



Anton has been engaged in Workover services since 2008. We are able to provide workover, workover & completion tools, workover fluid, program designing and integrated services. There are 26 qualified workover crews authorized by CNPC and 5 international teams.

We owned kinds of Workover rigs and auxiliary equipment to carry out workover integrated services in Tuha, Tarim, Jilin oilfields in China and Iraq, Ethiopia, Pakistan, Chad in overseas area.

## Contents





#### **Services types**

- Workover services
- Workover & Completion Tools services
- Workover Fluid and Technical Services



#### **Workover services**

**♦** Workover & Completion services

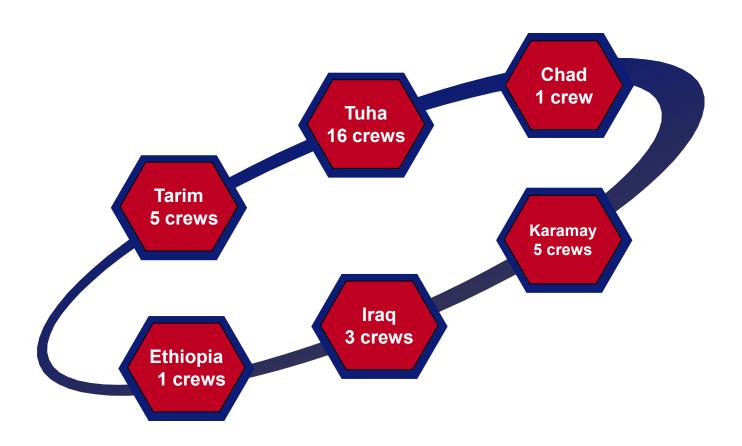
Category		Scope	Pattern
Workover and Completion service		Fishing, complex milling, casing repair, wellbore deepening and other complex operations.	Equipment + Service
	workover	Maintenance job of oil & gas and water well , pump change, fishing, conversion to water injection, plugging, sand control, paraffin treatment, cleaning up and etc.	Equipment + Service
	Sidetracking	Window opening、forging & milling、wellbore deepening and etc.	Equipment + Service



## **♦** Specialized technical services

Category		Scope	Pattern
Workover and Completion technical service Comple workove operation	Workover and Completion program	Workover & Completion strings and BHA design, such as fracturing, acidizing, gas lifting string design and water shut-off, plugging, squeezing, milling and other kinds of tools and BHA designs.	Technical
	Complex workover operation Programs	Providing Complex workover operation tools and Programs, such as downhole hydraulic motors, milling tools, bits, milling shoe, milling taper, washover pipe, spear, overshot, WL grab, WL spear.	Technical

Crews Distribution





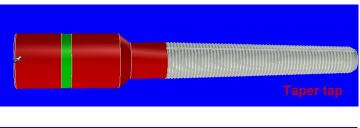
#### **Workover & Completion Tools and Services**

Workover & Completion tools and service involves a wide range of tools and services, We can provide high quality, high efficiency and safe operations for clients.

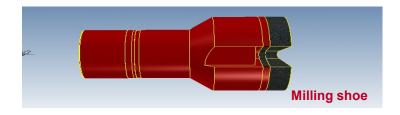
- Workover and completion program, strings & BHA and complex downhole operations design.
- Fishing tools with Kinds of specifications and field technical service.

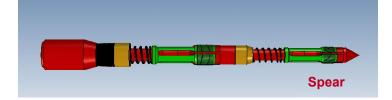


- Milling tools and services: Providing kinds of downhole hydraulic motors,
  milling tools and related technical services.
- Plugging tools and services: All kinds of specifications.
- Workover and completion tools with kinds of specifications and field technical services.











## **Scope of services**

Category		Scope	
Workover & completion tools and technical services	tools and	Workover and completion string designing, such as fracturing, acidizing, gas lifting string, water shut-off, plugging, squeezing, milling and other kinds of tools and BHA designing.	Products + Service
	and services	Downhole operation tools and technical services, such as downhole hydraulic motors, milling tools, fishing tools, bits, milling shoe, milling taper, washover pipe, spear, overshot, etc.	Products + Service
	i Fishina taale	Fishing tools and services: such as spear, overshot, wireline fishing, rope fishing, junks fishing, bumper jars, fishing magnet, impression, etc.	Products + Service
	and services	Plugging tools and services: such as hydraulic packer, slip packer, tail pipe support packer, self-sealing packer, bridge plug and auxiliary tools, etc.	Products + Service

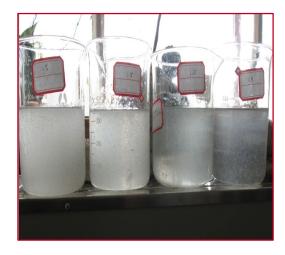


#### **Workover Fluid and Technical Services**

Workover fluid: Mainly used in workover and completion wells to reduce or avoid contamination of reservoirs as well as to recover, improve or maintain productivity. We have various workover fluid, such as low-density, high-density, casing protection fluid, etc.







# **Contents**



### **Equipment and Capability**

## ANTON 安東

- ◆ 31 sets of XJ350, XJ450, XJ550, XJ750, XJ850 series truck-mounted workover rigs.
- Possess SNC400, SNC700, F-800, F-1300 series pumps.
- ◆ 200 sets of auxiliary facilities, including circulation system, well control system and life support system.









### **Equipment and Capability**



#### Truck-mounted equipment

Antonoil possesses advanced truck-mounted tank and duty room system. it makes the mobilization quick-moving and highly efficient, which is leading ahead both domestically and internationally.



truck-mounted duty room



truck-mounted tank

## Contents



 Having global service capability crews are good at management, technology.



Iraq

Tarim



**Ethiopia** 



#### Workover service team

- ♦ 31 downhole operation service crews, including 5 overseas.
- ♦ 16 senior engineers.
- 93 professionals.









#### **Tools service teams**

- 8 engineers for tool designing.
- 16 technician for tool processing.
- ◆ 10 engineers to provide on-site technical services.







#### **Workover & Completion fluid service teams**

◆ 12 engineers with rich experience in workover and completion fluid field.





## **Contents**





#### International technical service qualifications





#### **Domestical technical service qualifications**





#### standards and systems

In terms of management, technology, operation and other aspects, Antonoil strictly abide by the international quality and technical standards.



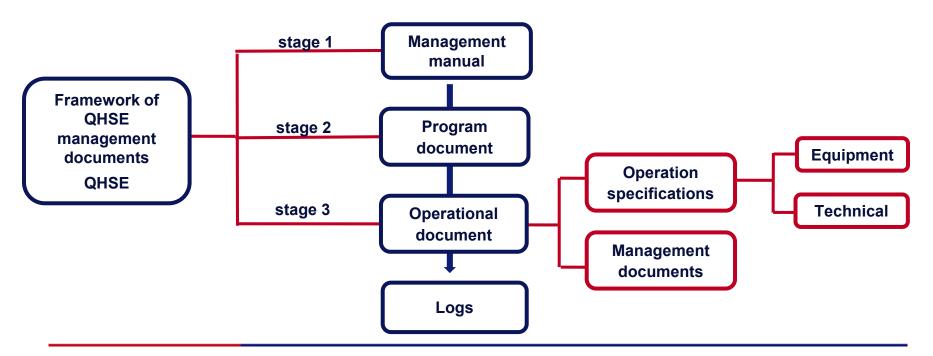






#### **Management Systems**

Based on international standards and systems, Antonoil establishes 47 management documents and 256 operation procedures to make a scientific control in organization, staff training, safety, process control, equipment management, quality control, etc.



## **Qualifications and capacities**

## ANTON 安東

- 🔁 API-5L1-2002(Recommended Practice for Railroad Transportation of Line pipe)
- 🔁 API-6A-2004(Well head and Christmas Tree Equipment)
- 芃 API-8C-(Drilling and Production Hoisting Equipment)2012 ( PSL1和PSL2 )
- 🔁 API-17G(Completion Workover Risers)
- 🔁 API-53(BOP equipment for drilling well)
- 🔁 API-510(In-Service Inspection, Rating,Repair, and Alteration)
- 🔁 API-PR-7G(Drill Stem Design and Operating Limits)
- 🔁 API-RP- 576-2009(Inspection of Pressure-relieving Devices)

#### International standards

off 1.QHSE培训管理程序 (AT-QHSE-P-3-0	2018/2/24 15:55
💼 2.沟通、参与和协商管理程序(AT-QHSE	2018/2/24 15:30
	2018/2/24 15:30
wii 4.记录控制程序(AT-QHSE-P-3-04V0-20	2018/2/24 15:31
	2018/2/24 15:32
📲 7.作业许可管理程序(AT-QHSE-P-5-02	2018/2/24 11:57
■ 8.交通安全管理程序(AT-QHSE-P-5-03V	2018/2/24 15:32
💼 9.QHSE关键岗位人员变更管理程序(AT	2018/2/24 15:32
wi 10.工艺和设备变更管理程序AT-OHSE-P	2018/4/28 0:28

#### **Operational manual**

#### Contents.

Purpose and Scope	4+
QHSE Vision, Policy, Values, Commitment	5₽
Appointment Letter of Management Representative	7↔
Announcement Letter of Employee Representative	8⊬
QHSE Management System Framework	9↓
1 Leadership and Commitment	10↩
2 Policy and Objective	
3 Organization, Responsibilities, Resources and Documents	
4 Contractors and Suppliers Management	19↩
5 Risk Management	20↩
6 Business Process	21₽
7 Performance Monitoring and Measurement	24↩
8 Audit and Management Review	

#### **Management manual**

■ 《井下作业现场员工各岗位常规操作动作	2015/5/7 12:24
mi JS7.07-103 修保后工具入库作业规范	2014/11/27 16:20
mi JS7.07-Z03 换装、拆卸各类堵头、压力	2014/11/27 16:21
〒 安装倒换井口、防喷器作业规范	2013/10/18 10:43
逾 抽汲作业施工规范608-918	2013/10/18 10:43
儲油罐计量操作规范3.13	2013/10/18 10:43
圖 高温高压滤失仪操作规范621	2013/10/18 10:43
更换大绳操作规范506-930	2015/5/7 11:09

#### **Operation specification**



#### **High-efficiency service capacities**

- Workover operational capacity is up to 800 wells/year.
- Workover & Completion fluid technical services capacity is up to 600 wells/year.
- Workover & Completion tools technical services capacity is up to 300 wells/year.
- High-efficiency resource allocation ability.
- Able to provide workover and completion integrated services.



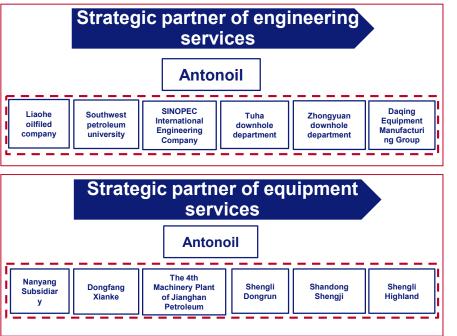




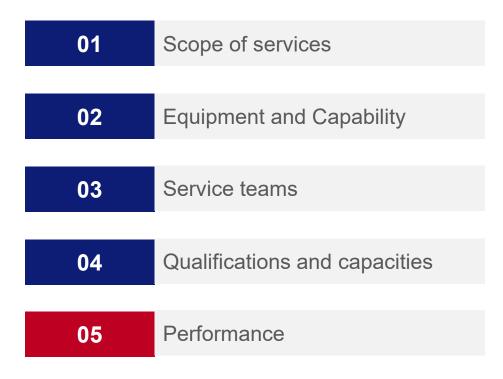
#### Global resource mobilized ability

Strategic corporation agreement with well-known Engineering service, Equipment manufacturing and oil service companies, we have good international mobilized ability.



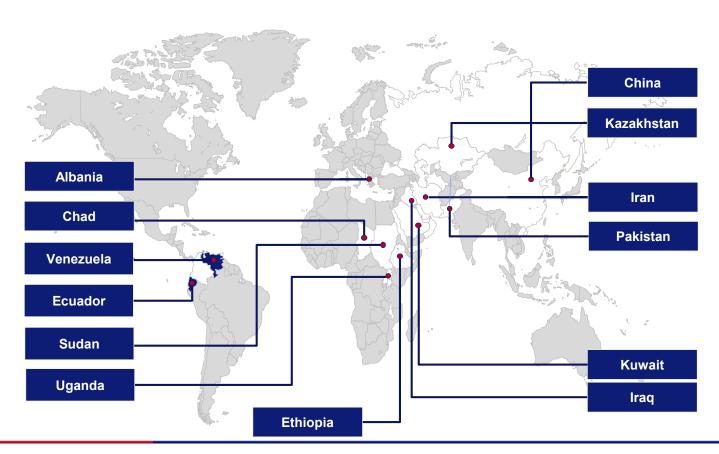


## Contents





Market distributes in China, Iraq, Ethiopia, Venezuela, Ecuador, Pakistan, Albania, Kazakhstan and etc.





We provide Workover & Completion technical services safely and continuous operation more than 3500 days, which has been highly regarded by the clients.

Dear Antonoil West Qurna 2 project management, I'm, as a representative of W/O and Completion department of Lukoil at Rig #2, I would like to enounce my sincere acknowledgement for the good organization of the Rig Demobilization operation. Within 2 days, during the period from August 5th to 7th, the Anton team of Rig#2 demobilized the Rig, rig equipment and Camp from Cluster 8 to Cluster 12. There were 20 trailers, 4 cranes and over 70 workers involved in this operation. Despite the large volume of workload, all the pre-job preparations were planned and prepared properly: prepared all necessary documents: security gate passes, SOC permits for personnel and vehicles, PTWs, the existing problems and possible obstructions was discussed before starting the job and ways found for their mitigation. During transportation of equipment, the loading of equipment was properly carried out, controlled safe loading and fixation of the transported equipment, the movement of transports along the roads of the field. Transportation of oversized equipment was carried out in accordance with the requirements of Lukoil, vehicles's conveying along the traffic route was organized, COSD was properly informed in advance. As a supervisor of the Workover and Completion department working with team of Rig #2, during six months, I would like to note the increased level of professionalism in planning and organizing this kind of work and thank the team and the management of the company for the work well done. I hope that the Anton would not stop and satisfy with their current level and keep improving their job performance level in the close future. Evgenii Alachev Workover supervisor 7 August 2017 Well operations department



#### **Performance**





**POLY-GCL Petroleum Group Holdings Limited** 保利協鑫石油天然氣集團控股有限公司

#### 表扬信

安东石油技术(集团)有限公司:

贵司埃塞国家公司修井项目部承接施工的我司埃塞修井项目开展以来,在 贵司埃塞国家公司领导带领和修井项目部全体成员的共同努力下, 积极响应, 密切配合我司作业部开展各项施工任务,并取得优良的业绩。

修井项目部全体成员拥有良好的职业素质和职业操守,吃苦耐劳,注重合 作, 具有高度的工作热情和和活力, 充分体现了贵司"帮助别人成功"的企业 文化。特别是在近期两口施工井作业中, 他们接连克服由于现场雨季造成的施 工道路不畅、网络诵讯中断等诸多困难,积极主动的讲行道路恢复、井场修缮 等工作。在项目部吴成的带领下,魏其昌、高贤福、刘斌、张群英等同志团结 一致, 想方设法的解决问题, 为我司排忧解难, 确保我司试油、试气施工作业 的顺利开展,在各承包商中起到了模范带头作用。

在此,我代表埃塞分公司作业部,对贵司及埃塞国家公司给予的大力支持。 以及贵司埃塞修井项目部全体成员付出的艰辛努力表示衷心感谢。希望贵司继 续保持优良作风及服务理念,在今后的工作中精诚合作,共创辉煌!

保利协鑫石油天然气集团控股有限公司埃塞分公司

作业部总经理: 2018年5月1日

Address: Medhanialem Building, 5th Floor, Bole Subcity, Wereda 03, Addis Ababa, Ethiopia +251 11 667 0841/44 Fax. +251 11 667 0866 E-mail: polygclethiopia@pg-petro.com



POLY-GCL Petroleum Group Holdings Limited 保利協鑫石油天然氣集團控股有限公司

#### 保利协鑫石油天然气集团致安东石油技术 (集团) 有限公司埃 塞修井项目部的表扬信

尊敬的安东石油技术 (集团) 有限公司埃塞修井项目部:

贵队在我司保利协鑫埃塞俄比亚油气项目 Calub-11 井和 Hilala-5 井测试 工作中,始终以良好的敬业态度、优良的后勤服务和蓬勃的团队生机,严格执行 各项作业指令和技术措施,与第三方密切配合,圆满完成 Calub-11 并 6 层测 试、1层试采和Hilala-5井5层测试、1层试采的生产任务, 无安全和工程事 故,在此提出表扬!

两口井施工过程,贵队认真执行作业指令,精心操作,保证了井下安全;注 重设备维护保养,发现问题及时整改,保持设备稳定运行,为生产提供了可靠的 保证: 在项目部的支持下, 做好生活、生产物资的组织, 确保生产连续进行, 提 高生产效率: 在井控方面, 保证井控装备运行良好, 各项监控措施完善, 有力的 保障了本井的井控安全。

在此,我司对于贵队的工作成绩给予充分肯定,希望贵队在后续的施工中能 够再接再厉,认真执行合同,与各单位积极配合,在繁杂的工作中保持清晰的思 路,严格执行作业指令、行业规范标准,圆满完成钻井施工任务! 2017 年继续携 手并肩、精诚合作,为开创埃塞-吉布提油气项目的美好未来而不懈奋斗!

最后,我谨代表保利协鑫石油天然气集团并以我个人名义向您及贵公司全体 员工及家人致以最真挚的节日问候! 東心祝愿:

新年吉祥如意

事业兴旺发达 阖家幸福安康!



#### **Performance**

## ANTON 安東

#### RECOGNITION LETTER

2017-09-22

West Qurna 2 LMEL Project

Dear Antonoil management, as a representative of LMEL Well operations department at AT-XJ7502 rig, I would like to enounce my sincere acknowledgement for the good organization of WQ2-351 well completion activity and mobilization to WQ2-352 well.

WQ2-351 recompletion job done in front of schedule with a perfect timing in 5.33 days without any NPT or unplanned activity. Preparation for the next WQ2-352 well was also finished in very timely manner without any delays and time wasting.

Please see the list of personnel I would like to mark out for their performance

Li Yanwu

- Rig Manager

Sun Zhiqiang Yi Weiwei

- Workover Engineer

- Night Engineer

Liang Yan

- Tool Pusher

Li Zhiiia

- Tool Pusher - Mechanic

Shi Jiangang Da Qinghan We Chao

- Driller

Asif Jahanzaib

- Driller - HSE Engineer

I hope that Antonoil would not stop and satisfy with their current level and keep improving their job performance level in the close future. In addition, I hope that their efforts will not be left unappreciated and Antonoil Company will award AT-XJ7502 crew.

Alexander Sorokin 4

Stimulation & Rigless Engineer, LMEL Well Operation Department



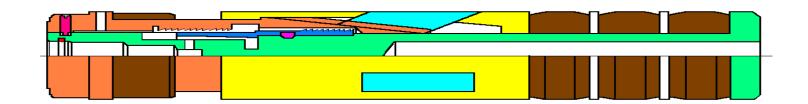


#### **Workover & Completion technical services**

- **♦** Provide Workover & Completion technical services up to 3100 wells.
- ◆ Conduct business in China, Iraq, Ethiopia market with risky turn-key project over 79 old wells.

#### **Workover & Completion Tools Services**

**♦** Completed over 700 wells.





#### **Workover Fluid and Technical Service**

**♦** Completed over 600 wells.





# THANKS!

Helping others succeed...