

International Well Control Forum

Subsea BOP Kill Sheet - Deviated Well (Metric/Bar)

DATE : _____

NAME : _____

FORMATION STRENGTH DATA:

SURFACE LEAK -OFF PRESSURE FROM FORMATION STRENGTH TEST bar

DRILLING FLUID DENS. AT TEST kg/l

MAX. ALLOWABLE DRILLING FLUID DENSITY =

(B) + $\frac{(A) \times 10.2}{\text{SHOE T.V.D}}$ = kg/l

INITIAL MAASP =

$\frac{((C) - \text{Current Density.}) \times \text{Shoe TVD}}{10.2}$ = bar

CURRENT DRILLING FLUID:

DENSITY kg/l

SUBSEA BOP DATA:

MARINE RISER LENGTH m

CHOKELINE LENGTH m

DEVIATION DATA:

KOP M.D. m

KOP T.V.D. m

EOB M.D. m

EOB T.V.D. m

CASING SHOE DATA:

SIZE in

M. DEPTH m

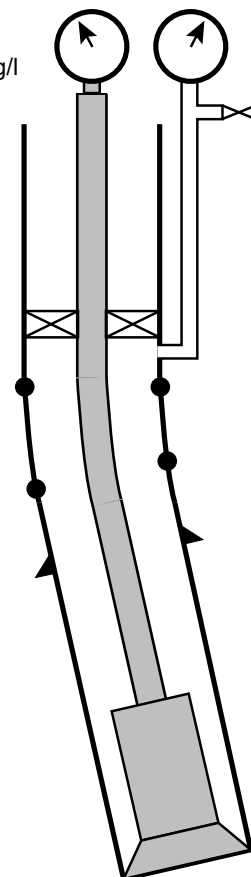
T.V. DEPTH m

HOLE DATA:

SIZE in

M. DEPTH m

T.V. DEPTH m



PUMP NO. 1 DISPL.	PUMP NO. 2 DISPL.
l / stroke	l / stroke

SLOW PUMP RATE DATA:	(PL) DYNAMIC PRESSURE LOSS [bar]					
	PUMP NO. 1			PUMP NO. 2		
	Riser	Choke Line	Friction Choke Line	Riser	Choke Line	Friction Choke Line
SPM						
SPM						

PRE-RECORDED VOLUME DATA:	LENGTH m	CAPACITY l / m	VOLUME litres	PUMP STROKES stks	TIME minutes
DP - SURFACE TO KOP	x	=		(L)	stks
DP - KOP TO EOB	x	=	+	(M)	stks
DP - EOB TO BHA	x	=	+	(N1)	stks
HEVI WALL DRILL PIPE	x	=	+	(N2)	stks
DRILL COLLAR	x	=	+	(N3)	stks
DRILL STRING VOLUME			(D)	stks	min
DC x OPEN HOLE	x	=			
DP / HWDP x OPEN HOLE	x	=	+		
OPEN HOLE VOLUME			(F)	stks	min
DP x CASING	x	=	(G)	stks	min
CHOKELINE	x	=	(H)	stks	min
TOTAL ANNULUS/CHOKELINE VOLUME			(F+G+H) = (I)	stks	min
TOTAL WELL SYSTEM VOLUME			(D+I) = (J)	stks	min
ACTIVE SURFACE VOLUME			(K)	stks	
TOTAL ACTIVE FLUID SYSTEM			(J+K)	stks	
MARINE RISER x DP	x	=	l	stks	

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KICK DATA : SIDPP bar SICP bar PIT GAIN litres

KILL FLUID DENSITY	CURRENT DRILLING FLUID DENSITY + $\frac{\text{SIDPP} \times 10.2}{\text{TVD}}$	
KMD + = kg / l

INITIAL CIRC. PRESS. ICP	DYNAMIC PRESSURE LOSS + SIDPP	
 + = bar

INITIAL DYNAMIC CASING PRESS AT KILL PUMP RATE	SICP - CHOKE LINE FRICTION	
	= - = bar

FINAL CIRCULATING PRESSURE FCP	$\frac{\text{KILL FLUID DENSITY}}{\text{CURRENT DRILLING FLUID DENSITY}} \times \text{DYNAMIC PRESSURE LOSS}$	
 x = bar

DYNAMIC PRESSURE LOSS AT KOP (O)	$\text{PL} + \left[(\text{FCP} - \text{PL}) \times \frac{\text{KOPMD}}{\text{TDMD}} \right] = \dots + \left[(\dots - \dots) \times \frac{\dots}{\dots} \right] =$ bar
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REMAINING SIDPP AT KOP (P)	$\text{SIDPP} - \left[\frac{(\text{KMD} - \text{OMD}) \times \text{KOPTVD}}{10.2} \right]$ $= \dots - \left[\frac{(\dots - \dots) \times \dots}{10.2} \right] =$ bar
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CIRCULATING PRESS. AT KOP (KOP CP)	(O) + (P) = + = bar
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DYNAMIC PRESS. LOSS AT EOB (R)	$\text{PL} + \left[(\text{FCP} - \text{PL}) \times \frac{\text{EOBMD}}{\text{TDMD}} \right] = \dots + \left[(\dots - \dots) \times \frac{\dots}{\dots} \right] =$ bar
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REMAINING SIDPP AT EOB (S)	$\text{SIDPP} - \left[\frac{(\text{KMD} - \text{OMD}) \times \text{EOBTV D}}{10.2} \right]$ $= \dots - \left[\frac{(\dots - \dots) \times \dots}{10.2} \right] =$ bar
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CIRCULATING PRESS. AT EOB (EOB CP)	(R) + (S) = + = bar
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(T) = ICP - KOP CP = - = bar	$\frac{(T) \times 100}{(L)} = \frac{\dots \times 100}{\dots} = \dots \frac{\text{bar}}{100 \text{ strokes}}$
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(U) = KOP CP - EOB CP = - = bar	$\frac{(U) \times 100}{(M)} = \frac{\dots \times 100}{\dots} = \dots \frac{\text{bar}}{100 \text{ strokes}}$
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(W) = EOB CP - FCP = - = bar	$\frac{(W) \times 100}{(N1+N2+N3)} = \frac{\dots \times 100}{\dots} = \dots \frac{\text{bar}}{100 \text{ strokes}}$
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