 31 December 2015:

Name	Fees	Salary	Discretionary bonuses	Housing allowance	Estimated money value of other benefits (1)	Employer's contribution to a retirement benefit scheme	Remunerations paid or receivable in respect of accepting office as director	Emoluments paid or receivable in respect of director's other services in connection with the management of the affairs of the company or its subsidiary undertaking	Total
<b>Executive Directors</b>									
Mr. Luo Lin	—	1,518	10	—	74	—	—	—	1,602
Mr. Pi Zhifeng	—	1,598	10	—	85	—	—	—	1,693
Mr. Wu Di	—	912	—	—	102	—	—	—	1,014
Mr. Liu Enlong	—	385	—	—	17	—	—	—	402
<b>Independent Non-executive Directors</b>									
Mr. Zhang Yongyi (iii)	433	—	—	—	—	—	—	—	433
Mr. Zhu Xiaoping (iii)	433	—	—	—	—	—	—	—	433
Mr. Wang Mingcai (iii)	433	—	—	—	—	—	—	—	433

Note:

- (i) Other benefits include pension plans, housing subsidies and other insurance premium.
- (ii) Mr. John William Chisholm was appointed as non-executive director on 2 November 2016.
- (iii) 2,700,000 share options on aggregate were granted to three independent non-executive directors during the year ended 31 December 2016 (2015: 1,440,000 share options), and the total expense recognised in the consolidated income statement for year ended 31 December 2016 amounted to RMB1,712,000 (31 December 2015: RMB1,117,000) which are not included in this summary.

## Notes to the Consolidated Financial Statements

For the year ended 31 December 2016

(Amounts expressed in thousands of RMB, unless otherwise stated)

### **38. BENEFITS AND INTERESTS OF DIRECTORS** *(Continued)*

#### **(b) Directors' retirement benefits**

During the year ended 31 December 2016, no retirement benefits operated by the Group were paid or made, directly or indirectly, to or receivable by a director in respect of his services as a director or other services in connection with the management of the affairs of the Company or its subsidiaries (2015: Nil).

#### **(c) Directors' termination benefits**

During the year ended 31 December 2016, no payments or benefits in respect of termination of director's services were paid or made, directly or indirectly, to or receivable by a director; nor are any payable (2015: Nil).

#### **(d) Consideration provided to third parties for making available directors' services**

During the year ended 31 December 2016, no consideration was provided to or receivable by third parties for making available director's services (2015: Nil).

#### **(e) Information about loans, quasi-loans and other dealings in favour of directors, controlled bodies corporate by and connected entities with such directors**

There are no loans, quasi-loans or other dealings in favour of directors, controlled bodies corporate by and connected entities (2015: Nil).

#### **(f) Directors' material interests in transactions, arrangements or contracts**

No significant transactions, arrangements and contracts in relation to the Group's business to which the Company was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year (2015: Nil).