

BLOWOUT PREVENTION EQUIPMENT CHECK LIST

- ∅ This report is to be completed before drill out on each well and there after fortnightly. Bleed down and recovery should be performed on initial nipple ups only.
- ∅ The accumulator unit should be inspected and tested by operating all BOP's using the energy stored in the accumulator.
- ∅ The accumulator should have sufficient capacity to **close** each bag and each ram **once** and **open** one HCR once at the rated well pressure and obtain a seal

Refer to API 53 17.3.2, 17.7.1

Contractor	Century Drilling, Rig 11
Report or Week #	1
Date	9th & 10th December 2006
Well	Megascolides # 1 RE
BOP operating unit	Koomey
BOP stack	13 5/8" 5K
Choke manifold	3 1/8" 5K

Before commencing check list on page 2 perform the following:

1. Check Accumulator fluid level
2. Check Accumulator pressure
3. Check Operating pressure
4. Check & confirm bottles fully charged (N2)
5. Check lines are hooked up
6. Check Driller's BOP panel
7. Check remote BOP panel

Repeat steps 4 & 5 after function testing BOP

PUMP SETTINGS	Starts psi	Stops psi	API spec Start psi *	API Spec Stops psi *
Electric Pump	2800	3000	2700	3000
Air Pump	2550	2850	2550	2850

Accumulator Pressure	
Initial Press	3,000
Pre-charge Press	1,000
Is final pressure at least 200psi more than Pre-charge Press?	Yes

- The primary pump system will **start** automatically at **90%** of the accumulator designed working pressure, and **stop** automatically at the **maximum** designed working pressure.
- ** The secondary pump system will **start** automatically at **85%** of the accumulator designed working pressure, and **stop** automatically at **95%** of the maximum designed working pressure

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Accumulator Pressure			Rig No:		Century 11	Date	10 th December 2006	
1. BOP	Type / Size		Low Press PSI	High Press PSI	Duration Minutes	Test No.	Passed	
Annular	GL	13 5/8	200	3000	10 / 10	6	Y / Y	
Pipe Rams	SL	13 5/8	200	3000	10 / 10	1-5	Y / Y	
Blind Rams	SL	13 5/8	200	3000	10 / 10	7	Y / Y	
Casing		9 5/8	200	1100	5/5	13	Y / Y	
2. Kill Line								Function
Stand Pipe		4"	200	3000	10 / 10	1	Y / Y	
Hose		4"	200	3000	10 / 10	1	Y / Y	
Valve Kelly		4"	200	3000	10 / 10	1	Y / Y	
Upper Kelly Cock			200	3000	10 / 10	2	Y / Y	
Lower Kelly Cock			200	3000	10 / 10	3	Y / Y	
Outer Kill			200	3000	10 / 10	1-3	Y / Y	
Inner Kill			200	3000	10 / 10	4	Y / Y	
3. Safety Valves								Function
HCR			200	5000	10 / 10	8-12	Y / Y	
Manual HCR			200	3000	10 / 10	13	Y / Y	
TIW number 1			200	3000	10 / 10	6	Y / Y	
TIW number 2								
Inside BOP valve								
Stabbing Valve			200	3000	10 / 10	4	Y / Y	
4. Choke Manifold								Function
Choke Valves 1, 2 + 3			200	5000	10 / 10	12	Y / Y	
Choke Valves 3, 5 + 7			200	5000	10 / 10	10	Y / Y	
Choke Valves 6, 8 + 9			200	5000	10 / 10	9	Y / Y	
Choke Valves 10 + 11			200	5000	10 / 10	8	Y / Y	
Chokes manual & remote			200		10	11	Manual N Remote Y	

NB

- Kelly cock ID should be > or = to string ID that is to be run.
- Test number should correspond with SOP and be recorded on the Barton Chart.

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Notes:

KOOMEY PRESSURE GAUGE READINGS				
	Unit	Remote		
Accumulator	2850	3000		
Manifold	1650	1500		
Annular	795	795		
BOPs				
Description	Gallons to Close	Gallons to Open	Closing Ratio	Opening Ratio
Hydril 13 5/8" annular preventer – 5K	19.76	14.16		
Shaffer 13 5/8" SL Pipe Rams – 5K	5.44	4.46	5.54:1	3:1
Shaffer 13 5/8" SL CSO Rams – 5K	5.44	4.46	5.54:1	3:1
Choke Line HCR	1.42	1.42		
Recovery time from 1,200psi				
Component	Initial psi	Time (seconds)	Final psi	
Close pipe rams	3000	3.5	2575	
Open pipe rams	2575	4.0	2250	
Close annular	2250	16.0	1500	
Open HCR	1500	1.0	1500	
Close pipe rams	1500	4.0	1410	
Recovery time from 1,200psi				
Electric pump			4min 40sec	
Air pumps			13min 30sec	
Electric & Air pumps combined			3min 40sec	

NB

- Bleed down and recovery tests are required on the initial nipple up only.
- If rams take longer than 30 seconds to fully function, system may be in need of repair.