



PROFILE



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Oil Exploration Operation Company



Background

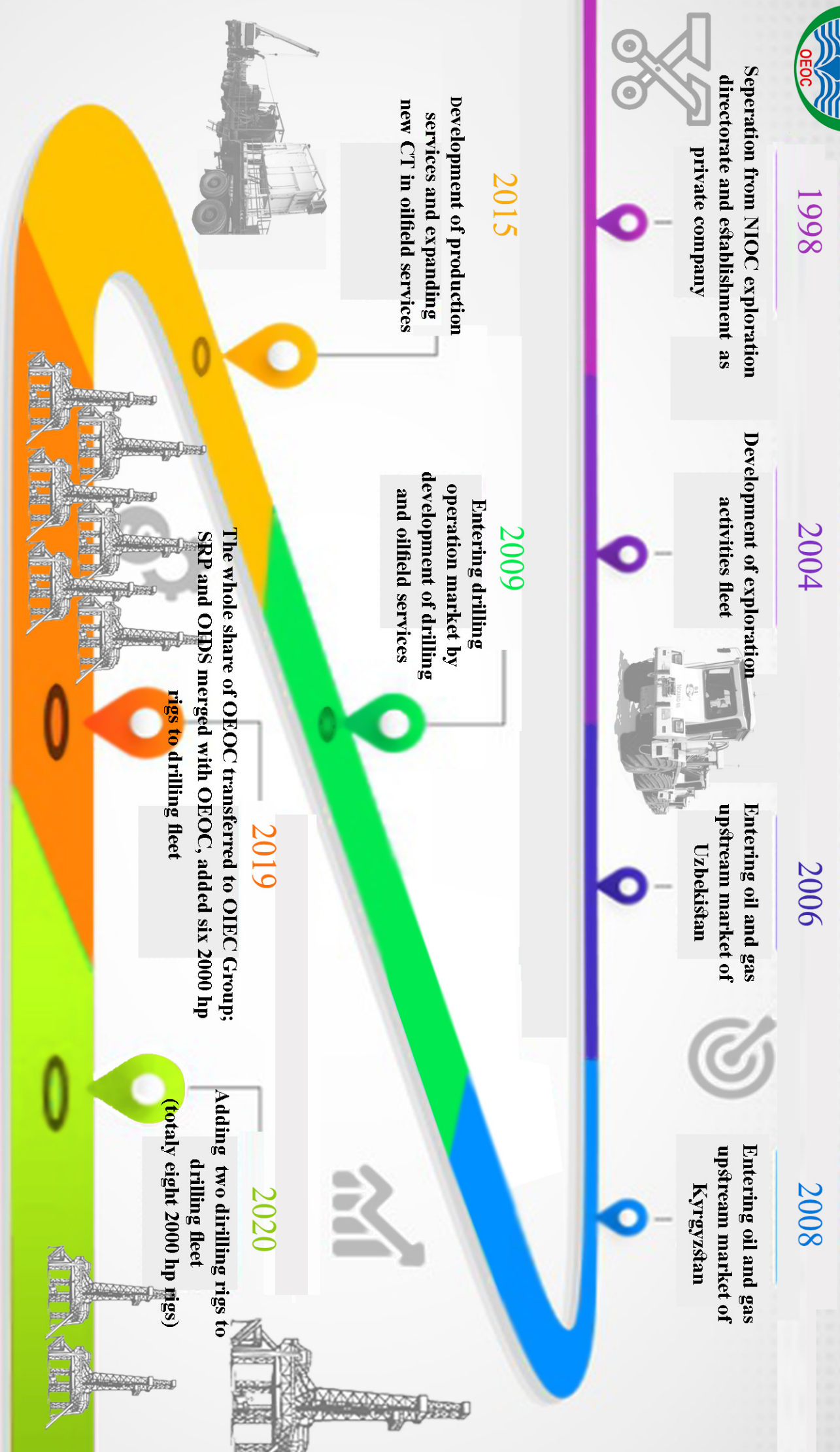
Oil Exploration Operation Company (OEOC), as one of the most reputable Iranian private companies in upstream sector of oil and gas industry, has been part of National Iranian Oil Company Exploration Directorate. Since 1998 the operational section of NIOC was derived as a separate organization under full ownership of NIOC Pension Fund called Oil Exploration Services Company (OESCO), with the aim of offering specialized oil exploration services to its clients.

According to Oil Pension Fund's strategies for restructuring and reorganization of subsidiaries and activities, the whole share of OEOC transferred to OIEC Group in 2020.

In order to expand OIEC group's presence in the upstream market, Saba Rig Providing Company (SRP) and Oil Industry Drilling Services Company (OIDS) merged with OEOC as a whole name at the end of 2020. OEOC has been succeeded to deliver technical and engineering services to variety of well-known international clients such as PETRONAS (Malaysia), LUKOIL (Russia), and SANTOS (Australia) in CIS countries as the first Iranian exporter in the field of upstream Oil & Gas industry by utilization of trained human resources and modern equipment.



Progress and Development in **Oil** Exploration **O**peration **C**ompany **T**imeline

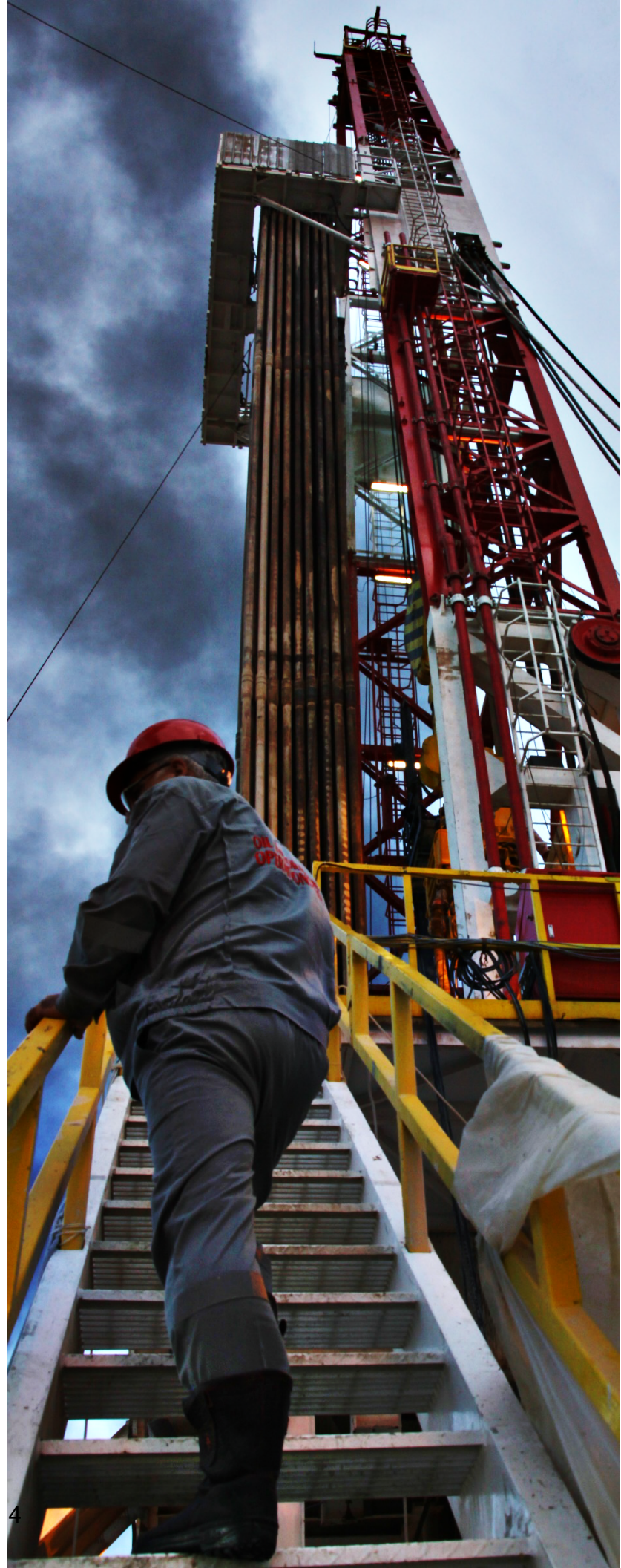


Introduction

Since the establishment, OEOC has succeeded to accomplish numerous projects in more than 80% of domestic Oil & Gas fields and several foreign markets in different levels of complexity and various scales in terms of both technical and non-technical issues.

Key Activities

- 1: Drilling Operation and Rig Services
- 2: Integrated Drilling Services



Drilling Operation and Rig Services

OEOC'S Drilling Operation Fleet Include:
Eight units of 2000 HP land rigs with
capability of drilling up to 7000 meters
depth.







OEOC's Rigs Specification

Rig 201, 202

2000 hp DC -Slingshot, Triple

General Description

Make	ZPEC
Year Built	2008
Year OF Commissioning	2010
Estimated Drilling Depth	6000 m with 5" DP, 7000 m with 4-1/2" DP
Estimated Rig Move Loads	75
Estimated Camp Move Loads	45

Mast

Make, Model, Height	ZPEC, K-Type, JJ450/45-K9, 45 m (147')
Static Hook Load Capacity	4500 kN, 1,000,000 Lbs
Mast Racking Capacity	2200 kN, 250 ea 5" Drill pipe Stand and 4 ea 9 3/4" Drill Collar and 6 ea 8 1/2" Drill Collar and 6 ea 6 1/2" Drill Collar

Substructure

Make, Style, Model	ZPEC, Slingshot, DZ450/9S6
Hight	9 m
Clear Hight	7.617 m (25")
Casing Capacity	4500 kN
Maximum Setback	2200 kN/220 MT

Drawworks

Make	ZPEC
Model	JC70D-2
Power Rating	2000 hp/1470 KW
Input Power	2300 hp/1715 KW, 2 ea YZ08 DC Traction Motor
Brake Type-Band or Disc	Disc
Drilling Line Size	1-1/2"

Top Drive

Make	BPM-Beijing Petrolume Mechanic Manufacture
Model	DQ70BSC
Capacity	4500 kN
Torque-Continuous	52877 Nm (39000 lbf ft)

Crown block

Make, Model, Load Rating	LSNOW, TC-450-10, 4500 kN/1,000,000lbs
Sheaves Quantity	6 + 1 Fast Line Sheave
Sheaves Diamiter	6 ea $\Phi 1524$ mm (60") , 1 \times $\Phi 1829$ mm (70")

Combination Hook and Traveling Block

Make, Model, Load Rating	LSNOW, DG450, 4500 kN/1,000,000 lbs
Sheaves Quantity	6
Sheaves Diamiter	$\Phi 1524$ mm(60")

Swivel

Make, Model, Load Rating	LANZHOU,SL450-S, 4500 kN/1,000,000lbs
Speed	0 -300 r/min
Working Pressure	35 MPa (5000 psi)
Center pipe bore hole	(4")

Rotary Table

Opening Size	952.5 mm (37-1/2")
Static Load Capacity	7250 kN
Torque	42000 N.M
Rotary Speed	0 - 300 rpm

Power Generation

Engines (Main)	4 ea CAT3512B DITA -1310KW
Generator	Kato -SR4B - 1714 KVA
SCR/VFD	SCR system -Ross hill Type- TSC- One to Two

Mud System

Mud Pumps	3 ea KLF ZPEC F-1600
Power /Pressure Rating	1600 HP/ 5000 Psi
Active Mud Volume	2000 bbl.
Reserve Mud Volume	1000 bbl
Shale Shakers	3 ea Derrick FLC-2000
Mud Cleaner Shaker	Derrick FLC2000
Mud Cleaner Desander	Derrick 2 ea Cone 12" - 1100 gpm
Mud Cleaner Desilter	Derrick 20 ea Cone 4" - 1500 gpm
Degasser	CANGZHOU ZHONGYOU HV-300; 800 GPM
Centrifuge	2 ea CANGZOU HEBEI, LW450-842N & GLW355-1250N with 300 gpm ea

Well Control

Annular	Yancheng Sanyi 20 3/4" , 3000 psi, H2S trimmed
Double Ram Preventer	Yancheng Sanyi 13-5/8" , 10,000 psi, H2S trimmed
	Yancheng Sanyi, 20 3/4" , 3000 psi, H2S trimmed
	Yancheng Sanyi,13-5/8" , 10,000 psi, H2S trimmed
Single Ram Preventer	Yancheng Sanyi,13-5/8" , 10,000 psi H2S trimmed
Choke Manifold	Yancheng Sanyi, JG103-78/70
	2 9/16"- 4 1/16", 10,000 psi WP, Sour Service
BOP Control Unit	BPM FKQ1280-10, 8 stations, 3000 psi

Drill String Equipment

Drill Pipe	4500m - 5", G-105/S-135, 19.5 lbs/ft
	1000m- 3 1/2", G-105/S-135, 13.3 lbs/ft
HWDP	30 jts 5", 30 jts 3 1/2"
Drill collars	9 jts 9 3/4", 24 jts 8 1/2", 30 jts 6 1/2", 30 jts 4 1/2"

Rig 203

2000 hp DC -Slingshot, Triple

General Description

Make	ZPEC
Year Built	2009
Year OF Commissioning	2011
Estimated Drilling Depth	6000 m with 5" DP, 7000 m with 4-1/2" DP
Estimated Rig Move Loads	75
Estimated Camp Move Loads	45

Mast

Make, Model, Height	ZPEC, K-Type, JJ450/45-K9, 45 m (147')
Static Hook Load Capacity	4500 kN, 1,000,000 Lbs
Mast Racking Capacity	2200 KN, 250 ea 5" Drill pipe Stand and 4 ea 9 3/4" Drill Collar and 6 ea 8 1/2" Drill Collar and 6 ea 6 1/2" Drill Collar

Substructure

Make, Style, Model	ZPEC, Slingshot, DZ450/9S6
Hight	9 m
Clear Hight	7.617 m (25")
Casing Capacity	4500 kN
Maximum Setback	2200 kN/220 MT

Drawworks

Make	ZPEC
Model	JC70D-2
Power Rating	2000 hp/1470 KW
Input Power	2300 hp/1715 KW, 2 ea YZ08 DC Traction Motor
Brake Type-Band or Disc	Disc
Drilling Line Size	1-1/2"

Top Drive

Make	BPM-Beijing Petrolume Mechanic Manufacture
Model	DQ70BSC
Capacity	4500 KN
Torque-Continuous	52877 Nm (39000 lbf ft)

Crown block

Make	LSNOW, TC-450-10, 4500 KN/1,000,000lbs
Sheaves Quantity	6 + 1 Fast Line Sheave
Sheaves Diamiter	6 ea $\Phi 1524\text{mm}$ (60") , 1 \times $\Phi 1829\text{mm}$ (70")

Combination Hook and Traveling Block

Make	LSNOW-DG450, 4500 Kn/1,000,000 lbs
Sheaves Quantity	6
Sheaves Diamiter	$\Phi 1524\text{ mm}$ (60")

Swivel

Make, Model, Load Rating	4500 KN/1,000,000lbs
Speed	0 -300 r/min
Working Pressure	35 MPa (5000 psi)
Center pipe bore hole	(4")

Rotary Table

Opening Size	952.5 mm (37-1/2")
Static Load Capacity	7250 KN
Torque	42000 N.M
Rotary Speed	0 - 300 rpm

Power Generation

Engines (Main)	4 ea CAT3512B DITA -1310KW
Generator	Kato -SR4B - 1714 KVA
SCR/VFD	SCR system -Drive Type- SIEMENS- One to One

Mud System

Mud Pumps	3 ea KLF ZPEC F-1600
Power /Pressure Rating	1600 HP/ 5000 Psi
Active Mud Volume	2000 bbl.
Reserve Mud Volume	1000 bbl
Shale Shakers	3 ea Derrick FLC-2000
Mud Cleaner Shaker	Derrick FLC2000
Mud Cleaner Desander	Derrick 2 ea Cone 12" - 1100 gpm
Mud Cleaner Desilter	Derrick 20 ea Cone 4" - 1500 gpm
Degasser	CANGZHOU ZHONGYOU HV-300; 800 GPM
Centrifuge	2 ea CANGZOU HEBEI, LW450-842N & GLW355-1250N with 300 gpm ea

Well Control

Annular	Yancheng Sanyi 20 3/4", 3000 psi, H2S trimmed
Double Ram Preventer	Yancheng Sanyi 13-5/8", 10,000 psi, H2S trimmed Yancheng Sanyi, 20 3/4", 3000 psi, H2S trimmed Yancheng Sanyi,13-5/8", 10,000 psi, H2S trimmed
Single Ram Preventer	Yancheng Sanyi,13-5/8", 10,000 psi H2S trimmed
Choke Manifold	Yancheng Sanyi, JG103-78/70 2 9/16"- 4 1/16", 10,000 psi WP, Sour Service
BOP Control Unit	BPM FKQ1280-10, 8 stations, 3000 psi

Drill String Equipment

Drill Pipe	4500m - 5", G-105/S-135, 19.5 lbs/ft 1000m- 3 1/2", G-105/S-135, 13.3 lbs/ft
HWDP	30 jts 5", 30 jts 3 1/2"
Drill collars	9 jts 9 3/4", 24 jts 8 1/2", 30 jts 6 1/2", 30 jts 4 1/2"

Rig 204, 205, 206, 206S (207)
2000 hp DC-Slingshot, Triple

General Description

Make	CPTDC - CPLEC (LPEI)
Year Built	2012
Year of Commissioning	2020
Estimated Drilling Depth	6000 m with 5" DP, 7000 m with 4-1/2" DP
Estimated Rig Move Loads	75
Estimated Camp Move Loads	45

Mast

Make, Model, Height	CPLEC, K-Type, JJ450/45K, 45.5 m (149')
Static Hook Load Capacity	4500 kN, 1,000,000 Lbs
Mast Racking Capacity	2200 kN, 250 ea 5" Drill pipe Stand and 3 ea 9 1/2" Drill Collar and 5 ea 8 1/2" Drill Collar and 10 ea 6 1/2" Drill Collar

Substructure

Make, Style, Model	CPLEC, Slingshot, DZ450/10.5S15
Height	10.5 m
Clear Hight	9 m (30")
Casing Capacity	4500 kN
Maximum Setback Load	2200 kN/220 MT

Drawworks

Make	LSNOV
Model	JC-70D
Power Rating	2000 hp/1470 KW
Input Power	2300 hp/1715 KW, 2 ea YZ08 DC Traction Motor
Brake Type-Band or Disc	Disc
Drilling Line Size	1-1/2"

Top Drive

Make	VARCO
Model	TDS-11SA
Capacity	500 T, 800HP
Torque-Continuous	37500 ft.lbs

Crown block

Make, Model, Load Rating	CPLEC, TC 450-7, 4500 KN/1,000,000lbs
Sheaves Quantity	6 + 1 Fast Line Sheave
Sheaves Diamiter	6 ea Φ1524mm (60"), 1 ea Φ1524mm (60")

Hook

Make, Model, Load Rating	CPLEC, DG450, 4500 KN/1,000,000lbs
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Traveling Block

Make, Model, Load Rating	BOMCO, YC450, 4500 KN/1,000,000lbs
Sheaves Quantity	6
Sheaves Diamiter	Φ 1524 mm(60")

Swivel

Make, Model, Load Rating	BOMCO, SL 450-5, 4500 KN/1,000,000lbs
Speed	0 -300 r/min
Working Pressure	35 MPa (5000 psi)
Center pipe bore hole	(4")

Rotary Table

Opening Size	CPLEC, ZP-375, 952.5 mm (37-1/2")
Static Load Capacity	5850kN
Torque	32362 N.M
Rotary Speed	0 - 300 rpm

Power Generation

Engines	4 ea CAT3512B DITA -1310KW
Generator	Kato -SR4B - 1714 KVA
SCR/VFD	SCR system -Ross hill Type- TSC- One to Two

Mud System

Mud Pumps	3 ea BOMCO, F-1600
Power /Pressure Rating	1600 HP/ 5000 Psi
Active Mud Volume	2000 bbl
Reserve Mud Volume	1000 bbl
Shale Shakers	3 ea MI Mongoose Dual Motion
Mud Cleaner Shaker	MI-Swaco-Mongoose, Dual Motion
Mud Cleaner Desander	MI-Swaco, 2 ea Cone 12" - 1100 gpm
Mud Cleaner Desilter	MI-Swaco, 12 ea Cone 4" - 1200 gpm
Degasser	ZCQ 1/4; 4 m3/min (1000 gpm)
Centrifuge	2 ea MI-Swaco 518 FVS, 100-250 gpm.

Well Control

Annular	Rongsheng Mach., 21 ¼", 2000 psi, H2S trimmed
Double Ram Preventer	Rongsheng Mach., 13-5/8", 5000 psi, H2S trimmed
Single Ram Preventer	Rongsheng Mach., 21 ¼", 2000 psi, H2S trimmed
Choke Manifold	Rongsheng Mach., 13-5/8", 5,000 psi, H2S trimmed
	Jiangsu Xianzhong Machinery
	2 9/16"- 4 1/16", 5,000 psi WP, Sour Service
BOP Control Unit	3000 psi, BPM FKQ1280-8;8 stations

Drill String Equipment

Drill Pipe	400 jts 5" G-105, 19.5 lbs/ft; 100 jts 5" S-135, 19.5 lbs/ft; 100 jts 3 ½" G-105, 13.3 lbs/ft, 100 jts 2 7/8" E-75, 10.4 lbs/ft, 50 jts 5"; 50 jts 3 ½".
HWDP	3 jts 11", 15 jts 9 ½", 18 jts 8 ½", 30 jts 6 ½", 30 jts 4 ¾", 30 jts 3 1/8"
Drill collars	

Rig 208

2000 hp DC -Slingshot, Triple

General Description

Make	BOMCO
Year Built	2012
Year of Commissioning	2021
Estimated Drilling Depth	6000 m with 5" DP, 7000 m with 4-1/2" DP
Estimated Rig Move Loads	75
Estimated Camp Move Loads	45

Mast

Make, Model, Height	BOMCO, K-Type, JJ450/45K, 45.5 m (149')
Static Hook Load Capacity	4500 kN, 1,000,000 Lbs
Mast Racking Capacity	2200 kN, 250 ea 5" Drill pipe Stand and 3 ea 9 1/2" Drill Collar and 5 ea 8 1/2" Drill Collar and 10 ea 6 1/2" Drill Collar

Substructure

Make, Style, Model	BOMCO, Slingshot, DZ450/10.5S15
Height	10.5 m
Clear High	9 m (30")
Casing Capacity	4500 kN
Maximum Setback Load	2200 kN/220 MT

Drawworks

Make	BOMCO
Model	JC-70D
Power Rating	2000 hp/1470 KW
Input Power	2300 hp/1715 KW, 2 ea YZ08 DC Traction Motor
Brake Type-Band or Disc	Disc
Drilling Line Size	1-1/2"

Top Drive

Make	VARCO
Model	TDS-115A
Capacity	500 T, 800HP
Torque-Continuous	37500 ft.lbs

Crown block

Make, Model, Load Rating	BOMCO, TC 450-7, 4500 KN/1,000,000lbs
Sheaves Quantity	6 + 1 Fast Line Sheave
Sheaves Diameter	6 ea Φ1524mm (60"), 1 ea Φ1524mm (60")

Hook

Make, Model, Load Rating	BOMCO, DG450, 4500 KN/1,000,000lbs
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Traveling Block

Make, Model, Load Rating	BOMCO, YC450, 4500 KN/1,000,000lbs
Sheaves Quantity	6
Sheaves Diameter	Φ 1524 mm(60")

Swivel

Make, Model, Load Rating	BOMCO, SL 450-5, 4500 KN/1,000,000lbs
Speed	0 -300 r/min
Working Pressure	35 MPa (5000 psi)
Center pipe bore hole	(4")

Rotary Table

Opening Size	BOMCO, ZP-375, 952.5 mm (37-1/2")
Static Load Capacity	5850kN
Torque	32362 N.M
Rotary Speed	0 - 300 rpm

Power Generation

Engines	4 ea CAT3512B DITA -1310KW
Generator	Kato -SR4B - 1714 KVA
SCR/VFD	SCR system -Ross hill Type- TSC- One to Two

Mud System

Mud Pumps	3 ea BOMCO, F-1600
Power /Pressure Rating	1600 HP/ 5000 Psi
Active Mud Volume	2000 bbl
Reserve Mud Volume	1000 bbl
Shale Shakers	3 ea MI Mongoose Dual Motion
Mud Cleaner Shaker	MI-Swaco-Mongoose, Dual Motion
Mud Cleaner Desander	MI-Swaco, 2 ea Cone 12" - 1100 gpm
Mud Cleaner Desilter	MI-Swaco, 12 ea Cone 4" - 1200 gpm
Degasser	ZCQ 1/4; 4 m3/min (1000 gpm)
Centrifuge	2 ea MI-Swaco 518 FVS, 100-250 gpm.

Well Control

Annular	Rongsheng Mach., 21 1/4", 2000 psi, H2S trimmed Rongsheng Mach., 13-5/8", 5000 psi, H2S trimmed
Double Ram Preventer	Rongsheng Mach., 13-5/8", 5,000 psi, H2S trimmed
Single Ram Preventer	Rongsheng Mach., 21 1/4", 2000 psi, H2S trimmed Rongsheng Mach., 13-5/8", 5,000 psi, H2S trimmed
Choke Manifold	Jiangsu Xianzhong Machinery 2 9/16"- 4 1/16", 5,000 psi WP, Sour Service
BOP Control Unit	3000 psi, BPM FKQ1280-8;8 stations

Drill String Equipment

Drill Pipe	400 jts 5" G-105, 19.5 lbs/ft; 100 jts 5" S-135, 19.5 lbs/ft; 100 jts 3 1/2" G-105, 13.3 lbs/ft, 100 jts 2 7/8" E-75, 10.4 lbs/ft, 50 jts 5"; 50 jts 3 1/2".
HWDP	3 jts 11", 15 jts 9 1/2", 18 jts 8 1/2", 30 jts 6 1/2", 30 jts 4 1/4", 30 jts 3 1/8"
Drill collars	

OEOC's Drilling Operation and Rig Services Projects

No	Name Of Project	Client	Location	Duration
1	Provision of One Drilling Rig in Maroon Drilling Project	Iranian Offshore Engineering and Construction Company	Maroon Oil Field	2 Years (In Process)
2	Providing Two Drilling Rigs in Mansourabasd Drilling Project	Petroiran Development Company	Mansour Abad Oil Field	2 Years (In Process)
3	Drilling and Completion 21 Wells in Mansouri Oil Field	National Iranian Oil Engineering and Construction	Mansouri Oil Field	2 Years (In Process)
4	Drilling and Completion 11 Wells in Ramshir Oil Field	National Iranian Oil Engineering and Construction	Ramshir Oil Field	2 Years (In Process)
5	Repair of Well (No 4) and Drilling Well (No 21) in Azar Oil Field	Sarvak Azar Engineering and Development Company	Azar Oil Field	1.5 Years
6	Providing One Drilling Rig in Danan Drilling Project	Mapna Drilling	Danan Oil Field	10 Months (In Process)
7	Drilling 13 Wells in Iran South Fields	National Iranian South Oil Company	South Of Iran Oil Fields	3 Years
8	Drilling and Completion of Azar Well (No 10) in Azar oil Field	Sarvak Azar Engineering and Development Company	Mehran-Ilam	1 Year
9	Completion of Azar Well (No 11) in Azar Oil Field	Kish Petroleum Engineering Company	Mehran-Ilam	1 Year
10	Completion of Well (No 8 and 17) in Azar Oil Field	Sarvak Azar Engineering and Development Company	Azar Oil Field	6 Months
11	Drilling and Completion of Azar Well (No 19) in Azar Oil Field	Global Petro Tech Kish	Azar Oil Field	2 Years
12	Drilling and Completion of Azadegan Well (No 159)	Tadbir Drilling Development Company	Azadegan Oil Field	3 Months
13	Drilling Two Wells in Azar Oil Filed in Form of EPD	Sarvak Azar Engineering and Development Company	Azar Oil Field	2 Years
14	Completion Wells (No 3 and No 4) in Azar Oil Filed (With Name of Persia Drilling Company)	Kish Petroleum Engineering company	Azar Oil Field	6 Months
15	Well Exploration Drilling in Persian Gulf (With Name of Persia Drilling Company).	NIOC	Persian Gulf	2 Years

Integrated Drilling Services

Oilfield Services Department delivers integrated drilling services as well as integrated production maintenance services to clients with optimum quality.

- Casing and Tubular Running Services
- Cementing & Acidizing Services
- Well Head Services
- Surface Testing Services
- Multi-Phase Flow Meter Services (MPFM)
- Downhole Testing Services (FBDST)
- Horizontal Directional Drilling Services
- Mechanical DST/RTTS Services
- Coring Services
- Coiled Tubing Services
- Nitrogen Lifting Services
- Slick Line Services
- Drilling Optimization Services
- H2S Services





Tubular Running Services

OEOC operates casing /tubing from small diameter tubing to 20" casing with owning one of the most complete tubular handling tool inventories in Iran.

-OEOC casing running started the activity since 2010 and during this period it has been operating in several contracts for well-known clients such as: (POGIDC, DANA, IOOC, OEID, etc.).

-OEOC casing running department benefits from updated equipment, highly skilled human resources in order to delivers high quality services to its clients.

-OEOC casing running fleet is equipped with torque monitoring system, pneumatic spider elevator & slips elevator, elevator side door, slips type elevator, power tong with backup tong, belt tong, electric and diesel power units, etc., capable of performing 3 operation "simultaneously in different size from 30" to 2 3/8".



Cementing & Acidizing Services

OEOC offers full line of equipment , engineering and experience to provide cementing and acidizing needs.

HP Double Pump Truck:

Our skid mounted double pump cementing system is designed for the most demanding oil and gas well cementing requirements. The quality of design, component selection makes it a benchmark in the industry. Its powerful mixing system can blend heaviest slurries and automatic density control module provides superior density adjustment.

Six Cement Units Include:

- 3 sets Model GJT70-34II
- 2 sets Model PCS-621B
- 1 sets Model PCS-521B

Main Features:

- Good mixing capabilities
- High load-bearing capacity
- CAT engine 13 & 15
- Allison transmission 600H
- ACM-III automatic mixing system



Cement Bulk Plant

The cement bulk plant includes:

Row	Description	Volume	Qty.
1	Solution Tank	500 bbl	16
2	Cement Silo	1050 ft3	11
3	Cement Silo	750 ft3	5
4	Scale Tank	500 ft3	1
5	Cutter Tank	250/500 ft3	1
6	Cutter Tank	40/50 ft3	2
7	Dust Catcher	250ft3	1
8	Bulk Trailer (Double Silo)	660 ft3	7
9	Air Compressor	392 CFM	7

Acidizing Equipment

Acidizing Equipment Includes:

Row	Description	Volume	Qty.
1	Liquid Tank	500 bbl	16
2	Acid Tanker Covered (Polyethylene)	4000 gal	6
3	Non-corrosive Tanker	4000 gal	3
4	Liquid Tanker	30,000 lit	5
5	Acid Storage Tank Covered (Polyethylene)	12000 gal	3
6	Acid Storage Tank Covered (Polyethylene)	15000 gal	2
7	Air Compressor	392 CFM	7
8	Acid Transfer Pump	200 gal/min	4
9	Acid Mixing Pump	300 gal/min	6
10	Manifold	(Low pressure)	2
11	Manifold	(High pressure)	1
12	Delasco Pump	100 gal/min	4



Surface Testing Services

OEOC has been a leading provider of surface well testing services in both onshore and offshore for more than 15 years.

It supports surface well testing with implementation of engineering team to provide contractual solutions and quality services under HSE's control.



Main surface testing package includes:

Equipment	Specification	QTY.
Choke Manifold	Working Pressure: 10000 & 15000 psi Working Temperature: -20 to 300 of Connection: 3" fig 206, 602 & 1502 Valves: 6 Gate valve with 3-1/16" Arms: 2 arms (fixed choke in one arm and a variable choke in the other arm) Other Features: H2S and CO2 Service	5
3-Phase Test Separator	Working Pressure: 1440 psi Working Temperature: -20 to 300 °F Max. Oil Processing Capacity: 15000 bbl/day Max. Gas Processing Capacity: 64 MMscf/day Retention Time: <u>Min:</u> 30 Sec. <u>Max:</u> 3 Min. Other Features: <ul style="list-style-type: none"> - Protected by relief valve with a backup rupture disc. - Sight glasses made of glass - A check valve to prevent back flow from the Sep. - An open Pressure controller on Gas line and a gas orifice meter. - A fail closed level controllers on Liquid line - An integral shrinkage meter with full range of gas orifices. - Gas and liquid sample points H2S & CO2 Services 	3
Surge Tank	Working Pressure: 50 psi Working Temperature: -20 to 212 °F Capacity: 2×50 bbl Other Features: <ul style="list-style-type: none"> - Uninterrupted Sight glasses cover made of glass - Gas vent line equipped with double check valves. - Protected by a separate relief line backed up by a rupture disc - Audible high and low level alarms. - H2S & CO2 Services 	3
Well Test Laboratory	Equipped with: <ul style="list-style-type: none"> - Zone II hazardous areas Cabin - Gas density measuring device (Ranarex) - Oil density measuring device (Hydrometer) - Dead weight tester - Pressure chart recorder - Pressure electronic reader and recorder - Spin drier (centrifuge) - Water analysis kit - PH Meters - Manometers - Thermometers - H2S and CO2 measurement tube (Gastec) manometer for Barton calibration 	3

Multi-Phase Flow Meter Services (MPFM)

MPFM device is a non-intrusive inline system providing real time measurement of oil, meter & gas flow rates, avoiding the use of large systems based on phase separation.

MPFM of OEOC company is radioactive model, so the device adds flow density measurement & provides a higher level accuracy.

ITEM 1

Multiphase flowatch meter type HS DN 4"API 5000# RTJ; body and flanges; ID = 58, 42; venturi $\beta = 0, 6$.

ITEM 2

Multiphase flowatch meter type HS DN 2" API 5000# RTJ; .body and flanges; ID = 58, 42; venturi $\beta = 0, 6$



The Multiphase flowatch meter HS is proposed in the following configurations:

- A) Materials in DUPLEX F51
- B) Skid Mounted MPFM with in/out Flanges DN 4" and DN 2" API 5000# at Skid Edge.
- C) Radioactive Gamma Source
- D) NIR Water Cut Optical Module (Probe and Electronics Enclosure (Ex d))

MPFM key features:

- Compact design: reduced space and weight, small footprint and no requirements for upstream or downstream straight pipe length.
- No special requirement for upstream pipe geometry, calibrated at the factory.
- Field tested by major oil and service companies worldwide.
- Robust and reliable components with wide temperature operating range.
- It will work in all flow regimes. Low sensitivity to variation in oil properties, not influenced by presence of H₂S or CO₂.
- High flexibility: used for onshore and offshore applications such as individual well monitoring, production optimization, fix and mobile well testing.
- Fast gamma densitometer.
- Near infrared probe for water cut measurement.
- Low power consumption.



Flowwatch HS
(Radioactive model)



Flowwatch 3i
(Non-Radioactive model)

Downhole Testing Services (FBDST)

OEOC provides reliable data for establishing reservoir characteristics, predicting reservoir performance and diagnosing formation damages in difficult or challenging conditions such as HPHT, high flow rate using, high technology downhole testing tools, 15k working pressure, 350 ° F working temperature for 13 3/8, 9 5/8, 7 & 5 inch casing size, 6 3/8 open hole size.

The basic downhole test tools required for a well test include:

PPS or MEGA-P Gauges

Slip Joint

MRCV

AORV

DSBV

LPR-N

POTV

N2 Chamber

ARTS

Hydraulic JAR

RH. Safety Joint

Packer

Perforated Joint

Mule Shoe

TTV

Safety Joint Over Shut

DHSV

Gauge Carrier

6 3/8" Openhole Packer



Mechanical DST/RTTS Services

OEOC designs Drilling Stem Test (DST) to achieve client's test objective economically by full package: 13 3/8", 9 5/8", 7" and 5" size.

Drill Stem Test tools delivers the right answers for determining reservoir pressure permeability and productivity.

Item	Description	Qty	Size(in)
RTTS Packer	RTTS, Retrievable Test Treatment Squeeze Packer Connection: Top: 4.5" API IF Thread Bottom: 4.5" API IF Thread	1	13 3/8
	RTTS Connection: Top: 4.5" API IF Thread Bottom: 4.5" API IF Thread	2	9 5/8
	RTTS Connection: Top: 4.5" 8RD EUE Thread Bottom: 2 7/8" 8RD EUE Thread	2	7
	RTTS Connection: Top: 2 7/8" 8RD EUE Thread Bottom: 2 7/8" FH Thread	2	5
MDST	MDST Package	1	13 3/8
		2	9 5/8
		2	7
		2	5



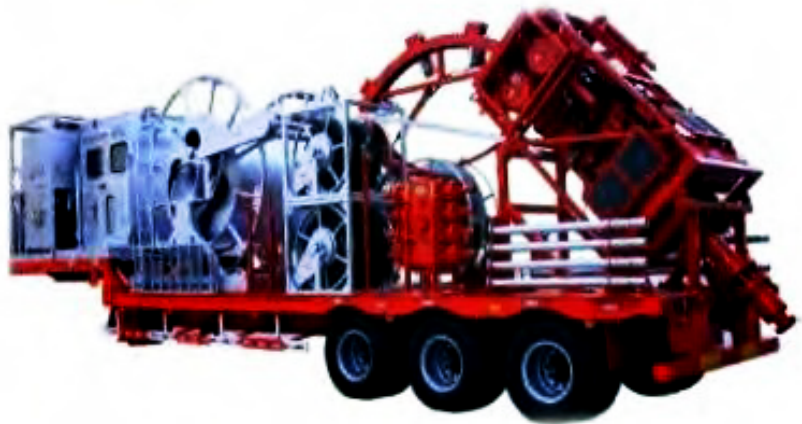


Coiled Tubing Services

OEOC coiled tubing section offers innovative intervention services conveyed on coiled tubing to improve well and reservoir performance.

Coiled Tubing Services Include:

- Acidizing
- Nitrogen Lift
- Drilling
- Jetting
- Washing
- Fishing / Milling
- Cement Plug
- Solids Removal
- Well Cleanouts
- Displacement
- Install Packer



OEOC own three Coiled Tubing Units with following specification:

Serva 80

Description	Specification	
CT Reel	OD	1.5"
	Thickness	0.109"
Injector	Pulling Capacity	800000 lbs
	Snubbing Capacity	40000 lbs
Gooseneck Radius	96 in	

Hydra Rig 240

Description	Specification	
CT Reel	OD	1.5"
	Thickness	0.109"
Injector	Pulling Capacity	60000 lbs
	Snubbing Capacity	20000 lbs
Gooseneck Radius	72 in	

Hydra Rig 480

Description	Specification	
CT Reel	OD	1.5"
	Thickness	0.109"
Injector	Pulling Capacity	100000 lbs
	Snubbing Capacity	40000 lbs
Gooseneck Radius	96 in	



Tubing Spooler:

A spool is a device used for carrying continuous pipe or coiled tubing which comes into a stand and coupled to a rotary power source.

It also mounted and coupled with comparative quick-ness, facilitating use for both transportation and operation at the well site.



Nitrogen Lifting Services

OEOC owns two 180K Zone II nitrogen unit that supplies gaseous nitrogen at flow rates up to 180,000 SCFH (3000 SCFM) and pressures up to 10,000 psi and also one N2 tanker with 5000 gal capacity.

Safety Feature

Oil Field Zone II Pyroban System
Anti-static and Fire Resistant Belts
Non-Metallic Fan
Coolant Over-Temperature Shutdown
Coolant Loss of Flow Shutdown
Loss of Lube Oil Pressure Shutdown
Emergency Shutdown
Over Pressure Shutdown
Over Speed Shutdown

Row	Description	Specification
1	Max. Pressure Rate	psi 10,000
2	Min - Max Flowrate	gal 4-25



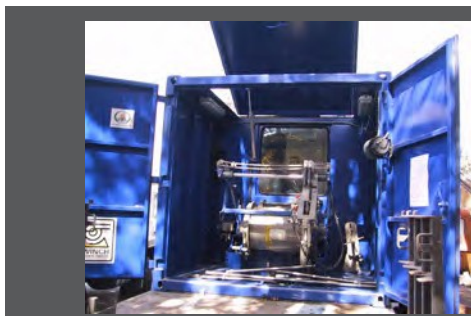
Slick Line Services

We provide a comprehensive range of services for cost-effective operations, with types of services (routine slick line to heavy duty services).

Operation is performed in high pressure, high temperature well environment with working pressure up to 10,000 psi.

Our slick line package includes:

- Double Drum Winches (3 Truck Mounted & 2 Skid mounted)
- Smart Display (Data Acquisition)
- Full Range of Pressure Control Equipment Includes: Stuffing Box, Lubricator and BOP Full Range of Running and Pulling Tools Positive Bottom Hole Sampler



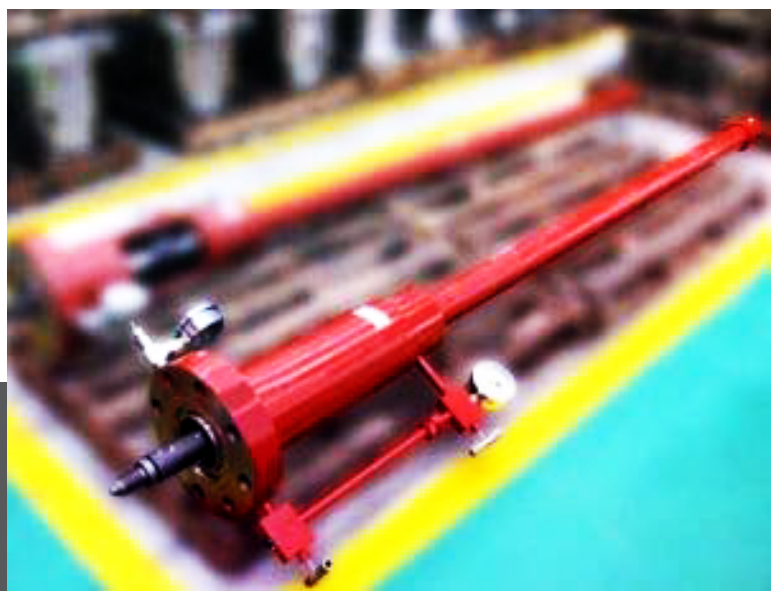
Well Head Services

OEOC offers a comprehensive suite of wellhead products and services as follows:

Conventional Wellhead Equipment

WFT and National, API 6A Wellhead Products Completion, Wellhead Systems Unitized, Wellhead Systems Mud line Suspension Systems Gate Valves, API 6A Gate Valves Field Services Installation, Maintenance and Repairs.

Set and unset BPV (Back Pressure Valve) & 2 ways by lubricator with working pressure 3000 psi or 5000 psi.



Horizontal Directional Drilling

Horizontal Directional Drilling equipment, known as HDD, is used for the trench less installation of pipelines for gas, oil, water, sewage, power cables and communication services all over the world.

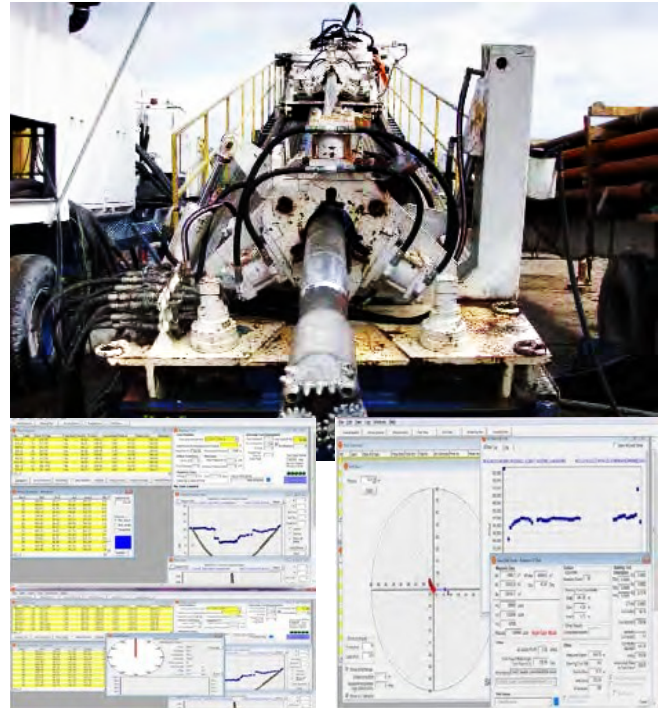
The product range covers the whole ranges of equipment for these applications.

For alluvial soils as well as for rocky conditions, HDD is the right method to install a prefabricated pipeline fast and cost-effective underneath obstacles.

Experience: 14 Years, River/Road Crossing Drilling

Specification: Herren Knecht Made in Germany 250 Ton

Performance: 5 x 36" Steel Pipe (Oil & Gas) -5 x 4" Steel Pipe (Fiber) 3 x 18" Steel Pipe 3 x 30" Steel Pipe P (Fiber) 2 x 24" Steel Pipe 3 x 20" Steel Pipe



OEOC's Integrated Drilling Services Recent Projects

No	Client	Name OF Project	Contract No
1	National Iranian South Oil Company	Provision of Three Coiled Tubing Units and Technical Services	53-74-1994
2		Provision of Coiled Tubing Units and Technical Services in Karun Oilfield	2213
3		Provision of Coiled Tubing Units and Technical Services in Masjed Soleyman Oilfield	2214
4	Persia Oil and Gas Industry Development Company	Stimulation Services for North Yaran Oilfield for Ten Wells	74-96/10158
5		Coring Services for Nine Wells in North Yaran Oilfield	74-92/10010
6		Casing Running Services for Eight Wells in North Yaran Oilfield	74-93/10044
7		Stimulation Services for Ten Wells in North Yaran Oilfield	74-93/10057
8		Casing Running Services for Two Wells in North Yaran Oilfield	74-96/10174
9		Slick Line Services in Yaran Oilfield	74-98/10276
10		Stimulation Services in Yaran Oilfield	74-98/10283
11		MOT/MOS Services in Yaran Oilfield	74-98/10288
12		Drilling Services in Yaran Oilfield	74-99/10334
13		FBDST Services	74-99/10339
14	Tadbir Petro Energy	Testing and Acidizing in Azadegan Oil Field	1397-171
15	Iranian Offshore Oil Company	Casing Running Services in Lavan ,Siri and Qeshm	5220-97-3 F G
16		Casing Running Services in khark and Bahregan	5221-97-3 F G
17	Drilling International Company – (DCI)	Well Head Services	SI-98-CO-0007
18	Oil Industries' Engineering and Construction (OIEC)	Provision of Integrated Drilling Services Ramshir Oil-Field Development Project	PR-OI-OC-9810-DR-CN-0019
19		Provision of Integrated Production and Petroleum Engineering Services Ramshir Oil-Field Development Project	PR-OI-OD-9903-PE-CO-0024
20		Provision of Integrated Drilling Services Mansouri Oil-Field Development Project	MIAS-OI-OC-9810-DR-CN-0014
21		Provision of Integrated Production and Petroleum Engineering Services Mansouri Oil-Field Development Project	MIAS-OI-OC-9810-PM-CN-0017
22	Pars Energy Gostar Drilling and Exploration Company	Pumping services	-
23	Sarvak Azar Engineering and Development	Provision of Production Maintenance Services For 4(four) wells in AZAR Oil Field	AP-1-98-254
24		Provision of Production Maintenance Services in AZAR Oil Field	AP-1-00-294
25	Top Select Oilfield service company	Surface Well Testing Services	156-1398-ت
26		Stimulation	204-1398-ت
27		Slickline services	101-1399-ت
28		Well Testing Srvices (Surface and Downhole) and Slickline	127-1400-ت
29		Pumping services	132-1400-ت
30	Dana Energy	MOS & MOT Well Services	DDC-99-NRG-CN-045
31	Tadbir Drilling Development Co	Well Services	99/382
32	Oil & Energy Industries Development Company	Cementing and Acidizing Services	997618
33	Petro Darian Kish Drilling Engineering Company	Provision of Cementing Equipment Services	98-184
34	North Drilling Company	Provision of Surface Well Testing and Drilling Stem Test Services	31869

Operation Base

OEOC owns operation base in Ahwaz with almost 40 hectares area.

All equipment maintained in this area. The whole area consist of 3 yards which include warehouses and maintenance shops.

1- **Korit's yard** which includes:

Seven warehouses and maintenance shops as follows:

- Warehouse related to storing and cutting cement sacks.
- Maintenance and repair shop related to cement truck and coiled-tubing unit.
- Maintenance shop related to coring and casing running tools.
- Maintenance and repair shop related to mechanical DST-RTTS and fullbore DST tools.
- Maintenance and repair shop related to slickline, well-head and surface testing tools.
- Warehouse related to spare parts.
- Logistics, transportation and repair shop.

2- **Shahid Soleymani's yard** with 9 hectars area encompasses:

A. 7200 m2 concreted floor which includes:

- 1200 m2 warehouse (100m2 cold room and maintenance shop)

B. 800 m2 administrative office which includes:

- Maintenance, welding and instrumentation department
- Movable tools department (capable of repair and overhaul of well control equipment)
- Operation management

3- **Third yard** incudes warehouse and storage in order to support and case of necessity.



HSE Management System

In OEOC we are particularly concerned issues such as Health, Safety, Environment. “Safety First” and “No Harm to people, no Damage Equipment and Environment” are our deep-rooted anxiety. We are very proud that the HSE culture in OEOC has established in Iran; such as succeed to achieve 600,000 Man/Hours free LTI in Surkhanski Seismic Project in Uzbekistan and 1,300,000 Man/Hours Zero LTI in Arvandan Drilling Project in Iran.

In order to further improve and proceed with QHSE objective, OEOC has implemented an Integrated Management System (IMS) in accordance with Quality Management System (QMS) and in conformity with OGP guidelines and ISO 9001:2008 standards, and the Health, Safety and Environmental Management System (HSE-MS). IMS enables OEOC to better facilities continues improvement of HSE activities to provide sustainable protection against human, financial and environmental losses.

In addition, qualified HSE personnel are assigned to consult management on all aspects of Health, Safety and Environmental issues. This HSE team is responsible for developing and reviewing HSE procedures and monitoring contractor activities with periodical audits to ensure that all operations, including corporate activities and project implement, follow and respect Health, Safety and Environmental performance standards and applicable procedures in their workplace.



In order to improve the effectiveness of the managementSystem constantly, the Oil Exploration Operation Company is committed to management systems standards:

(HSE-MS,
ISO9001: 2015,
ISO14001: 2000.
OHSAS18001: 2007
ISO/TS29001: 2015)
across all organizational levels.

Integrated Management System (IMS) comply these issued standards by DQS (Germany) which are extended every year after auditing procedure.



Certificates



OEOC Achieved ISO Certificates from DQS Germany

HSE - MS
ISO 9001: 2015
ISO 14001: 2015
OHSAS 18001 / 2007
ISO / TS 2 9001 / 2010



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