#### Overview

We are one of the leading Chinese non-state-owned providers of integrated oilfield services in the market segments we serve in China in terms of revenue in 2010, according to Spears and Associates. We are one of the few non-state-owned providers of oilfield services in China that have the capability to provide integrated oilfield services ranging from reservoir research, drilling, well completion and well testing to oil and gas production-related services (e.g., oil and gas production enhancement), well workover and other related services. We also manufacture and sell oilfield service-related products to our customers. We offer customised solutions that integrate sophisticated well design with technologically advanced tools and materials. Our solutions, which focus on increasing oil and gas productivity and extending well life in technically demanding geological conditions, has enabled us to gain and retain a stable client base.

## PRC and Overseas Markets

Our operations cover an extensive geographic range in China. We are currently operating in the Tarim Oilfield, Changqing Oilfield, Daqing Oilfield, Jilin Oilfield, Jidong Oilfield, Dagang Oilfield and several other major oilfields in China. We generated a significant portion of our revenue from the Tarim Oilfield during the Track Record Period by primarily providing well completion services on high-end or critical services wells— wells that are deep, high pressure and/or high temperature. According to Spears and Associates, in the three market segments we serve (i.e., drilling, well completion and reservoir services) in China, we have an aggregate 5% share of the market that is captured by non-state-owned services providers, or a 0.5% share of the entire market, in terms of revenue in 2010.

To diversify our customer base, enhance our market competitiveness and capture business opportunities in new markets, we have strategically expanded our operation to overseas regions that are active in the global oil and gas industry, including Central Asia, North America, Southeast Asia and the Middle East. For the three years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2011, revenue generated from our overseas subsidiaries accounted for approximately 59.2%, 59.0%, 57.9% and 70.0% of our total revenue, respectively. We commenced our operations in Kazakhstan in 2002 and Kazakhstan has grown to become our most important overseas market. Revenue of our subsidiaries in Kazakhstan accounted for approximately 44.0% and 53.4% of our total revenue for the year ended 31 December 2010 and the six months ended 30 June 2011, respectively. We provide a wide range of oilfield services in Kazakhstan and our major customers in Kazakhstan include subsidiaries and affiliates of CNPC. According to Spears and Associates, we have a market share of approximately 13% of the oilfield services market segments we serve in Central Asia, including Kazakhstan, Turkmenistan, Uzbekistan and Azerbaijan, in terms of revenue in 2010.

Our operations are geographically diversified, with the revenue of our subsidiaries in China, Kazakhstan, Canada, Singapore and other regions accounting for 30.0%, 53.4%, 9.5%, 4.4% and 2.7% of our total revenue, respectively, for the six months ended 30 June 2011. Our major customers in China, Kazakhstan and other overseas markets primarily include subsidiaries and affiliates of CNPC. The profit margins of our services depend on a number of factors including reservoir's geological conditions, service complexity, the `cost of materials and equipment and the service fees we pay to third parties. For the Track Record Period, the profit margins of our overseas subsidiaries<sup>(1)</sup> were 42.3%, 35.0%, 28.5% and 28.0%, and the profit margins of our overseas subsidiaries decreased during the Track Record Period primarily due to the decrease of such subsidiaries' revenue from the reservoir services segment, which has a higher profit margin than the other two segments, i.e., drilling and well completion services.

To further develop our business and diversify our revenue sources, we intend to continue to expand our operations in the overseas markets and continue our focus on key oil and gas producing regions. While we endeavour to seek more business opportunities with local and international oil companies in our overseas markets, we will continue to provide oilfield services to Chinese state-owned oil companies, including CNPC, as

<sup>&</sup>lt;sup>(1)</sup> Only taking into account the direct, attributable expenses and costs of such subsidiaries.

<sup>(2)</sup> Only taking into account the direct, attributable expenses and costs of such subsidiaries, and such direct expenses and costs do not include the inventory write-off amounting to RMB58.5 million in 2008.

they expand their overseas operations. Furthermore, we believe it is important to enhance our leading position as a specialist in certain high-end oilfield services in order to differentiate ourselves from our competitors and attract potential business opportunities, and we intend to consider acquisition opportunities that could complement our service portfolio and improve our technological expertise.

#### **Relationship with CNPC**

We derived a majority of our revenue from the provision of services to the subsidiaries and affiliates of CNPC, China's largest state-owned oil and gas company. The revenue generated from our five largest customers, all of which are subsidiaries or affiliates of CNPC, accounted for 66.6%, 72.0%, 65.1%, 70.4% and 69.7% of our total revenue for the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and 2011, respectively. Our revenue attributable to CNPC, on a group basis, accounted for 82.3%, 90.6%, 87.1%, 88.9% and 82.3% of our total revenue for the same periods. We have entered into long-term strategic alliances with some of these major customers, including CNODC, PetroChina Tarim Oilfield Company, PetroChina Exploration & Production Company and CPTDC, all of which are subsidiaries or affiliates of CNPC. We have made and will continue to make significant efforts to reduce our business concentration on subsidiaries and affiliates of CNPC. We have expanded into certain overseas markets to provide services to other oil and gas companies. For example, we set up our Dubai branch office in July 2010 to seek business opportunities with local and international oil and gas companies in the Middle East. We expanded into Indonesia and secured several service contracts there, including a package drilling service contract with a contract value of US\$2.7 million with an Indonesian subsidiary of an Australian company in 2011. We hired a number of senior marketing managers with extensive marketing and business development experience from international oilfield services providers, to strengthen our marketing efforts targeting local and international oil and gas companies in our overseas markets. We have also placed a significant emphasis on the level of success in securing new business from local and international oil and gas companies when evaluating the performance of the staff in our overseas subsidiaries.

# Service Contracts

Some of our service contracts require us to provide services to our customers for a definite term (typically one year), while others require us to provide services for a specific number of well operations or to provide particular services. The terms and conditions of our service contracts normally include engineering and quality requirements specified by our customers. Pricing is determined by taking into account factors such as the complexity of the services and the costs incurred in providing such services. Our customers are normally required to provide us with support and utilities such as power and water that are necessary for performing the services. Depending on specific geological and other relevant conditions and the types of services, a well operations may last from a few days to a few months and a service contracts may be terminated due to force majeure events or a party's failure to perform the contractual obligations. Our customers are normally required to settle the payment of our service fees within three to six months after having accepting our services, except for certain services for which our customers withhold a small portion (typically 5%) of the service fees and settle the same with us within one year after having accepted our services.

#### Strategic Alliance with Halliburton

We have entered into strategic alliances with several international and domestic oilfield services providers, including Halliburton, one of the largest diversified oil field services companies in the world with a significant presence in a number of product and services lines in various regions. According to Spears and Associates, Halliburton's market share in 2010 in the drilling, well completion and reservoir services segments were estimated to be approximately 35%-45%, 30%-40% and 25%-35%, respectively, in regions covering Central Asia, the Middle East and the Far East, and Halliburton captured 1.8% of the drilling, well completion and reservoir services in China in 2010. Although Halliburton's market share in China is not substantial, we believe that our collaboration with them in China is beneficial to us and enhances our competitiveness in this market given their proven expertise in providing high-end oilfield services.

#### Intellectual Property

We possess advanced services technology and expertise, which we have developed through years of experience in the oil and gas industry. We place a strong emphasis on research and development to ensure that we continue to possess advanced technology critical to maintain our competitiveness. Through our research and development efforts, we have successfully improved some of our services. For example, we have been continuously improving the functionality, efficiency and other features of the PPS series of electronic pressure gauges that are used to monitor well pressure with high precision. These gauges are widely applied in well testing operations worldwide. Currently, it is one of the few models of pressure gauges in the world that can operate reliably for an extended period of time under extreme downhole conditions at temperatures as high as 200°C. As at the Latest Practicable Date, we held 30 patents and had 11 patent applications pending approval in China.

For the three years ended 31 December 2008, 2009 and 2010 and for the six months ended 30 June 2010 and 2011, our revenue was RMB663.9 million, RMB911.5 million, RMB1,050.4 million, RMB392.0 million and RMB408.5 million, respectively. For the same periods, our operating profit was RMB146.7 million, RMB153.1 million, RMB180.9 million, RMB58.5 million and RMB68.6 million, respectively, while our net profit attributable to equity holders of the Company was RMB95.3 million, RMB84.8 million and RMB119.5 million, RMB38.9 million and RMB47.2 million, respectively.

#### **Our Strengths**

We believe the following competitive strengths contribute to our success in the oilfield services industry and distinguish us from our competitors:

#### Strong market position as one of the leading Chinese non-state-owned providers of integrated oilfield services

We are one of the leading Chinese non-state-owned providers of integrated oilfield services in the market segments we serve in China in terms of revenue in 2010, according to Spears and Associates. Since 1998 when we commenced our operations, we have accumulated extensive experience and expertise in oilfield services. We are one of the few non-state-owned providers of oilfield services in China that have the capability to provide integrated oilfield services ranging from reservoir research, drilling, well completion and well testing to oil and gas production-related services (e.g., oil and gas production enhancement), well workover and other related services. Based on our expertise and in-depth understanding of customers' needs and by leveraging the strategic alliance that we have established with Halliburton, we are able to provide technologically advanced and highly customised services to our customers at competitive prices.

Our operations cover an extensive geographic range in China. We have provided services to oilfields across China, including the Tarim Oilfield, Changqing Oilfield, Daqing Oilfield, Jilin Oilfield, Jidong Oilfield, Dagang Oilfield and several other major oilfields. We have also strategically expanded our operations to overseas regions that are active in the oil and gas industry, including Central Asia, North America, Southeast Asia and the Middle East. The aggregate revenue of our subsidiaries in these regions constituted approximately 70% of our total revenue for the six months ended 30 June 2011.

We believe that our market leading position, extensive industry experience, wide range of integrated services and products, and growing international presence enabled us to grow significantly from 2008 to 2010, notwithstanding the global financial crisis and a slowdown in the growth of world oil consumption. Our revenue increased from RMB663.9 million for the year ended 31 December 2008 to RMB911.5 million for the year ended 31 December 2009, and further increased to RMB1,050.4 million for the year ended 31 December 2010, representing a CAGR of 25.8% for the period between 2008 and 2010. Our revenue increased from RMB392.0 million for the six months ended 30 June 2010 to RMB408.5 million for the six months ended 30 June 2011. As the global economy recovers, global oil and gas consumption is expected to grow substantially in the next ten years, according to Spears and Associates. We expect that the demand for oilfield services will grow accordingly and we believe that, as one of the leading Chinese non-state-owned providers of oilfield services, we will benefit from that growth.

## Extensive experience and proven track record in overseas operations

We are one of the first Chinese non-state-owned oilfield services companies to establish overseas offices. We commenced our overseas operations in 2000, and have so far expanded our operations into Central Asia, North America, Southeast Asia and the Middle East.

In Central Asia, we have established operational bases, and have significant operations, in Kazakhstan and Turkmenistan. As at the Latest Practicable Date, we had more than 800 local employees in Central Asia and were able to provide a full spectrum of services including drilling, well completion and reservoir services. We performed an average of more than 50,000 well operations in Central Asia in each of the years from 2008 to 2010.

In North America, we have established two subsidiaries in Canada to provide research and development, manufacturing, trading and other support for our services in other regions. According to Spears and Associates, one of our Canadian subsidiaries, PPS, is a global leader in downhole electronic pressure gauge technology, and is one of the only two companies in the world that are currently producing leading electronic pressure gauges for high-pressure (over 20,000 psi) and high-temperature (200°C) wells with a diameter of 19 millimetres. PPS also offers one of the most complete ranges of downhole pressure and temperature gauges in the world, according to Spears and Associates.

We have also expanded into Southeast Asia and the Middle East. We believe that our successful overseas expansion positions us for future growth in these markets, diversifies our revenue sources and customer base and enhances our market competitiveness.

# Solid customer base and strategic alliances with key customers and a leading international oilfield services provider

We have developed and maintained strong and long-term relationships with our key customers, many of which are subsidiaries or affiliates of CNPC, the largest oil and gas company in China in terms of production volume in 2010. We have entered into long-term strategic alliances with some of our key customers, including CNODC, PetroChina Tarim Oilfield Company, PetroChina Exploration & Production Company and CPTDC, all of which are subsidiaries or affiliates of CNPC. These long-term strategic alliances will better position us for future contracts with those customers. We believe that our existing client base and our long-term relationships with key customers will provide us with a steady source of revenue.

Further, we have entered into a strategic alliance with Halliburton, a leading international oilfield services provider. See "—Strategic alliance with Halliburton." Our strategic partnership with Halliburton has helped us to gain exposure to internationally advanced technologies and management techniques, to expand into certain technologically challenging markets, and to enhance our competitiveness. For example, we have cooperated with Halliburton in providing high-end drilling services in the Tarim Oilfield, including FMPD and geosteering drilling services.

# Advanced technologies, dedicated technological expertise and strong research and development capabilities

We possess advanced technology and expertise in the oilfield services industry. We place strong emphasis on research and development to ensure that we possess advanced technology critical for our competitiveness. As at the Latest Practicable Date, we held 30 patents and had 11 patent applications pending approval in China. See "—Research and Development." Our research and development efforts have led to some new well completion techniques that can significantly improve well productivity. For example, we developed an integrated technology for well testing, completion and acidising that combined the traditional three string trips into one and significantly reduced project duration and costs. Also, we have developed the PPS series of electronic pressure gauges, which have a high level of precision in monitoring well pressure and have been widely applied in oilfield services and well testing operations worldwide. This is one of the few models of pressure gauges that can operate reliably for prolonged periods of time under extreme downhole conditions at temperatures as high as 200°C.

We are experienced in combining internationally advanced technologies with our deep understanding of customers' needs, local industry practices and geological conditions to provide high-end oilfield services. For example, by utilising Halliburton's drilling technology, we successfully completed the first class-4 dual-lateral drilling operation in the Tarim Oilfield in 2010 at a well 5,082m deep, one of the deepest class-4 multilateral wells in the world.

We have dedicated research and development teams in Canada and China. In addition, each of our business divisions in China has designated research and development personnel who focus their research on services-related practical techniques. As at the Latest Practicable Date, we had more than 80 research and development personnel. We believe our leading technologies, coupled with our strong research and development capabilities in the oilfield services industry, will continue to serve as key drivers for our growth in the future.

#### Experienced and stable management team with expertise in the oilfield services industry

We have an experienced and stable management team with diverse background and substantial expertise in the oilfield services industry. Our senior management team is headed by our founders, Mr. Wang and Mr. Wu, each having approximately 20 years of experience in the oil and gas industry. In addition, a majority of our senior management team is experienced in and knowledgeable about the oil and gas industry. Some of them have previously served in executive positions in major oil and gas enterprises. The industry experience and knowledge of our senior management team have significantly contributed to the success of our operations. Although competition for qualified and experienced personnel is intense in our industry, we have generally been able to retain the core members of our management team since our inception. The stability of our management team is critical to our long-term development and the continued growth of our business.

# **Our Strategies**

We aim to become a leading China-based international oilfield services provider. We plan to achieve this goal through the following strategies:

# Continue to expand our overseas market operations

We intend to continue to expand our business in overseas markets to further grow our business and diversify our revenue sources. Specifically:

- We plan to further develop our business in selected key oil and gas-producing regions around the world, focusing on countries and regions with substantial oil and gas reserves and high demand for oil and gas development and production services.
- The PRC government's current oil and natural resources strategy, as mandated in the "12th Five-Year Plan," encourages the three major Chinese state-owned oil companies to continue their efforts to acquire more oil and gas assets in foreign countries. We plan to grow our operations in conjunction with the business expansion of the three major Chinese state-owned oil companies by providing oilfield services to their overseas operations.

# Expand our ability to provide integrated services and solutions in order to gain market share and capture new opportunities

We expect to continue to broaden our services and products portfolio to take advantage of new opportunities and strengthen our market position. Specifically:

- We plan to develop our capability to conduct seismic analysis to enhance our overall reservoirevaluation capabilities, which will allow us to provide more services for reservoir property prediction.
- Through our research and development activities, we plan to further develop our capability to provide advanced shale gas reservoir analysis and evaluation services in response to the potentially large shale gas and CBM market in both China and overseas, as these resources are becoming an increasingly

important source of natural gas. CNPC and certain other Chinese state-owned oil and gas companies are allocating more resources to develop these resources. We secured a staged fracturing service contract with CNPC in March 2011 for two shale gas wells in Sichuan with a contract value of approximately RMB18.0 million.

# Continue to strengthen our relationships with major PRC oil and gas companies and further expand our strategic alliance with international oilfield services providers

Our strong and strategic relationships with major PRC state-owned oil companies, in particular CNPC, provide us with opportunities to grow in conjunction with their expansion and to develop new markets for our services and products. We intend to develop a deeper understanding of the needs of our customers' oilfield projects so that we will be able to routinely perform early stage oilfield evaluation, project planning and design services. In addition, we will continue to strengthen our relationship with our existing strategic partners and may establish strategic alliances or joint venture relationships with other leading oilfield services providers to enhance our ability to provide more high-end integrated oilfield services and to achieve cost savings.

# Continue to strengthen our research and development capabilities and develop specialised industry-leading services

We will continue to strengthen our research and development capabilities through our in-house research and development efforts or by cooperating with renowned institutions and enterprises in our industry. To facilitate this strategy, we plan to commit more staff and funding to develop advanced technologies and maintain a high level of technical expertise. We intend to focus our research and development activities on:

- technologies and techniques that can enhance our operational efficiency and increase our overall competitiveness, including reservoir analysis technology, drilling technology and production enhancement technology;
- unique technologies in new business fields that can support our growth and expansion, including shale gas and CBM operations; and
- individual products with strong market potential that can be sold on an ongoing basis, including downhole electronic instruments and well completion tools.

In addition, we intend to establish research and development centres in the Tanggu District of Tianjin, China and Singapore, respectively, to strengthen our research and development capabilities.

#### Pursue acquisition opportunities to achieve our business development goals

We believe it is important to develop and maintain our leading position in certain specific oilfield services areas to differentiate ourselves from our competitors and to improve our overall competitiveness. We will consider acquisition opportunities to achieve that objective. We will also consider opportunities to acquire, invest in, or form joint ventures or strategic alliances with companies that can provide us with proprietary and innovative techniques, technology or other advantages. We believe that, upon the Listing, our status as a public company will better position us to pursue such acquisition, investment and cooperation initiatives.

#### **Principal Services and Products**

#### **Overview**

We provide oilfield services and products to Chinese and international oil and gas exploration and production companies. We provide our customers with integrated and customised services across a broad spectrum of exploration and production activities.

The oil and gas exploration and production process typically begins with the seismic exploration of rock formations to identify potential opportunities for oil and gas exploration and production. Then "wildcat" or

exploration wells are drilled to determine the presence of hydrocarbon (oil or gas) molecules. If such wells are considered to have the potential for economically sustainable oil or gas production, further appraisal wells are drilled to define the structure and size of the oil or gas resource. Once a field has been appraised to confirm commercial value, the development stage commences. This stage involves a range of activities, including drilling production wells, completing wells by installing a wellhead and production tubing, and constructing surface manufacturing facilities. Following the development stage, the process of production commences.

Services provided by oilfield services providers in respect of a particular well generally consist of three phases: (i) designing and engineering an optimal operation for the well; (ii) sourcing and procuring relevant equipment and materials for the operation and (iii) performing the operation on site.

Our services and products can be divided into the following three business lines covering different phases of oilfield services:

- Drilling services: mainly include the provision of vertical drilling, cementing, directional drilling, sidetracking, drilling fluids, FMPD, workover and other services;
- Well completion services: mainly include the provision of wellhead, completion string, sand control, acidising and fracturing services; and
- Reservoir services: mainly include the provision of well testing, artificial lifting, dynamic monitoring, slickline operations, oilfield chemistry and reservoir research services.

We are capable of providing well completion services for high-end and technically challenging wells. According to Spears and Associates, we have completed the largest number of high-end or critical services wells in the Tarim Oilfield each year during the Track Record Period and held the largest market share in 2010 of approximately 75% of the high-end or critical services well completion market in the Tarim Oilfield. We are also capable of providing well drilling services for high-end and technically challenging wells. For certain well drilling services, particularly FMPD and geosteering drilling services, we rely on third-party subcontractors, particularly Halliburton, to provide and operate certain equipment and tools.

We manufacture, sell and lease to our customers certain oilfield services-related products, particularly sand control screens, downhole pressure and temperature gauges. We manufacture sand control screens at our manufacturing facilities in Tianjin, China, and downhole pressure and temperature gauges at our manufacturing facilities in Canada. We also lease our downhole pressure and temperature gauges to our customers.

We are also involved in purchasing equipment and tools to sell to our customers, primarily including oil companies in China and Kazakhstan who occasionally require those equipment and tools for certain oilfield operations. Our trading business largely depends on specific requests from our customers and may fluctuate significantly from time to time. The revenue from our manufacturing, leasing and trading businesses accounted for approximately 10% of our total revenue for the six months ended 30 June 2011.

<b>BUSINESS</b>
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Business Line Services/Products		Summary Description					
Drilling Services	Vertical Drilling	A typical well drilling technique characterised by a generally vertical wellbore track.					
	Directional Drilling	A technology for drilling into target regions by moving the wellbore from the vertical track.					
	(a) MWD	"Measurement While Drilling." The technique and equipment for measuring the inclination and location of the wellbores, without suspending the drilling process.					
	(b) LWD	"Logging While Drilling." Improvement of MWD; in addition to the functions of MWD, it can also conduct well logging and identify the nature of the formation.					
	(c) Rotary Steerin	ng A ground-driven technology used in the drilling process of inclined and horizontal wells; it can reduce the utilisation of costly downhole motors with limited useful lives and speed up the drilling process.					
	(d) Geosteering	A technology ensuring the position of wellbore track to be located in oil and gas reservoirs that involves the feedback and control of LWD and measurement results.					
	Well Logging	Measurement implemented underground to identify the nature of the rock and determine the location of reservoirs.					
	Drilling Rig	The main drilling facility used to drill a deep hole reaching the oil and gas reservoir.					
	Cementing	The process of injecting cement into a well to provide and reinforce the structural integrity of wellbores; our services include the design of cement pumps and cement formula/pumping procedures.					
	Casing Accessory	Certain underground equipment used to ensure the normal operation of an oil and gas well, as well as the quality of cementing.					
	Drilling Fluids	Also known as drilling mud, it is a special fluid with certain density, viscosity and rheology that is injected through the drilling bit during the drilling process. The main functions of drilling fluids include providing hydrostatic pressure to prevent formation fluids from entering into the wellbore, keeping the drill bit cool and clean during drilling, carrying out drill cuttings, and suspending the drill cuttings while drilling is paused and when the drilling assembly is brought in and out of the hole.					
	Sidetracking	To drill a secondary wellbore away from an original wellbore. It is possible to have multiple sidetracks, each of which might be drilled for a different reason.					

The following table sets forth a summary of our major oilfield services and products:

<b>Business Line</b>	Services/Products	Summary Description
	FMPD	"Fine-Managed Pressure Drilling." An adaptive drilling process used to more precisely control the annular pressure profile throughout the wellbore. It can maximise the protection of the oil and gas reservoir and increase the productivity of wells.
	Coring	A technique for core sampling in the drilling process. Apart from treatment and observation, the obtained core can also be used in the laboratory analysis to obtain various underground data and parameters.
	Well Workover	A downhole operation to complete the removal and replacement of tubing string and also remedial treatment of the well via a series of technical measures to restore the normal operation of suspended wells or wells that cannot operate normally due to changes in downhole fluids.
Well Completion Services	Wellhead	Head of oil and gas well exposed on the ground surface, which is used for installing the production trees and hanging various casings and tubing.
	Perforation	A technique to build channels between oil and gas reservoirs and oil wells by using explosives underground so that oil and gas may flow from the reservoirs to the wells.
	Completion String	Also known as production string. The combination of tubing down to the well and a flow control tool for the purpose of bringing downhole fluids to the ground surface.
	Hydraulic Power Tongs	Computer and torque tongs for hydraulic pressure control used to precisely control the torsion of tubing thread and casing to ensure sealing.
	Sand Control	A technique to control the migration of sand to the ground surface by typically using screens or other mechanical and chemical solutions to filter sand.
	Well Fracturing and Acidising	A technique to increase the yield of oil and gas in reservoirs by using acidic fluid to dissolve seismic rock layers or using high pressure to create cracks in the rock for the purpose of increasing the production rate.
Reservoir Services	Well Testing	Also known as oil testing. A process of carrying out a series of measurements on the production of oil and gas wells. The purpose is to obtain data, such as the production capacity of oil and gas wells, and pressure and temperature of the rock.
	(a) DST	"Drill Stem Testing." Oil testing carried out in the course of drilling by using the drill stem.
	(b) PVT Analysis	"Pressure Volume and Temperature." A process of conducting physical and chemical analysis on the fluids extracted from the well.

Business Line	Se	rvices/Products	Summary Description				
	(c)	Completion Testing	Also known as production testing, a type of oil testing that is conducted during the early production of oil and gas wells.				
	(d)	Integration of Perforation and Flow-Back Testing	A process applied upon well testing before completion. It involves tubing-conveyed perforation, Navi pumping or gas lift technology and drill stem testing in a one-trip, single downhole string, instead of three separate trips, to significantly improve the testing efficiency.				
	(e)	Integration of Perforation, Acidising, and Flow-Back Testing	A technology that can complete the process of perforation, acidising, flowing back and testing with high efficiency.				
	( <b>f</b> )	Ultra-Deep Well Wireless Transmitting Testing	A technology developed by our Company which allows live-time data feedback from the bottom hole of an ultra-deep well.				
	Artificia	l Lift	Various processes of artificially giving pressure to the downhole to bring oil out of the rock to the ground surface.				
	(a)	Rod Pump	A common oil-extracting pump using its stem to driv the underground pump.				
	(b)	Gas Lift	A technology of injecting gas into the pit shaft oil pipeline to facilitate the outflow of oil in the pit shaft.				
	(c)	Plunger Lift	A technology of putting plunger into the well to facilitate the oil to flow to the surface under the downhole pressure.				
	(d)	ESP	"Electric Submersible Pump." Similar to an underground water pump, ESP is an efficient way to extract oil from the well.				
	(e)	Hydraulic Lift	Hydraulic energy oil extraction includes a jet pump and a hydraulic piston pump.				
	Reserv Monit	voir Dynamic oring	Monitoring of the dynamic situation of reservoirs, both in the well and on the ground surface, by a variety of measurements.				
	(a)	PDMS	"Permanent Downhole Monitoring System." Pressure and temperature-measuring devices permanently installed downhole.				
	(b)	Bottom Hole Pressure/ Temperature Survey	A process of measuring pressure and temperature by using steel wire or cable down into the bottom of the well.				
	(c)	DPT	"Downhole Pressure Test." A process for measuring downhole pressure by placing a measuring device into the well, together with the well completion pipe string.				

<b>Business Line</b>	Se	rvices/Products	Summary Description					
	(d)	Production Logging	The measurement of production yield and fluid nature in different zones of production so as to understand fluid production in different layers.					
	(e)	Heavy Oil Steam Injection Profile Logging	The measurement implemented in heavy oil steam injection wells. Due to the high temperature of the well, the operation is very challenging.					
	( <b>f</b> )	Dynamometer Diagram	A rod pump test for evaluating the efficiency of a pump and diagnosing any of its faults.					
	(g)	ESP Status Monitoring	Monitoring pressure flow, vibration and temperature of pumps to prevent faults.					
	Well Int	ervention	Downhole operations.					
	(a)	Water Control	A technique to control water production in oil and gas wells by using packer or chemical coagulant to plug the water layer or adjust water-injection layers.					
	<b>(b)</b>	Fishing	A technique to collect objects dropped into the well.					
	(c)	Slickline	A technique of controlling downhole equipment by using steel wire of several millimetres in thickness to achieve the control of well flow, or the technique of measuring downhole parameters by placing various types of equipment down the well.					
	(d)	Snubbing	A technique for downhole operations without applying pressure to the well, which can reduce costs and protect the reservoir.					
	(e)	Swabbing	A temporary oil recovery measure that pumps the oil out of the wellbore by using steel rope to drive the pumping tube.					
	( <b>f</b> )	Coiled Tubing	Metal piping that is often several kilometres long that comes spooled on a large reel and is used in various downhole operations.					
	Oilfield	Chemistry	A method of improving the working conditions in oil wells using chemicals or chemical methods, which can effectively resolve problems that commonly occur during production and thus operate to enhance the recovery rate.					
	Reservo	ir Research	Services to ensure optimal development and exploitation of the oilfield through reservoir data collection, compilation, analysis and research, as well as the description of the nature and flow pattern of the reservoir.					

The following table shows a breakdown of our revenue by business line for the periods indicated:

		Ye	ear ended 31	1 Decem	Six months ended 30 June					
	200	8	2009		2010		2010		2011	
	RMB'000	%	RMB'000	%	RMB'000	%	RMB'000 (unaudited)	%	RMB'000	%
Drilling Services Well Completion	110,589	16.7	310,162(	<sup>1)</sup> 34.0	343,822	32.7	117,079	29.9	128,707(3)	31.5
Services	245,025	36.9	268,420	29.4	323,808(	<sup>2)</sup> 30.8	121,332	31.0	74,610(4)	18.3
Reservoir Services	308,258	46.4	332,944	36.6	382,802	36.5	153,568	39.1	205,165	50.2
Total	663,872	100.0	911,526	100.0	1,050,432	100.0	391,979	100.0	408,482	100.0

Notes:

(1) Includes revenue of RMB86.4 million from our trading business sourced through our subsidiaries in Canada.

(2) Includes revenue of RMB40.5 million from our trading business sourced through our Singapore subsidiary.

(3) Includes revenue of RMB5.7 million from our trading business sourced through our Singapore subsidiary.

(4) Includes revenue of RMB12.2 million from our trading business sourced through our Singapore subsidiary.

#### **Drilling Services**

#### **Overview**

Drilling generally refers to the building of a long-lasting and stable connection between the exposed rock formation and the wellhead with specific drilling equipment and auxiliary tools during the exploration, evaluation, development and production stages of an oilfield. The difficulties and challenges of drilling operations lie with the technology of carrying out drilling in underground rocks and unstable fluid layers until the target reservoir layer is reached, so as to reduce drilling cost, maximise oil and gas production and improve the ROP.

Drilling is an important operation during the exploration and production stages of an oilfield, and also accounts for a large portion of the overall cost of exploring and developing an oilfield. We commenced our drilling business in 2004. Currently, we are able to offer a wide range of drilling-related services, including the provision of drilling rigs and equipment, slurry service, well cementing, directional drilling, sidetracking and FMPD technology. For the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and 2011, the revenue generated from our drilling services was RMB110.6 million, RMB310.2 million, RMB343.8 million, RMB117.1 million and RMB128.7 million, accounting for 16.7%, 34.0%, 32.7%, 29.9% and 31.5% of our total revenue, respectively.

Following are the major highlights of our drilling services:

• Vertical well drilling

A vertical well is a well that is characterised by a generally vertical wellbore track. Because the risk of vertical well construction is relatively low, the techniques for drilling such a well are relatively simple and the maintenance of the subsequent oil extraction operation is relatively easy. Vertical well is the most widely used well type worldwide.

We have extensive experience in improving the drilling speed of vertical wells. In particular, we are experienced in optimising drilling tools and drilling parameters, which in turn enables us to achieve the optimum drilling speed and lower drilling costs using existing tools and technologies. For example, the average well depth of certain oilfields in Kazakhstan is around 3,100m, which is considered deep in the oil and gas industry. In that region, the formation has a large angle of inclination that tends to collapse and may be subject to possible well kicks and losses, all of which increase the difficulty of drilling. We have been engaged in turnkey drilling operations in Kazakhstan since 2008, and have completed high-quality complex drilling services for a total of seven deep wells.

# • Cementing

As the drilling progresses and the depth of the well increases, well walls must be supported by cementing and well casing. Well casing consists of predesigned and connected steel tubing, approximately the width of the planned well walls, inserted from the surface typically down to the target reservoir, and is utilised to maintain downhole pressure and prevent fluid loss. Well cementing is a process of injecting cement slurry down the well between the well casing and the well walls in order to prevent the well walls from collapsing under pressure. Cementing must be designed to deal with the specific geological requirements of the well, including its pressure, gas content and temperature. The difficulties and challenges of cementing services lie with the effective control of the tubing string tool, as well as the bonding strength between the cement slurry, rock formation and tubing string.



The following diagram illustrates the basic processes involved in well cementing:

Note: For illustration only; not to scale.

We are able to provide a comprehensive range of cementing slurry systems for our customers to address various well conditions. We have significant expertise and capabilities in high-end well cementing with long cementing sections under large temperature differences at different depths, and cementing wells with high-pressure production zones, or having significant leakage. In particular:

• In a high-pressure gas field, the gas wells in later stages of development generally have the potential safety issue of gas flowing from the formation to the ground. To solve the safety risks of this type of gas field, we used expandable liner hanger tool systems to effectively block the gas flowing channel from the formation and preventing the gas from flowing to the ground, thereby enabling safe production on the ground in the subsequent development stage.

- In a low-permeability and low-pressure gas field, the conventional slurry injection caused pollution of the oil and gas resources in the production formation, lowering the permeability and impeding full development of the oil and gas resources. To solve this problem, we improved the typical cementing procedures by using annulus packer and stage tools. The method and tools we chose effectively avoided the pollution of the oil and gas production formation and segregated different underground layers, enabling the full development of underground oil and gas resources in later stages.
- Drilling fluids

Drilling fluids refer to various recycled fluids used in drilling oil and natural gas wells. Its main functions include carrying and suspending the drill cuttings, keeping the well walls stable and balancing the pressure of the formation, cooling and lubricating drill bits and drilling tools. The three main categories of drilling fluids are water-based mud, oil-based mud and gaseous drilling fluid.

To meet the various needs of our customers and due to the different characteristics of formations underground, we have developed a variety of drilling fluid systems for the exploration and development of the most challenging oil and gas wells, including horizontal wells, multilateral wells, extended reach wells and ultradeep HTHP wells. We have also partnered with Halliburton to provide comprehensive high-quality drilling fluid and related technical services for certain major oilfields, such as the Tarim Oilfield and the Jidong Oilfield in China. In particular, our high-temperature, oil-based mud technology has been successfully applied in western China in an ultra-deep, high-temperature well with a depth of 8,023m, which is one of the deepest wells in the world. As compared with conventional water-based mud, oil-based mud has unique advantages in protecting the oil and gas reservoir, and we believe that it will be the main drilling fluid technology used for shale gas exploration in the future.

• Directional drilling

Unlike vertical drilling, directional drilling does not drill vertically into the target region, but is a technique of inclined drilling into the target region by deviating the wellbore from the vertical track. The main advantage of directional drilling over vertical drilling is its ability to drill at certain angles, allowing oil extraction where vertical access is difficult or impossible to achieve. In addition, directional drilling allows more than one well to be drilled from a single surface location and increases the length of the exposed section of the reservoir.

We commenced our directional drilling business in Kazakhstan in 2010, and have completed directional drilling with respect to eight wells to date.

Geosteering is recognised as one of the most advanced directional drilling methods. Compared with conventional directional drilling systems, geosteering drilling is able to increase ROP and the reservoirencountered rate, so as to increase the ratio of exposed reservoir. Currently, only a few oil field services companies in the world are capable of providing geosteering drilling services. We have established a technologysharing relationship with Halliburton to provide geosteering services.

• Sidetracking

Sidetracking technology for horizontal wells is a process of cutting a window in the original borehole casing and drilling along a pre-designed track into the target layer. Currently, due to their low implementation risk, sidetracking techniques are widely used in oilfields in China. They have also become one of the most effective and reliable technologies for increasing production from old oilfields, which is a common practice in the oilfield industry.

With significant experience and the capabilities to meet our customers' requirements, we offer a full range of solutions related to window-cutting sidetracking services, including sidetracking design, optimised design and selection of window-opening tools. Since 2009, we have completed a total of 15 small-radius horizontal wells with casing and window cutting in Aktau, Kazakhstan, leading to a significant reduction of drilling periods and an increase in the average well output as compared to the old wells. The inflating pipe hangers, which are

commonly used by us after sidetracking, have been successfully applied in our overseas operations. We have developed our own expertise in inflating tubing technology and have successfully entered the inflation pipe hanger market to compete with international players.

• Fine-managed pressure drilling (FMPD)

Fine-managed pressure drilling is an adaptive drilling process used to more precisely control the annular pressure profile throughout the wellbore. The objectives of FMPD are to ascertain the downhole pressure environment and to manage the annular hydraulic pressure profile accordingly. FMPD requires special equipment that controls the adaptive drilling process. FMPD technology is one of the most advanced and sophisticated drilling technologies in the oilfield industry and is mainly applied in regions that have narrow pressure windows and have the tendency to incur well kicks or losses. With the help of FMPD, signs of well kicks or losses can be identified in a timely manner during the drilling process, and suitable measures may be taken immediately to mitigate such kicks or losses. We provide FMPD services through our cooperation with Halliburton.

Well workover

Well workover mainly involves the use of specific workover machines and ancillary equipment to complete the removal and replacement of tubing string and other technical measures to restore the normal operation of suspended wells and wells that cannot operate normally. Well workovers require a high level of technical expertise and consequently they can only be carried out with large-scale workover equipment that must be operated by experienced technical personnel.

We own and lease over 15 different types of workover equipment. Since the commencement of our workover operations in 2008, we have successfully carried out approximately 4,000 workovers of different scales, domestically and overseas.

#### Well Completion Services

#### **Overview**

Well completion is a critical stage in the oil and gas well construction process. It is a systematic process that begins with penetrating the reservoir, followed by installing, cementing and perforating the casing. Finally the well completion string is installed, allowing oil and gas to flow to the surface. Once an oil and gas reservoir is tested and the oilfield is deemed ready for commercial development, drilled wells will require well completion for optimal commercial production. The core objective of well completion is to protect the oil and gas reservoir and extend the life of oil and gas production.

We started to provide well completion services in China in 2002. From 2008 to 2010 we completed over 1,000 oil and gas wells for our customers in China and overseas. We are able to provide a comprehensive range of well completion equipment and services, including overall project design, equipment selection, accessory material preparation, project operation and reporting.

We provide our customers with fully integrated "Completion Systems," which package and integrate equipment, products, processes, procedures and programs to provide customised and integrated products and services.

Each component in a well completion process has specific functions. A component from one manufacturer may work better under certain conditions than one from another manufacturer. Our role is to select and to combine the most suitable components available in the market, add our own technology, develop procedures and processes and package them to make a Completion System that meets our clients' specific needs.

We have established well completion project teams in each region where we render our services in order to provide our customers with localised, convenient and high-quality services. We also employ more than 100 well

completion specialists to focus on examining and verifying operational designs and procedures. For the years ended 31 December 2008, 2009 and 2010, and the six months ended 30 June 2010 and 2011, the revenue generated from well completion services was RMB245.0 million, RMB268.4 million, RMB323.8 million, RMB121.3 million and RMB74.6 million, accounting for 36.9%, 29.4%, 30.8%, 31.0% and 18.3% of our total revenue, respectively.

Our well completion supplies, technology and services fall into four traditional lines: wellheads, well completion strings, sand control, and well fracturing and acidising. Following are major highlights of our well completion technology and services:

• Wellhead

Wellhead is a combination of surface components placed on top of an oil or gas well. Wellhead equipment is used for suspending a well and sealing well tubing and casing so as to control the wellhead pressure and the flow of the oil and gas.

As part of a Completion System package, we provide wellhead choke and kill manifolds as well as subsea wellhead systems. We supply wellheads that are API 6A certified, which is a global industry standard applicable to oil and gas wells and stipulates strict wellhead quality and safety criteria.

Well completion string

The main function of a well completion string is to establish a safe and efficient conduit between the reservoir and the surface for the production of reservoir fluids (oil and gas).

Once the well is drilled, the wellbore is typically lined with a steel tube called "casing." The casing is typically cemented in place. Cemented casing is designed to prevent oil and gas from flowing through the space between the side of the wellbore and the outside of the casing, or to the surface or other zones (such as protective water zones) which could cause contamination. The casing also prevents well bores from collapsing under the pressure of fluids and surrounding rocks.

Once casing is in place, a "well completion string" is installed inside the casing. Well completion strings serve three main purposes:

- to direct the flow of reservoir fluids through the inside of the well completion string;
- to stop the flow of reservoir fluids should a well need to be shut in; and
- to install safety devices that, if needed, would prevent uncontrolled flow of reservoir fluids.

Components normally installed in a well completion string are liner systems, production packers, subsurface flow controls, and subsurface safety valves with associated items. Components of a well completion string are very specialised and are designed and manufactured to meet the specific requirements of each well. Geological and reservoir characteristics must be analysed; logistical issues and limitations must be considered and surface equipment capabilities must be examined and verified. The well completion string is an integral part of a Completion System. Located below the surface, well completion strings are required to be reliable and have high construction quality. We have highly qualified, internationally trained completion teams consisting of both engineers and operations personnel. Completion design engineers must evaluate several potential scenarios to identify and prevent problems during both the production life and the remedial operations of a well that may span 20 to 30 years or more. Equally important are the operations personnel who must have specialised knowledge and experience to properly and safely install our Completion Systems.

As oil and gas resources become more scarce, wells are being drilled deeper, while well locations are becoming more remote and wells and their operators are being subjected to harsher environments. These factors, among others, require continued technological advances in well completion strings to meet the growing challenges. During the past decade, most of our research and development has centred on providing innovative

technology in this crucial area of the Completion Systems. As a result, we are able to offer many specialised well completion strings by providing advanced equipment and services.

We are presently promoting our integrated, modular testing and completion packages branded as the "ITest Completion Systems" line of products and services. We also offer our "Smart Wells," "Integrated Fracturing and Completion Systems," "Gas Storage" and other value-added Completion Systems. We delivered approximately 150 Completion Systems every year during the Track Record Period.

Our Completion Systems are capable of addressing challenging field requirements with a holistic approach.

Sand control

Sand control is the process of filtering sand from fluids flowing at the bottom of the well to prevent production problems such as erosion and loss of production. Sand control stabilises the reservoir, minimises suspension of production caused by sand, avoids unnecessary maintenance and workovers, and therefore maximises production, increases recoverable reserves and extends the life of the well.

We are able to provide effective solutions for sand control that are tailor-made for the specific geological conditions of a reservoir. Our process is to extract sand samples, analyse the samples using various types of laboratory equipment including ultrasound analysis, and provide effective sand control solutions. Effective sand control can be achieved by mechanical or chemical means.

We are a manufacturer of downhole sand control screens certified by Halliburton. Our manufacturing facilities are ISO 9001 and API Q1-certified and have the manufacturing capacity to meet the growing market demands for our sand screens.



The following diagram illustrates the basic processes involved in sand control:

Note: For illustration only; not to scale.

• Well fracturing and acidising

Well fracturing and acidising are stimulation treatments for oil and gas reservoirs that are used to increase the connectivity of the reservoir and consequently enhance well production by dissolving holes into the formation using acidic liquid or cracking the formation by high-pressure hydraulics.

We provide project management and various technical services, including reservoir reconstruction, hydra-jet fracturing processes, coiled tubing jet perforation and fracturing techniques. Specifically, we have managed reservoir reconstruction for up to 50 wells in fields near Kyzylorda and Aktobe, Kazakhstan, effectively enhanced well production and extended the reservoir life.

We have also managed projects in the Changqing Oilfield and oilfields in Sichuan for five wells using coiled tubing jet perforation and fracturing techniques. We have dealt with complex issues associated with multiple-layer formations and have been able to significantly reduce the operational risks for our customers.

We apply sound project management skills when we undertake major complex well reconstructions that typically involve many companies including international leading oilfield services providers and domestically renowned research institutes. We also conduct stimulation research on fracturing techniques, fracturing fluid formulation, rheological property analysis and filtration performance. We have provided fracturing fluid systems and acidising fluid additives for wells ranging from high-temperature deep wells to low temperature shallow wells in both carbonate and sandstone formations.



The following diagram illustrates the basic processes involved in well fracturing and acidising:

Note: For illustration only; not to scale.

# **Reservoir Services**

# **Overview**

Our reservoir services mainly involve the collection of reservoir data, such as temperature, pressure and flow rate of the reservoir, through a series of measurements; conducting evaluations and making recommendations on the appropriate exploration and production methods for reservoirs; improving oil and gas production from reservoirs; and enhancing the recovery rate through downhole operations. For the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and 2011, the revenue generated from reservoir services was approximately RMB308.3 million, RMB332.9 million, RMB382.8 million, RMB153.6 million and RMB205.2 million, accounting for 46.4%, 36.6%, 36.5%, 39.1% and 50.2% of our total revenue, respectively.

Following are the highlights of our reservoir services:

Well testing

We measure the production rate of oil and gas wells to calculate the productivity index and acquire formation pressure, temperature and other data of oil and gas wells to conduct evaluations of oil and gas reservoirs. The techniques we utilise in our well testing services principally include:

#### Portable Surface Measuring Technology

We measure and take samples of oil, gas and water from oil and gas wells by portable equipment. Our portable measuring technology is easy to install and operate, user-friendly and efficient, and is able to provide

timely multiphase measurements for oilfields. As at 30 June 2011, we operated eight portable measuring and separation systems with different models in oilfields in Kazakhstan and China.

#### Downhole Bluetooth Pressure Transmission Technology

Our proprietary downhole bluetooth pressure transmission technology is able to achieve real-time wireless transmission of data via a downhole pressure gauge during well testing. In comparison with traditional techniques, this technology significantly improves the operational efficiency and can effectively overcome the technical challenges of conducting real-time ground surveillance for downhole pressure data in a shut-in well. We have successfully applied the technology to transmit pressure data from a well with a depth of 5,986m to the ground surface in the Tarim Oilfield.

Artificial lift

Artificial lift is commonly used when the natural pressure of a reservoir is depleted and not sufficient to push the oil to the surface. Artificial lift technology typically increases reservoir pressure to push oil and gas to the ground, so as to achieve a higher production rate.

We have developed a number of advanced artificial lift technologies, among which the gas lifting technology is particularly effective for low pressure depleted reservoirs. For heavy oil reservoirs, we have developed technologies based on the mechanism of in-situ combustion to increase the oil viscosity and improve oil recovery rates.

• Dynamic monitoring

We offer various suggestions to increase and optimise the oil and gas production after analysing the reservoir information obtained with various measuring methods.

We have over 50 pieces of winch monitoring equipment and over 400 experienced field engineers and operators. We have successfully conducted many dynamic monitoring operations for various oil and gas wells, such as highly deviated wells (with an inclination of 45 degrees or more), ultra-deep wells (with a depth of 6,500m or more), high-pressure wells (with downhole pressure up to 80 Mpa), and oil and gas wells with high sulfur (with hydrogen sulfide content of 100,000 ppm or more). We conducted more than 40,000 well monitoring operations in 2010.

Slickline operations

Slickline operation is a major downhole operation. With slickline operation vehicles, we can operate downhole tools to perform specific maintenance jobs to optimise the downhole conditions for better oil and gas production performance.

We completed more than 10,000 slickline operations each year during the Track Record Period. We believe that we are a leading Chinese slickline operations service provider in terms of technology strength and scale of operations.

Oilfield chemistry

Oilfield chemistry refers to a method of improving the performance of oil and gas wells using chemicals or chemical methods that can effectively resolve problems that commonly occur during production and thus improve the recovery rate.

We offer a comprehensive range of services such as chemical optimising, scheme formulation, onsite service and valuation relating to paraffin controlling and block clearing.

#### Reservoir research

In order to ensure that the exploration and development of an oilfield is efficient and able to achieve expected productivity, oilfield development projects must be designed and optimised through reservoir data collection, compilation, analysis and research, as well as an understanding of the nature and characteristics of a reservoir.

We have a professional and experienced reservoir research team of more than 20 researchers and experts. We have successfully applied dynamic production optimisation solutions to some of the main oilfields in Kazakhstan which have significantly contributed to the stabilisation and stimulation of production from those oilfields. For the fractured-vuggy carbonate reservoirs of an oilfield in western China, we have conducted a detailed study in conjunction with PetroChina Tarim Oilfield Company and successfully resolved technical problems, such as oil layer classification and evaluation, production decline evaluation, geologic reserves assessment, and described complicated reservoir seepage flow patterns and conducted performance-based production track prediction by adopting dynamic description methods.

## **Services Equipment**

Our services are available to our customers at any point they require and we run our operations on a continuous basis throughout the year. In the first half of a year, particularly in the first quarter of a year, our customers generally have less demand of oilfield services from us but our operations are carried out uninterrupted, at a reduced level.

To conduct our services, we require oilfield services equipment which mainly consists of drilling rigs, workover rigs, portable surface measuring and separation systems and winches. Drilling rigs are the main type of drilling equipment used to drill a deep hole in order to reach the oil and gas reservoir. Workover rigs are the equipment used for performing major maintenance or remedial treatment on an oil or gas well. Both drilling rigs and workover rigs are used for our drilling services. Portable surface measuring and separation systems are used to separate, analyse and measure sample oil, gas and water from a well. Winches are equipment used to extract from and lay down materials and tools into a well for downhole operation and testing services. Both portable surface measuring and separation systems and winches are used for our reservoir services.

Set forth below is a summary of the major services equipment we used during the Track Record Period in respect of their number and utilisation rate.

			Six Months Ended					
	2	008	2009		2010		30 June 2011	
	Number	Utilisation Rate <sup>(1)</sup>	Number	Utilisation Rate <sup>(1)</sup>	Number	Utilisation Rate <sup>(1)</sup>	Number	Utilisation Rate <sup>(1)</sup>
Drilling Rig <sup>(2)</sup>	1	60%	1	90%	1	90%	1	90%
Workover Rig <sup>(3)</sup>	9	70%	10	70%	10	80%	15	60%
Portable Surface Measuring and								
Separation System <sup>(4)</sup>	6	73%	6	67%	9	75%	8	65%
Winch <sup>(5)</sup>	30	69%	32	73%	50	79%	51	70%

Notes:

(1) Utilisation rate is the result of dividing the aggregate number of days for which equipment is operated in a year or period by 300 days (or 150 days for the six months ended 30 June 2011 or 300 days as prorated based on actual holding period in the case of newly acquired or leased equipment). Given that a well operation may last from a few days to a few months, we normally measure the capacity of our equipment by number of operation days (instead of by number of wells they serve). We consider that our equipment has a full capacity of approximately 300 operation days after deduction of time required for regular maintenance and repair.

(2) The drilling rig is self-owned and used for our operations in Kazakhstan.

(3) Includes seven, eight, eight, and nine workover rigs leased from third parties during the Track Record Period. All were used for our operations in Kazakhstan.

(4) For 2008 and 2009, four portable surface measuring and separation systems were used in Kazakhstan all of which were self-owned and two were used in China all of which were leased from third parties. For 2010, seven were used in Kazakhstan all of which were selfowned and two were used in China all of which were leased from third parties. For the first half of 2011, seven were used in Kazakhstan all of which were self-owned and one was used in China which was leased from third parties. (5) All winches are self-owned. For 2008, 15 winches were used for each of China and Kazakhstan. For 2009, 15 winches were used for each of China and Kazakhstan and two were used for Indonesia. For 2010, 23 were used for Kazakhstan, 12 were used for China and 12 were used for Indonesia. For the first half of 2011, 24 were used for Kazakhstan, 12 were used for China and 12 were used for Indonesia.

#### Competition

The oilfield services industry is highly competitive. Oilfield services companies typically compete for customers and market share on the basis of experience, past performance, reliability, range of services, technical support and price.

The oil and gas industry in China is dominated by the subsidiaries and affiliates of the three major stateowned oil companies, namely CNPC, Sinopec and CNOOC. As a result, the demand for drilling, completion and reservoir services in China is highly concentrated. According to Spears and Associates, we primarily compete with domestic oilfield services providers in the Chinese market, which consist of subsidiaries and affiliates of the major Chinese state-owned oil and gas companies, and some smaller non-state-owned companies. We also compete with multinational oilfield services companies such as Schlumberger for high-end oilfield services.

Our major competitors in China are described below:

- *State-owned Companies*: The oilfield services companies associated with the three major PRC stateowned enterprises dominate the Chinese oilfield services sector and were established to focus on serving the exploration and production sector of their respective groups. Those companies benefit from their large size, operational scale, and good intercompany relations with their customers. Some other state-owned companies also compete with us in some regions where we operate.
- Multinational Players: Major international oilfield services companies possess significant financial and technical resources. These companies provide a wide range of products and services and have extensive experience in high-end oilfield services. In addition, they typically have strong research and development capabilities and offer significant technical support to their clients. The major international oilfield services companies compete primarily on the basis of advanced technologies and equipment.
- *Smaller Independent Oilfield Services Providers*: The non-state-owned oilfield services sector is highly fragmented, with many smaller independent oilfield services providers focusing on either specific geographic areas or specific types of products or services. Most of them face challenges associated with their small scale, lack of resources for research and development and inability to establish integrated services or national sales platforms. However, smaller independent oilfield services providers benefit from the ability to adapt quickly to commercial trends, and the needs of their customers. In addition, unlike the subsidiaries and affiliates of the three state-owned oil companies that generally provide services to their affiliates, smaller independent oilfield services providers offer services to all customers in the market.

According to Spears and Associates, the subsidiaries and affiliates of China's three major Chinese stateowned oil companies currently capture approximately 85% of the market segments that we serve in China, i.e., onshore drilling services, well completion services and reservoir services, in terms of revenue in 2010. Spears and Associates further estimates that international oilfield services companies such as Schlumberger and Halliburton capture approximately 5% of these market segments in China and that over 1,200 PRC non-stateowned companies such as our Group, Anton Oilfield Services and Xinjiang Zhudong Petroleum Technology compete for the remaining approximately 10% of these market segments in terms of revenue in 2010. According to Spears and Associates, we capture approximately 5% of these market segments in which PRC non-stateowned companies compete, or approximately 0.5% of the entire market, in terms of revenue in 2010. We primarily provide high-end oilfield services in China, particularly at the Tarim Oilfield, where state-owned services providers generally do not focus on and international services providers may be at a disadvantage due to high costs and lack of local knowledge. See "Industry Overview—Oilfield Services Sector Overview—China Oilfield Services Outlook."

According to Spears and Associates, the demand for drilling, completion and reservoir services outside China is divided among several hundred companies. In the overseas markets, we primarily compete with

international oilfield services companies, such as Schlumberger, Halliburton, Baker Hughes and Weatherford, and smaller independent oilfield services providers. Our major competitors in Kazakhstan include international oilfield services companies such as Halliburton, subsidiary or affiliate oilfield services providers of PRC stateowned oil companies and independent oilfield services providers. Oilfields we serve in Kazakhstan are mature oilfields that generally require conventional oilfield services which are less technically challenging than high-end or critical well services such as those that we provide in the Tarim Oilfield in China. We provide integrated oilfield services covering drilling, well completion and reservoir services in Kazakhstan and we believe we are able to compete effectively with our competitors in providing those services. We have a strategic alliance with Halliburton in Kazakhstan on bidding for projects and providing services on a non-exclusive basis. See "—Strategic Alliance with Halliburton." However, given that services required by our customers in Kazakhstan are generally conventional services, the cooperation with Halliburton is limited and on a much smaller scale than in China. We currently cooperate with Halliburton in Kazakhstan in providing well fracturing services, which require the operation of on-site heavy equipment that we do not currently own in Kazakhstan.

Due to the difficulty of collecting reliable industry information in Kazakhstan, which is a relatively immature market, Spears and Associates is unable to present information regarding the oilfield services industry in Kazakhstan and we are not in a position to disclose specific information about our and our major competitors' market shares in Kazakhstan.

#### **Geographical Coverage**

We currently have operations in China, Kazakhstan, Canada, Turkmenistan, Indonesia, Singapore and Dubai. We also have a subsidiary in Uzbekistan which has not commenced operations. The following map illustrates the coverage of our services worldwide:



In China, we generated a significant portion of our revenue from the Tarim Oilfield during the Track Record Period and our services provided in the Tarim Oilfield were primarily well completion services on high-end or critical services wells—wells that are deep, high pressure and/or high temperature. We also have manufacturing facilities in Tianjin, China to manufacture sand control screens that are generally sold to our oilfield services customers. To diversify our customer base, enhance our competitiveness and capture more business opportunities, we have invested heavily in developing overseas markets, especially emerging markets. In addition to China, we currently also operate in Central Asia, North America, Southeast Asia and the Middle East.

Our operations in Kazakhstan in Central Asia were our first and are currently the largest of our overseas operations. Revenue of our subsidiaries in Kazakhstan represented 44.0% and 53.4% of our total revenue for the year ended 31 December 2010 and the six months ended 30 June 2011, respectively. We provide a wide spectrum of services in Central Asia, covering almost all of the oil and gas exploration and production stages. We hire most of our employees locally. Our major customers in this region are subsidiaries and affiliates of CNPC.

In North America, we established two subsidiaries in Canada in 1999 and 2000. According to Spears and Associates, one of our Canadian subsidiaries, PPS, is a global leader in downhole electronic pressure gauge technology, being one of the only two companies in the world that are currently producing leading edge electronic pressure gauges for high-pressure (over 20,000 psi) and high-temperature (over 200°C) wells. PPS also offers one of the most complete ranges of downhole pressure and temperature gauges in the world, according to Spears and Associates. The downhole pressure and temperature gauges designed and manufactured by us in Canada have been widely used around the world. Our subsidiaries in Canada are also involved in leasing downhole pressure and temperature gauges to our customers.

Our operations in Southeast Asia started in 2009 and are mainly in Singapore and Indonesia. Our operations in Singapore are currently involved in the procurement and sale of equipment and tools relating to oilfield services whilst our operations in Indonesia currently include drilling and reservoir services.

As one of the largest oil-producing regions of the world, the Middle East provides us with significant business opportunities. However, market competition is intense in this region. We have successfully won four project tenders since we entered this market in 2010, and we expect that the Middle East will become an important market for us in the future.

			Year ended 3	Six	months en	ded 30 June				
	2008 2009			2010		2010		2011		
	RMB'000	%	RMB'000	%	RMB'000	%	RMB'000 (unaudited)	%	RMB'000	%
PRC	270,796	40.8	373,735	41.0	441,847	42.1	160,818	41.0	122,674	30.0
Kazakhstan	263,487	39.7	357,776	39.3	462,137	44.0	148,376	37.9	218,309	53.4
Canada	129,589	19.5	177,636	19.5	91,375	8.7	47,253	12.1	38,719	9.5
Singapore	_	_	2,333	0.2	40,549	3.9	30,107	7.7	17,917	4.4
Others			46	0.0	14,524	1.3	5,425	1.3	10,863	2.7
Total	663,872	100.0	911,526	100.0	1,050,432	100.0	391,979	100.0	408,482	100.0

The following table sets forth the geographical breakdown of our revenue for the periods indicated<sup>(1)</sup>:

Note:

(1) Our revenue is from (a) the provision of services and (b) the trading of tools and equipment, as well as from manufacturing, sale and leasing of products:

(a) revenue from the provision of services is categorised in the locations either where actual services are rendered or where our contracting subsidiary is incorporated. Such revenue represented approximately 85.5% of our revenue for the six months ended 30 June 2011; and

(b) revenue from trading of tools and equipment, and from manufacturing, sale and leasing of products in the location where our contracting subsidiary is domiciled and where management's decision relating to the underlying contract was taken. Such revenue represented approximately 14.5% of our revenue for the six months ended 30 June 2011.

Our revenue from all individual markets increased from 2008 to 2010, except for revenue from Canada, which decreased from RMB177.6 million in 2009 to RMB91.4 million in 2010. The decrease was primarily due to the fact that our Canadian subsidiaries, which had revenue of RMB86.4 million in 2009 from the trading of equipment and tools had no such revenue in 2010 as we moved the sourcing function for our trading business to Singapore in 2010. We did this for (i) tax efficiency purposes (see "History, Reorganisation and Group Structure—Reorganisation—(7) Exclusion of four operating BVI companies and restructuring of accounts payables to the BVI Companies") and (ii) sourcing efficiency purposes as Singapore is an international oil trading hub and oil refining centre and many oilfield services equipment and tools suppliers, particularly Halliburton, have manufacturing centres in Singapore. Consequently, revenue of RMB40.5 million from the trading of equipment and tools in 2010 was recorded as the revenue of our subsidiary in Singapore. Our trading

business customers primarily include oil companies in China and Kazakhstan who occasionally need oilfield services equipment and tools for special oilfield operations. Our trading business largely depends on specific requests of our customers and as a result, revenue from the trading business may fluctuate significantly from time to time.

The revenue of our subsidiaries in Kazakhstan increased from RMB148.4 million for the six months ended 2010 to RMB218.3 million for the six months ended 2011, primarily due to fact that the demand for our services from our customers in Kazakhstan continued to increase as they expanded exploration activities into new areas and took various measures to maintain or increase production volume.

# Sales and Marketing

We primarily rely on our subsidiaries in each region to carry out localised marketing in their respective regions. We utilise a matrix marketing system, where our business line departments work in tandem with our regional offices. Under this system, our business line departments are responsible for the development and marketing of new products and services, while the regional offices manage the business relationships with clients. Through this matrix approach, the business line departments can tailor their products and services to the specific needs of our customers, and the regional offices can maintain a strong connection with our customers, and react quickly to their needs. In addition, we sometimes rely on local agents in developing new markets, especially for new overseas markets. Leveraging their local resources and knowledge, we are able to enter new markets more quickly.

Most of our service contracts in countries where we have operations are secured through an open bidding process. Our regional offices collect relevant bidding request information from potential customers. Our business line departments analyse and prepare proposals for the bidding. Our regional offices and our business line departments then work together in the bidding process. Upon securing a service contract, our business line departments are responsible for performing the required services. There are no material differences among countries where we have operations in the bidding process and the manner by which we secure a service contract, except that in our overseas markets we are normally required to set up local subsidiaries that meet certain requirements to participate (or participate in conjunction with local partners or agents) in bidding processes and sign relevant service contracts. For example, we are required to set up subsidiaries in Kazakhstan that must hire a certain number of local employees to participate in a bidding. While most of our service contracts in our overseas markets were secured from local subsidiaries of Chinese state-owned oil companies, particularly CNPC, we have also been able to secure service contracts from other oil companies in our overseas markets.

Due to the different geological conditions of oilfields, an oilfield services provider is required to have the capability to provide tailor-made solutions to meet the customers' requirements. Hence, the success of our marketing efforts is primarily dependent on the ability of our sales and marketing personnel to understand the technical features of our services and products and respond promptly to our customers' needs. We primarily use our own personnel to market our products and services. Most of our sales representatives have many years of experience working for major oil and gas companies or related research institutions. We believe that their expertise, particularly their ability to explain clearly the technical features and advantages of our services and products, and to understand and anticipate the needs of our customers, gives us a competitive advantage in our sales and marketing activities.

#### Customers

The oil and gas exploration and production sector in China is dominated by three state-owned oil and gas groups, i.e., CNPC, Sinopec and CNOOC. CNPC is the largest of the three groups in China, producing approximately 52% and 75% of the crude oil and gas output in China, respectively, for the year ended 31 December 2010, according to data from CNPC and the National Bureau of Statistics of China. We have been conducting business with CNPC for approximately thirteen years since our inception. We have a ten-year business relationship with Sinopec. These state-owned groups have many subsidiaries and affiliates in China and overseas. The headquarters of the three groups are generally responsible for setting and formulating group strategies, making group-wide policies and guidelines and dealing with other high level matters that could affect

the whole group. The subsidiaries and affiliates of the three groups run their business under these set policies and guidelines. Oilfield services providers in China generally directly deal with and secure contracts from such subsidiaries and affiliates, which generally enjoy autonomy in selecting a specific services provider. Many Chinese oilfield services providers, notwithstanding the fact that they directly deal with and secure contracts from customers that enjoy autonomy in selecting a services provider, find that their business becomes concentrated on one or more of the three state-owned oil groups.

For the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and 2011, our top five customers, all of which are subsidiaries or affiliates of CNPC, accounted for approximately 66.6%, 72.0%, 65.1%, 70.4% and 69.7% of our revenue, respectively. Our largest customer accounted for approximately 25.3%, 25.4%, 28.8%, 30.1% and 24.9% of our revenue for the same periods. Our revenue attributable to CNPC, Sinopec and CNOOC, on a group basis, constituted 82.3%, 1.7% and nil of our revenue for the year ended 31 December 2008, 90.6%, 0.9% and nil for the year ended 31 December 2009, 87.1%, 0.6% and 0.2% for the year ended 31 December 2010, 88.9%, 1.2% and 0.2% for the six months ended 30 June 2010, and 82.3%, 0.1% and 1.0% for the six months ended 30 June 2011, respectively. Out of our revenue attributable to CNPC, on a group basis, 40.6%, 31.4%, 42.8%, 47.0% and 32.0% was derived from China, and 59.4%, 68.6%, 57.2%, 53.0% and 68.0% was derived from our overseas subsidiaries, for the years ended 31 December 2008, 2009 and 2010 and 2011, respectively. None of our Directors, Shareholders who hold more than 5% of our issued capital immediately prior to the completion of the Global Offering or any of their associates has any interest in our top five customers, all of which are subsidiaries or affiliates of CNPC.

We commenced our operations in 1998 and since then have been able to develop a strong relationship with our customers, particularly our major customers. Some of our major customers, such as PetroChina Tarim Oilfield Company, have approximately a ten-year business relationship with us, while other relationships, particularly those with our customers in our overseas markets, are shorter. We do not believe that our business relies on any particular customer, including any individual subsidiary or affiliate of CNPC, since our customers, including subsidiaries and affiliates of CNPC, generally enjoy autonomy in selecting their oilfield services providers. We believe that we have strong and stable business relationships with our major customers and have entered into strategic alliances with some of them. See "-Strategic Alliances with Certain Customers." We believe that our ability to provide integrated services covering drilling, well completion and reservoir research adds significant value to our customers who can rely on one services provider to address their various needs in a cost-effective manner. Our ability to provide high-end oilfield services, particularly high-end well completion services, also has secured a number of loyal customers for us. During the course of our multi-year relationships, we have developed in-depth understanding of the geological conditions of, and gained the ability to provide customised solutions for, the oilfields of our major customers, which any replacement services providers would find difficult to develop over a short period of time. We believe these factors have contributed to our strong and stable relationship with our major customers.

Our operations are diversified geographically, with the revenue of our subsidiaries in China, Kazakhstan, Canada, Singapore and other regions accounting for approximately 42.1%, 44.0%, 8.7%, 3.9% and 1.3% of our revenue for the year ended 31 December 2010, and approximately 30.0%, 53.4%, 9.5%, 4.4% and 2.7% for the six months ended 30 June 2011, respectively. Our customers in China, Kazakhstan and other overseas markets are primarily subsidiaries or affiliates of CNPC. The profit margins of our services primarily depend on a number of factors including the reservoir's geological conditions, service complexity, the cost of materials and equipment and the service fees we pay to third parties. During the Track Record Period, the profit margins of our subsidiaries in the PRC<sup>(2)</sup> were 24.1%, 18.7%, 21.0%, 18.4% and 19.7%. The profit margins of our overseas subsidiaries decreased during the Track Record Period primarily due to the decrease of such subsidiaries' revenue from the reservoir services segment as a percentage of such subsidiaries' total revenue which has a higher profit margin than the other two segments, i.e., drilling and well completion services.

<sup>(1)</sup> Only taking into account the direct, attributable expenses and costs of such subsidiaries.

<sup>(2)</sup> Only taking into account the direct, attributable expenses and costs of such subsidiaries and such direct expenses and costs do not include the inventory write-off amounting to RMB58.5 million in 2008.

Some of our service contracts require us to provide services to our customers for a definite term (typically one year), while others are project by project based and require us to provide services for a specific number of well operations or to provide particular services. The service contracts set forth the terms and condition on which we provide services to our customers, which normally include engineering and quality requirements specified by our customers. Pricing is determined by taking into account factors such as the complexity of the services and the costs incurred in providing such services. Our customers are normally required to provide us with the support and utilities, such as power and water that are necessary for performing the services. Depending on specific geological and other relevant conditions and the types of services, a well operation may last from a few days to a few months and a service contract that covers a few or a few dozen well operations may last from a few weeks to a year. The service contracts may be terminated due to force majeure events or a party's failure to perform services that satisfy relevant requirements. Our customers are normally required to settle the payment of service fees with us within three to six months after having accepted our services, except for certain services for which our customers retain a small portion (typically 5%) of the service fees and settle the same with us within one year after having accepted our services.

During the Track Record Period, the amount of trade receivables due from CNPC, on a group basis, was RMB220.0 million, RMB312.6 million, RMB328.3 million and RMB265.5 million. The credit terms we granted to subsidiaries and affiliates of CNPC were generally three to six months and relevant account receivables were generally settled with in the granted credit terms during the Track Record Period, except in 2010 when CNPC was upgrading its internal invoice approval and settlement system the settlement of relevant account payables to us was delayed by several months.

Revenue from our oilfield services is recognised when relevant services are accepted by our customers and collectability of the related receivables is reasonably assured. Our customers accept our services by acknowledging the completion of our services. Usually 20 days to 45 days will lapse between the acceptance of our services and the issuance of our invoices, which are issued generally an a monthly basis. For our well completion services, reservoir services and certain drilling services, such as well workover, the service fees are typically calculated by the number of wells and our customers accept our services on a well by well basis. For our other drilling services, such as FMPD, the service fees are calculated by days of services and our customers accept our services on a daily basis. We maintain frequent communications with our customers regarding the progress of our services and in the case of problems or disagreements relating our services, we typically resolve them through discussions with our customers. As our customers are fully informed of the development and progress of our services, it is rare for them to refuse to accept our services. During the Track Record Period, we did not experience any non-acceptance of our services.

We generally extend a credit term of three to six months to our customers starting from the service acceptance date. Our customers generally settle the payment of the service fees with us within the credit term, except for certain services for which our customers withhold a small portion (typically 5%) of the service fees and settle with us within one year after the service acceptance date. When equipment and tools are required in our services, our customers generally make a prepayment representing a portion of the purchase price for the relevant equipment and tools and the remaining purchase price will be settled with us together with the related services.

Revenue from our trading business is recognised when the title to the goods has been passed to the customer, which is on the date when the customer receives and accepts the goods and collectability of the related receivables is reasonably assured. Our goods are normally sold under letters of credit issued from banks and we receive payment from our customers within two to three months after our goods are accepted.

The following table sets forth a summary of the oilfields where we have significant operations, our revenue attributable to such oilfields during the Track Record Period and our major customers in these oilfields for the year ended 31 December 2010.

	Ye 31 J	ar Ende Decembe	d er	Six m	onths 30 June	
Oilfields	2008	2009	2010	2010 2011 Names of Major Customers		Number of Customers/ Names of Major Customers for the Year Ended 31 December 2010
		(RM	B in m	illion)		U
Major oilfields		( <b>u</b>	naudit	ed)		
Oilfields in Kazakhstan	263.5	357.8	462.1	148.4	218.3	<ul> <li>Number of customers: 21</li> <li>CNPC-International Aktobe Petroleum</li> <li>FIAL Liability Partnership</li> <li>Sagiz Petroleum Company</li> <li>JSC PetroKazakhstan Kumkol Resources</li> <li>JSC CNPC-AiDanMunai</li> <li>Buzachi Operating Ltd.</li> <li>KazGerMunai LLP JV</li> </ul>
Tarim Oilfield	102.3	116.6	305.0	134.7	105.5	<ul> <li>Number of customers: 3</li> <li>PetroChina Tarim Oilfield Company (中國石油天然氣股份有限公司塔里木油田分公司)</li> </ul>
Other oilfields						
Oilfields in Turkmenistan	49.6	117.1	63.6(3	) 44.1	15.1	<ul><li>Number of customers: 3</li><li>CPTDC</li></ul>
Changqing Oilfield	(1	) 13.5	25.0	(2)	(2)	<ul> <li>Number of customers: 1</li> <li>CNPC Changqing Oilfield Company (中國石油長慶油田分公司)</li> </ul>
Oilfields in Sichuan	30.3	9.2	21.5	8.1(2)	(2)	<ul> <li>Number of customers: 4</li> <li>PetroChina Southwest Oil and Gas Field Company (中國石油天然氣股份有限公司西南油氣田分公司)</li> </ul>
Oilfields in Indonesia	(1	.)(1)	14.5	7.7	10.6	<ul> <li>Number of customers: 3</li> <li>PETROCHINA</li> <li>CNOOC-COSL<sup>(4)</sup></li> </ul>
Daqing Oilfield	2.4	(5)	10.7	4.5(2)	0.5(2)	<ul> <li>Number of customers: 3</li> <li>Well Testing &amp; Perforating Services of Daqing Oilfield Co., Ltd. (大慶油田有限責任公司試油試采分公司),</li> <li>Research Institute of Oil Production Engineering of Daqing Oilfield Co., Ltd. (大慶油田有限責任公司採油工程研究院)</li> </ul>
Xinjiang Oilfield	0.4	10.7	10.5	(2)	0.5(2)	<ul> <li>Number of customers: 2</li> <li>Petroleum Administration Bureau of Xinjiang Uygur Autonomous Region (新疆維吾爾自治區石油管理局)</li> </ul>
Jilin Oilfield	14.9	2.0(5)	9.5	1.0(2)	1.5(2)	<ul> <li>Number of customers: 2</li> <li>Jilin Oilfield Import and Export Co., Ltd. (吉林油田進出口有限公司),</li> <li>PetroChina Jilin Oilfield Company (中國石油天然氣股份有限公司吉林油田分公司)</li> </ul>
Jidong Oilfield	52.3	9.1(6)	7.2	(2)	1.1(2)	<ul> <li>Number of customers: 1</li> <li>PetroChina Jidong Oilfield Company (中國石油天然氣股份有限公司冀東油田分公司)</li> </ul>
Dagang Oilfield	(5	5) _(5)	5.2	0.2(2)	2.0(2)	<ul> <li>Number of customers: 2</li> <li>CNPC Bohai Drilling Engineering Company Limited (中國石油集團渤海鑽探工程有限公司),</li> <li>Bohai Drilling Engineering—Downhole Technical Service Co., Ltd. (渤海鑽探工程有限公司井下技術服務公司)</li> </ul>
Northwest Oilfield	10.4	17.6	3.9(5	) 2.8	0.3(2)	<ul> <li>Number of customers: 2</li> <li>Northwest Bureau of China Petroleum and Chemical Corporation (中國石油化工股份有限公司西北局)</li> </ul>

Notes:

- (1) We did not carry out any operations in this oilfield during the year.
- (2) We generally provide fewer services in the first half of a year and occasionally we provide no services in some oilfields in the first half of a year. Therefore, we may have lower or no revenue in the first half of a year.
- (3) We secured a well completion services subcontract with a contract value of RMB117.1 million in 2009. Most of the revenue from the subcontract was recognized in 2009 and 2010 (with a higher amount recognized in 2009).
- (4) We leased oilfield equipment (which can be used both for onshore and offshore oilfield services purposes) to CNOOC in 2010 and 2011. We did not provide any offshore oilfields services during the Track Record Period and we currently have no plans to expand into offshore oilfield services.
- (5) We primarily provide high-end gas well completion services in this oilfield and the demand of our services was limited and variable during the Track Record Period. In light of its small contribution to our revenue and variable and limited demand of our services, we selectively pursue business opportunities at this oilfield and recorded declining or no revenue from this oilfield during this period.
- (6) Our revenue from this oilfield decreased significantly in 2009 primarily because an expected discovery of oil reserves in this oilfield did not materialise. As a result, the demand of our services at this oilfield decreased significantly. We performed certain oilfield services relating to this expected discovery in 2008 and therefore recorded a larger amount of revenue in that year.

Our revenue from oilfields in Kazakhstan and the Tarim Oilfield, from which we generated in aggregate more than 70% of our revenue in 2010, increased during the Track Record Period. Based on the current production rates and commercial reserves, the Tarim Oilfield has an estimated reserve life of over 20 years, while the oilfields we primarily serve in Kazakhstan have an estimated average reserve life of over 15 years, according to Spears and Associates. Our revenue from other oilfields, such as Daqing Oilfield and Jilin Oilfield, which are not our primary markets, constituted a small portion of our revenue and fluctuated during the Track Record Period primarily because most of our services in these oilfields were high-end gas well completion services and the demand for these services was limited and variable. In light of their limited contribution to our revenue as well as the variable and limited demand for our services in these oilfields, we only selectively pursue business opportunities in these oilfields and may have recorded little or no revenue from some of these oilfields during certain periods within the Track Record Period.

# Market Access Licenses in the PRC

Most of our customers in the PRC, including the subsidiaries of CNPC and Sinopec, issue their own market access licenses to qualified oilfield services providers based on their service quality, capabilities and expertise. Under such licenses, services providers may provide specified services and supply specified equipment within the stipulated term. We have obtained all the market access licenses that are required for the services and equipment we provide at various oilfields. We also provide services and supply equipment with respect to which no license is required from our customers. Set forth below is a table that summarizes the market licenses we have obtained.

Licensor	Term	Location	Permitted Major Scope of Services			
CNPC, Changqing Oilfield Company	Valid until 31 December 2011 <sup>(1)</sup>	Changqing Oilfield	<ul> <li>Supplier to Changqing Oilfield;</li> <li>Well completion;</li> <li>Downhole operation;</li> <li>Balance stimulation;</li> <li>Sales of completion tools;</li> <li>Cable pulling operation;</li> <li>Wellhead operation;</li> <li>Subtransformation;</li> </ul>			
Sinopetroleum Natural Gas Co., Ltd.	1 November 2007 to 31 December 2010 <sup>(2)</sup>	China	• Natural gas development services;			
CNPC, Exploration and Production Company	27 June 2011 to 26 June 2012	China	• Logging;			
(中國石油天然氣股份有 限公司勘探與生產分公司)	15 June 2011 to 14 June 2012	China	• Formation testing;			
	15 June 2011 to 14 June 2012	China	• Well testing;			
West-East Gas Pipeline (Sales) Company	29 September 2010 to 29 September 2013	China	<ul> <li>Supplier of West-East Gas Pipeline (sales) company;</li> <li>Well testing;</li> <li>Testing;</li> <li>Logging;</li> <li>Well completion;</li> <li>Downhole operation;</li> <li>Mud service;</li> <li>Cementing;</li> <li>Sales of completion tools;</li> <li>Electronic downhole pressure gauge;</li> <li>Drilling fluid;</li> <li>Completion fluid;</li> <li>Drilling equipment;</li> </ul>			
CNPC, Dagang Oilfield Company	7 July 2011 to 7 July 2016	Dagang Oilfield	Completion tools;			
	5 July 2010 to 4 July 2013	Dagang Oilfield	<ul><li>Horizontal well fracturing;</li><li>Gas seal test.</li></ul>			

Notes:

<sup>(1)</sup> The license renewal procedures will start in mid December 2011 and we expect that our license will be renewed in due course.

<sup>(2)</sup> We were advised by our customer that relevant license renewal procedures were suspended due to changes in relevant personnel of our customers and that our license would remain valid regardless until such renewal procedures resume. Our business and operations are not affected by the suspension of relevant license renewal procedures.

Licensor	Term	Location	Permitted Scope of Services
CNPC, Jidong Oilfield Company	March 2011 to March 2012	Jidong Oilfield	<ul> <li>Cable pulling operation;</li> <li>Fracturing;</li> <li>Sand control;</li> <li>Well completion;</li> <li>Pressure gauge pressure testing technology services and auxiliary products</li> </ul>
CNPC, Jilin Oilfield Company	1 April 2010 to 31 December 2011	Jilin Oilfield	<ul> <li>Well completion tool with CO<sub>2</sub> injected</li> <li>Well technology services with CO<sub>2</sub> injected</li> <li>Drilling and completion tools for gas well use</li> <li>Drilling and completion services and gas well services</li> </ul>
Shengli Petroleum Administration Market Management committee (勝利石油管理局市場管	Valid for unlimited period of time	Shengli Oilfield	Electronic pressure gauges
理委員會)	Valid until May 2012	Shengli Oilfield	• Plunger
Chuanqing Drilling Engineering Co., Ltd. (川慶鑽探工程有限公司)	December 2008 to September 2012	Sichuan Province	<ul> <li>PSE electronic pressure gauges;</li> <li>Agency for sale of PPS electronic pressure gauges</li> </ul>
CNPC, Southwest Oil and Gas Field Company	27 September 2005 to 3 April 2012	Southwest oil and gas field	• Sales of completion tools
	Valid until 31 November 2012	Southwest oil and gas field	• 201—H3 Well, Ning201—H1 Well—well completion fracturing design and site technique services
	Valid until 31 November 2012	Southwest oil and gas field	<ul> <li>030—H25 Well, 030—H26 Well—open hole completion of horizontal well technique services</li> </ul>
	Valid until 31 November 2012	Southwest oil and gas field	• 1 Well and 22 Well —cementing slurry technique services
CNPC, Tarim Oilfield	18 June 2010 to 30 June 2013	Tarim Oilfield	<ul><li>Logging;</li><li>Perforation;</li></ul>
Company	50 June 2015		<ul> <li>Oil testing;</li> </ul>
			• Downhole operation;
			<ul><li>Research;</li><li>Drilling</li></ul>
CNPC, Turpan Hami Oilfield Company (中國石油吐哈油田公司)	1 July 2010 to 31 July 2012	Turpan Hami Oilfield	<ul> <li>Drilling and production equipment</li> <li>Electronic pressure gauges repairing, standardisation services</li> <li>Oil testing;</li> <li>Research;</li> <li>Logging;</li> <li>Downhole operation services;</li> </ul>
CNPC, Xinjiang Oilfield Company (新疆油田公司品質管制 與節能處/新疆油田公司 市場管理)	May 2008 to October 2012	Xinjiang Oilfield	<ul> <li>Drilling technology services</li> <li>Electronic pressure gauges</li> <li>Drilling equipment;</li> <li>Oil and gas production equipment</li> <li>Cementing equipment</li> <li>Production test equipment</li> <li>Electronic pressure gauges</li> </ul>

#### **Research and Development**

Our research and development efforts are focused on, among other things, improving technical and other features of our products and services; developing new products, processes and services; and providing customers with customised solutions that address their specific needs and requirements. Our research and development efforts are focused on addressing specific needs of our customers to improve the oil and gas production and the operational efficiency. We incurred research and development expenses of RMB8.8 million, RMB10.2 million, RMB17.3 million and RMB10.7 million for the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2011, respectively.

Our research and development activities primary focus on improving the technical and other features of (i) electronic pressure gauges; (ii) downhole tools for well completion and reservoir services; (iii) chemical fluids and (iv) integrated technology to enhance oil and gas production and operational efficiency. Our subsidiaries in Canada are committed to the research and development of electronic pressure gauges with high precision that can be applied in high-pressure and high-temperature downhole conditions. Our other research and development activities were primarily carried out in conjunction with providing specific services to our customers. Our engineers in our business line departments analyse the geological and other features of reservoirs wells to design and engineer specific operation plans to meet the needs of our customers. Our engineers sometimes encounter technically challenging problems in addressing the specific needs of our customers and in such cases there may be various discussions, testing and other activities involved to address these challenges. With the customers' approval, improvement proposals will be applied and used in on-site operations. If such proposals are successful, we will consider applying for patents on the techniques underlying such proposals. Positive outcomes have been achieved by combining our on-site operational experience with our deep understanding of existing tools, equipment and procedures.

Through our research and development efforts, we have developed well completion techniques that have allowed us to greatly improve well productivity. For example, we have developed the integrated technology of well testing, completion testing and acidising that combines the traditional three string trips into one, which significantly reduces project duration and costs. Also, we have developed the PPS series of electronic pressure gauges, which have a high level of precision in monitoring well pressure and are widely applied in well testing operations worldwide. Currently, it is one of the few models of pressure gauges in the world that can operate reliably for an extended period of time under extreme downhole conditions at temperatures as high as 200°C.

We have research and development teams in Canada and China that consist of an aggregate of approximately 80 staff. In Canada, we have approximately 20 employees who are dedicated to the research and development of electronic pressure and temperature gauges, with an average of five years of research and development experience in our industry. We also have approximately 60 employees in China involved in research and development activities, with an average of 15 years of research and development experience in our industry. Most of our research and development staff in China are also engineers in our business line departments who tackle technical problems and challenges arising from well operations.

We are in the process of developing research and development centres in the Tanggu District of Tianjin, China and Singapore to strengthen our technological capabilities. Our research and development in Tanggu will focus on improving the features, functionalities and efficiency of well completion tools, which the facilities in Tanggu will manufacture and sell. We plan to invest RMB170.0 million in developing the facilities in Tanggu and expect to commence our operations in Tanggu in 2014. Our research and development in Singapore will focus on improving the features, functionalities and efficiency of directional drilling equipment, which our facilities in Singapore will manufacture and sell. We plan to invest RMB30.0 million in developing our facilities in Singapore and expect to commence our operations in Singapore in 2013.

As a result of our continuous research and development efforts, we have been able to enhance the quality of the oilfield services we provide and have become in integrated oilfield services provider. We will continue to focus on our research and development efforts to further improve our position as one of the leading Chinese non-state-owned oilfield services providers.

#### **Supplies**

Our raw materials consist mainly of consumables and replacement components and parts. We purchase from independent third parties consumables, components and parts required for our services and products. We evaluate each of our raw materials suppliers based on a variety of quality and other standards. For the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and 2011, material costs amounted to RMB193.9 million, RMB273.8 million, RMB264.9 million, RMB101.0 million and RMB98.9 million, accounting for 36.2%, 38.4%, 30.3% 30.3% and 29.5% of our total operating costs, respectively.

We have established long-term business relationships with our key suppliers to ensure the stable supply and timely delivery of high-quality raw materials and components. During the Track Record Period, we did not experience any major difficulties in procuring raw materials necessary for performing our services and manufacturing our products. We endeavour to source our major raw materials from a few different suppliers and refrain from relying on a single supplier or group of suppliers for any type of our key raw materials. Our suppliers typically offer us credit terms ranging from one month to six months. The payment terms with our suppliers vary and payments are mainly made through bank transfers or bank bills.

Purchases from our five largest suppliers accounted for approximately 84.0%, 68.4%, 51.2% and 40.7%, respectively, of our total purchases for the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2011, respectively. Purchases from our largest supplier accounted for approximately 60.5%, 43.2%, 17.6% and 14.1% of our total purchases for the same periods, respectively. We usually do not enter into long-term supply contracts with our suppliers or hedge against the price volatility of raw materials.

None of our Directors, Shareholders who hold more than 5% of our issued share capital immediately prior to the completion of the Global Offering, or any of their associates has any interest in our top five suppliers.

#### Inventory

We monitor and control our inventory level so as to provide our services in a timely manner, avoiding situations where we have insufficient stock, over-stocking or having our stock become obsolete. Due to the particular nature of our business, which primarily involves the provision of oilfield services, our inventory consists mainly of materials and tools required for or consumed in the course of provision of our services, primarily including well completion tools that are installed deep in the well or on the ground at the wellhead, drilling fluids used in drilling activities and replacement components and parts for equipment such as drilling rigs and winches. Other than inventory for services, we also keep a small amount of inventory that is related to our manufacturing business and trading business, which constitutes an insignificant part of our overall business. The required level of inventory is generally determined based on the amount of services that are regularly performed and are covered by annual service contracts, the number of services orders that our clients placed with us, the amount of services required under service contracts signed on a project by project basis and our procurement cycle for materials, tools and components.

Our level of inventory is particularly affected by the facts that (i) a majority of our revenue is derived from oilfields outside China, particularly oilfields in Kazakhstan, and we source most of the inventory for these oilfields from China, which typically requires two or more months to transport the relevant inventory to these oilfields; (ii) we provide services at various oilfields across geographically dispersed regions and we are required to keep an appropriate level of inventory for and close to each of these oilfields in which we operate; (iii) a significant portion of our services require us to prepare materials and tools in advance (while other services providers may only offer services that do not require them to prepare materials and tools in advance) and (iv) we generally provide more services in the second half of the year. As a result, our inventory levels may be higher than that of our peers who provide services that require them to prepare little or no materials and tools in advance. As we perform more services in the second half of the year, we also maintain a relatively higher level of inventory in the first half of the year. Our Directors are of the view that our level of inventory is appropriate for our business.

Based on our operational requirements and the particular type of inventory required, we aim to place purchase orders for raw materials and components as close as possible to the required time of delivery so as to optimise our liquidity and maximise efficiency of return of our capital resources. We will continue to closely monitor our inventory levels, utilise existing inventory to the extent possible and reduce unnecessary replacement inventory. In light of the wide geographic distribution of the oilfields where we provide services, we plan to use regional warehouse hubs to provide frequently used inventory to oilfields within relevant regions so as to reduce the overall inventory levels. We have started to conduct preliminary analysis and assessment of potential regional warehouses at low cost. In addition, where local suppliers meet our quality standards, we plan to source supplies locally in our overseas markets so as to reduce the inventory levels that we are required to maintain. We have started to conduct research on potential oilfield services suppliers in Kazakhstan and Russia (which is relatively close to the oilfields we serve in Kazakhstan) in respect of their product quality, distance to our markets and transportation convenience.

#### **Pricing Policy**

We determine and adjust the prices for our products and services on the basis of market supply and demand. In determining our prices, we also take into account the additional value offered by our products and services, such as the incremental increase in production volume or useful life of oil and gas wells, the availability and pricing of comparable products and services in the market, our cost of goods or services, the convenience offered by our comprehensive range of services, and the positioning of our products and services in the market.

# **Quality Control**

We believe that the quality of our products and services is crucial to our continued growth and hence quality control is a high priority in our business operations. We aim to achieve a consistent quality in our products and services with the involvement and commitment from all levels of management and staff. We have implemented a set of stringent quality control procedures designed to ensure that our products and services meet the relevant industry standards and quality requirements of our customers. Our quality control team is responsible for the establishment and maintenance of our quality control system, and supervises the implementation of the system. We regularly conduct quality control inspections of our business units.

Our products and manufacturing facilities have received three quality and environmental management certifications, namely, the ISO9001 certification, ISO14001 certification and OHSAS 18000 certification. Due to our emphasis on service and product quality and our stringent quality controls, we also received certification of API Specification Q1 quality control system in 2008 for the design, manufacture and servicing of sand control screens.

#### Strategic Alliance with Halliburton

We commenced our cooperation with Halliburton in 2004 for a project in the Tarim Oilfield and subsequently entered into a strategic alliance with Halliburton in 2007. Halliburton is an important oilfield services subcontractor for us and provides certain technically challenging services, particularly FMPD and geosteering drilling services, to our customers.

In March 2004, both Halliburton and our Group participated in the "Tarim Wusen No.1 Well" project. At the time, we successfully completed the oil and gas well completion operation with a high temperature of 165°C, depth of 6,394m and a high pressure of 120MPa for formation. Following the success of this project, we entered into a strategic alliance with Halliburton in July 2007 by signing three agreements, including a bid development and co-operation agreement with a two-year term, a general services agreement with an indefinite term and a distributor agreement with a one-year term that is renewable automatically, relating to certain products and services in the Tarim Oilfield and the Jidong Oilfield. These agreements provided that, among others, (i) we shall cooperate with Halliburton in the preparation of bidding proposals for certain technically challenging services in the Tarim Oilfield and the Jidong Oilfield; (ii) in the event that we win a bid, we shall subcontract such services to Halliburton; (iii) each party shall bear its own costs in connection with any bidding processes; and (iv) we

shall act as the sole distributor of certain Halliburton's products for the Tarim Oilfield and the Jidong Oilfield. These agreements may be terminated by either party by a notice of 30 days. There is a bilateral exclusivity provision under the bid development and co-operation agreement. Under the distributor agreement, we shall exclusively purchase products from Halliburton for covered oilfields and in 2009 the agreement was amended to provide that Halliburton shall also exclusively provide products to us for covered oilfields. The bid development and co-operation agreement was renewed in 2009 for another five-year term. All these agreements were subsequently amended to expand the cooperation scope to include oilfields in Sichuan Province.

Under this strategic alliance, we generally act as the contractor that enters into specific well service contracts with our customers in the Tarim Oilfield, Jidong Oilfield and oilfields in Sichuan Province and we then subcontract high-end services to Halliburton. As such, we are able to expand into certain technically challenging markets and enhance our overall competitiveness. For example, we cooperated with Halliburton in providing certain high-end drilling services in the Tarim Oilfield during the Track Record Period. Our cooperation with Halliburton is focused on certain technically challenging services, particularly FMPD services and geosteering drilling services. For areas or services that are beyond the scope of the strategic alliance, we may, depending on the specific circumstances, compete or cooperate with Halliburton in securing contracts and providing relevant services to potential customers.

We have expanded this strategic alliance with Halliburton into certain oilfields in Kazakhstan. In June 2009, we entered into three similar agreements with Halliburton with respect to our cooperation in those oilfields on a non-exclusive basis (except for the distributor agreement under which we shall exclusively purchase certain products from Halliburton for covered oilfields).

During the Track Record Period, we have primarily subcontracted FMPD, geosteering drilling and fracturing services to Halliburton. We generally first obtain a quote from Halliburton for relevant services before making a fee proposal to our customers and we take into account factors such as the quote from Halliburton, our material and other costs and our profit expectation in determining such fee proposal. Our revenue relating to the services subcontracted to Halliburton was RMB9.3 million, RMB98.4 million, RMB204.8 million, RMB43.9 million and RMB47.8 million for the three years ended 31 December 2008, 2009 and 2010 and for the six months ended 30 June 2010 and 2011. We incurred technical service fees in the amount of RMB5.6 million, RMB60.2 million, RMB102.5 million, RMB29.2 million and RMB31.6 million for services subcontracted to Halliburton, accounting for approximately 60.2%, 61.2%, 50.6%, 66.5% and 66.1% of our revenue relating to those services, for the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and RMB31.6 million, RMB163.0 million, RMB72.7 million, RMB26.7 million and RMB35.6 million (where applicable, includes the payment of purchases incurred in previous periods) for the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and RMB35.6 million (where applicable, includes the payment of purchases incurred in previous periods) for the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010 and RMB35.6 million (where applicable, includes the payment of purchases incurred in previous periods) for the years ended 31 December 2008, 2009 and 2010 and the six months ended 30 June 2010, respectively.

If the strategic alliance is terminated by Halliburton or otherwise ceases, our ability to provide certain high-end drilling services (particularly FMPD and geosteering drilling services) for which we rely on Halliburton will be affected. However, our ability to provide other technically challenging services will not be affected. See "—Principal Services and Products." As to services with respect to which we rely on Halliburton, such services can also be provided by other internationally leading oilfield services providers such as Baker Hughes and Schlumberger and if the strategic alliance with Halliburton is terminated or otherwise ceases, we can seek to obtain substitute services from such other internationally leading services providers. However, we may not be able to source substitute services from such alternative services providers at favourable terms or at all, and as a result, our business, financial condition and results of operations may be materially and adversely affected. See "Risk Factors—Risks Relating to Our Business and Industry—Changes in, expiration or termination of, arrangements with Halliburton or other strategic partners could have a material adverse impact on our business operations."

#### **Strategic Alliances with Certain Customers**

We have entered into strategic alliances with a number of our customers, in particular, CNODC, PetroChina Tarim Oilfield Company, PetroChina Exploration & Production Company and CPTDC, all of which are subsidiaries or affiliates of CNPC. Some of these customers were also our major customers during the Track Record Period. Most of the strategic alliances are generic in nature and serve as a framework under which our customers recognise our services capabilities and agree to develop a mutually beneficial business relationship with us in the oilfield services industry. Such strategic alliances do not have provisions for specific projects, such as the number of well operations, service fees and other terms that are normally contained in a specific oilfield service contract.

#### **Intellectual Property Rights**

We conduct substantial research and development activities, and intellectual property protection is crucial to our business.

As at the Latest Practicable Date, we held 30 patents and had 11 patent applications pending approval in China. We rely on a combination of non-disclosure, confidentiality and other contractual agreements with our Directors, employees and other third parties, as well as privacy and trade secret laws, to protect and limit access to and distribution of our intellectual property rights. In accordance with the Patent Law of the PRC and the Rules for the Implementation of the Patent Law of the PRC, in order to obtain a patent, it is necessary to disclose the details of the design to the public. Hence, there exists a risk that by publication of our proprietary technologies, competitors may learn, copy and reverse-engineer the technologies or process developed by us and produce derivative products. While we will apply for patents for certain of our proprietary technologies as trade secrets. See "—Research and Development" and the section entitled "Intellectual Property" in Appendix VI—"Statutory and General Information" to this prospectus.

As at the Latest Practicable Date, we were not aware of any infringement or unauthorised use of our intellectual property rights by any third party.

#### Insurance

We maintain insurance coverage on certain properties, fixed assets, motor vehicles and other assets owned or operated by us that we consider to involve significant operating risk. We have maintained personal injury insurance for all of our employees. We believe that our current level of insurance coverage is adequate and in line with the practice of the oilfield services industry in the jurisdictions where we operate.

We intend to continue to maintain our insurance coverage range to the extent consistent with industry practice. We will continue to review and assess our risk portfolio and make necessary and appropriate adjustments to our insurance practice.

# Property

As at the Latest Practicable Date, the total site area of the properties that we owned was approximately 260,574.4 square meters, of which our existing facilities in China and Kazakhstan occupy approximately 256,430.4 square meters and 4,144.0 square meters, respectively, with a total gross floor area of approximately 14,720.3 square meters and 604.9 square meters, respectively. We occupy our owned properties for the purposes of industrial use, warehouses, offices and staff quarters. As at the Latest Practicable Date, we leased 68 properties worldwide with a total gross floor area of approximately 28,455.12 square meters. DTZ Debenham Tie Leung Limited, an independent valuer, has valued our owned attributable property interests as at 30 September 2011 at RMB47.1 million. Details of the valuation are set out in "Appendix IV—Property Valuation" to this prospectus.

We expect to enter into a land use rights granting agreement with the local government in Tanggu, Tianjin, in the next few months regarding the land use rights to a parcel of land with a size area of approximately 43,355 square meters, the granting fee for which is approximately RMB23.2 million. We have paid the government a deposit of RMB6.5 million for this parcel of land. We plan to use this parcel of land to construct and develop our research and development centre, which we expect to put into operation in 2014.

#### **PRC** properties

As at the Latest Practicable Date, we had obtained the relevant long-term land use right certificates in respect of 27 parcels of land in China with an aggregate area of approximately 256,430.4 square meters. We had obtained the ownership certificates in respect of 38 buildings and units with an aggregate gross floor area of approximately 14,720.3 square meters. We have been advised by Commerce & Finance Law Offices, our PRC legal adviser, that we have obtained all the land use right certificates of all our lands and ownership certificates for all our self-owned buildings.

In addition, we leased 46 properties with a total gross floor area of approximately 19,013.8 square meters. None of these leases have been registered with the relevant property administration authority in the PRC and these properties are being used by us for industrial use, warehouses, offices and staff quarters. We have not been able to obtain from the lessors complete title documents in respect of 30 of these leased buildings with a total gross floor area of approximately 3,998.9 square meters. For such leased buildings, our PRC counsel has advised that, because of the potential lack of title of the lessors over these leased buildings, our right to use these leased buildings as a lessee is subject to uncertainty. These leased buildings are used as offices and staff quarters. As such, our Directors believe that they can be relocated if necessary without causing any material adverse impact on our business, results of operations or financial condition.

#### **Overseas properties**

As at the Latest Practicable Date, in Kazakhstan we owned two parcels of land with a site area of approximately 4,144.0 square meters and two buildings with a total gross floor area of approximately 604.9 square meters. We also leased 22 buildings in other overseas countries with a total gross floor area of approximately 9,441.3 square meters.

#### **Occupational Health and Safety Program**

We believe that one of our most important assets is our employees. We consider injuries to our employees and/or damage to our physical assets pose a threat to our reputation and to our financial success. As our business expands and the complexity of our operations increases, we regularly review and ensure that our occupational health and safety procedures and measures have developed to comply with relevant legal standards. We obtained OHSAS 18000 certifications for our occupational health and safety management system in 2009. However, as our operations involve handling of heavy machinery and components and hazardous chemicals, our employees may face the risk of various work-related injuries and accidents. See "Risk Factors—Risks Relating to Our Business and Industry—Our businesses involve inherent risks and occupational hazards, which could harm our reputation, subject us to liability claims and cause us to incur substantial costs."

We are subject to the relevant rules and regulations on occupational health and safety, such as the Safe Production Law of the PRC, the Law of the PRC on the Prevention and Treatment of Occupational Diseases and Regulations on the Reporting, Investigation and Handling of Work Safety Accidents. For further details, see "Regulations." We have established work safety policies or procedures to ensure that all parts of our operations are in compliance with existing laws and regulations. During the Track Record Period, there was no instance of major work-related injuries or casualties which could have materially and adversely impacted our business and operations. However, there can be no assurance that we would not suffer from any loss or injury resulting from inherent occupational hazards. In addition, the laws or regulations that apply to our business operations may change, which could cause us to incur significantly higher costs. See "Risk Factors—Risks Relating to Our

Business and Industry—We are required to comply with various environmental, health and safety laws and regulations, the compliance with which may be onerous or expensive."

#### **Environmental Compliance**

Our operations create or emit noise and waste water, gas and dust, particularly rock dust, drilling fluids and waste oil that are created or discharged downhole during the operation and are brought up to the surface. We are subject to the environmental laws and regulations in jurisdictions where we have operations. These laws and regulations in general empower government authorities to impose fees for the discharge of wastes, levy fines for offenses, or order closure of any manufacturing facilities which fail to comply with related laws and regulations. It is a common practice in the oilfield services industry for the well or oilfield owners and developers to, absent negligence or fault on the part of relevant service providers, clean up rock dust, drilling fluids, waste oil and other wastes produced from providing relevant services. During the Track Record Period, we incurred no environmental compliance expenses, and we do not expect to incur any material environmental compliance expenses.

As at the Latest Practicable Date, we have not been subject to any sanctions by PRC or overseas environmental authorities for non-compliance with respect to our production and facilities since our inception. During the Track Record Period, we were in compliance in all material respects with applicable environmental laws, and did not incur any material costs in complying with such laws. Although we do not expect to incur any material costs in this regard in the future, any additional or more onerous environmental laws or regulations may cause us to incur significantly higher costs, which we may not be able to pass on to our customers. See "Risk Factors—Risks Relating to Our Business and Industry—We are required to comply with various environmental, health and safety laws and regulations, the compliance with which may be onerous or expensive."

# Legal Compliance and Proceedings

We are not aware of any non-compliance under applicable laws and regulations of jurisdictions where we had operations during the Track Record Period that could have a material adverse effect upon our business, financial condition and results of operations. We and our employees possess all required licences and permits of relevant jurisdictions that were material to our operations during the Track Record Period. As at the Latest Practicable Date, we were not a party to any material litigation, legal or administrative proceedings which could be expected to have a material adverse effect on our business or results of operations. We are not aware of any pending or threatened litigation, or legal or administrative proceedings against us. We may from time to time become a party to various legal or administrative proceedings arising in the ordinary course of our business.