

# DRILL STEM TEST SERVICE



## Range of activity:

- Drill Stem Tests in holes combined with measurement of the production rate, pressure and temperature
- Using the Full-Flo testers we perform the wide range of operations while testing:
  - running geophysical probes into boreholes (e.g. to obtain production logs)
  - Slickline sampling
  - acid treatments jobs
  - cooperation with Coiled Tubing and Nitrogen Units
  - production testing
  - perforating combined with drill stem tests

## EQUIPMENT

### Halliburton Standard type OD 3-7/8" and OD 5"

- Set in cased hole 5", 6-5/8", 7", 9-5/8"
- Set in open hole up 143 mm to 311 mm (5-5/8" – 12-1/4")
- Working pressure 9 500 PSI

### Halliburton Ful-Flo type OD 5"

- Ful-Flo ID 2,25"
- Set in cased hole 7", 9-5/8"
- Working pressure 10 000 PSI

### Baker - Lynes Inflatable OD 5"

- Drill Stem Tests of formation using straddle packers. Distance between packers up 5 to 50 meters
- Set in cased hole 7"; 9-5/8"; 13-3/8"
- Set in Open hole up 146 mm to 311 mm (5-3/4" – 12-1/4")
- Working pressure 5 000 PSI

### DST testing Head, flow lines, valves, choke manifolds

- Working pressure 10 000 PSI

### Two phases skid mounted separators

- Working pressure up to 207 bar
- Flow rate up to 42,000 Nm<sup>3</sup>/h

### Skid mounted Flare Stack



# EQUIPMENT

## Electronic memory gauges Canada Tech and Metrolog

		Pressure Pilot	Shortline	Quartz QM 200
Pressure	Rating external pressure [psi]	0-10000 0-15000	0-10000 0-15000	0-20000
	Sensor type	Piezo-resistive	Piezo-resistive	Quartz
	Accuracy	± 0,050% full scale	± 0,050% full scale	± 0,02% full scale
	Long-term stability	0.1% full scale	0.1% full scale	0.015% full scale
Temperature	Maximum temperature	177°C	177°C	200°C
	Accuracy	± 1.0°C	± 1.0°C	± 0.15°C
Memory	Sampling interval	One second to one hour	One second to one hour	One second to one hour
	Capacity	500 000 records	500 000 records	1,000,000 samples in sequential mode or 500,000 in redundant memory mode

### HALLIBURTON STANDARD 3-7/8" – OPEN HOLE

Tool name	OD [inch]	ID [inch]
surface equipment		
drill collars / hevi wate drill pipes / drill pipes		
pump out disc circulating valve		
drill collars / hevi wate drill pipes		
dual closed in pressure valve	3.88	
sample chamber (drain valve)	3.90	1.80
hydrospring tester valve	3.875	
gauge carrier	3.875	
hydraulic jar	3.90	1.25
v.r. safety joint	3.88	0.75
packer nr 5 1/2" / 7 3/4" / 11 1/4"	5.5 – 8	1.53
anchor pipe safety joint	3.75	0.75
hevi wate drill pipes / drill pipes		
perforated flush anchor joint	3.75	1.75
anchor shoe	3.75	

### HALLIBURTON STANDARD 5" – CASSED HOLE

Tool name	OD [inch]	ID [inch]
surface equipment		
drill collars / hevi wate drill pipes / drill pipes		
pump out disc circulating valve		
rd circulating valve		
drill collars / hevi wate drill pipes / drill pipes		
dual closed in pressure valve	5.00	
sample chamber (drain valve)	5.00	2.25
hydrospring tester valve	5.00	
gauge carrier	5.00	
hydraulic jar	5.00	1.75
v.r. safety joint	5.00	1.00
packer RTTS 6 5/8" / 7" / 9 5/8"	5.65	2.37
drill collars / hevi wate drill pipes / drill pipes		
perforated flush anchor joint	5.00	2.43
anchor shoe	5.00	

### BAKER-LYNES INFLATABLE

Tool name	OD [inch]	ID [inch]
surface equipment		
drill pipes		
drill collars		
circulating sub	4.75	2.99
drill collars		
inside recorder carrier	5.00	N/A
hydraulic shut-in valve	5.00	N/A
sampler	5.00	N/A
hydraulic jar	5.00	N/A
safety joint	5.00	2.44
downhole inflation pump	5.00	N/A
pump screen	5.00	N/A
top packer assy	5 / 7 / 10 / 1/2	N/A
ported combination sub	5.00	0.94
outside recorder carrier	5.00	2.00
drill pipes		
bottom packer assy	5 / 7 / 10 / 1/2	1.57
drag spring device	5.13	2.00
shoe	5.00	N/A

### HALLIBURTON FUL-FLO 5" – CASSED HOLE

Tool name	OD [inch]	ID [inch]
surface equipment		
drill collars / hevi wate drill pipes / drill pipes		
rd circulating valve	5.00	2.25
drill collars / hevi wate drill pipes		
hydrospring tester valve	5.00	2.25
sampler	5.00	2.25
drill collars / hevi wate drill pipes		
slip joint	5.00	2.25
drill collars / hevi wate drill pipes		
gauge carrier	5.00	2.25
hydraulic jar	5.00	2.25
safety joint	4.625	2.43
RTTS circulating valve	4.87	2.43
packer RTTS 7"	5.65	2.37
tubing		
gun		

[www.exalo.pl](http://www.exalo.pl)

**Headquarters**  
Exalo Drilling S.A.  
Pl. Staszica 9  
64-920 Piła  
Poland  
phone: +48 67 215 13 00

**Sales Department**  
ul. Naftowa 3  
65-705 Zielona Góra  
phone: +48 68 329 55 55  
fax: +48 68 325 64 42  
e-mail: sales@exalo.pl

**Czech Republic**  
phone: +48 134372194  
e-mail: czechy@exalo.pl

**Kazakhstan**  
phone/fax: +77272279688  
e-mail: kazachstan@exalo.pl

**Libya**  
phone/fax: +218913234151  
e-mail: libia@exalo.pl

**Pakistan**  
phone: +922135874136  
e-mail: pakistan.branch@exalo.pl

