

International Well Control Forum

Subsea BOP Deviated Well Kill Sheet (Field Units)

DATE : _____

NAME : _____

FORMATION STRENGTH DATA:
 SURFACE LEAK -OFF PRESSURE FROM
 FORMATION STRENGTH TEST psi
 DRILLING FLUID DENS. AT TEST ppg
 MAX. ALLOWABLE DRILLING FLUID DENSITY =
 $(B) + \frac{(A)}{\text{SHOE T.V. DEPTH} \times 0.052} = \text{(C)} \text{ ppg}$
 INITIAL MAASP =
 $((C) - \text{CURR. DENS.}) \times \text{SHOE T.V. DEPTH} \times 0.052$
 = psi

CURRENT DRILLING FLUID:

DENSITY ppg

SUBSEA BOP DATA:

MARINE RISER LENGTH ft

CHOKELINE LENGTH ft

DEVIATION DATA:

KOP M.D. ft

KOP T.V.D. ft

EOB M.D. ft

EOB T.V.D. ft

CASING SHOE DATA:

SIZE in

M. DEPTH ft

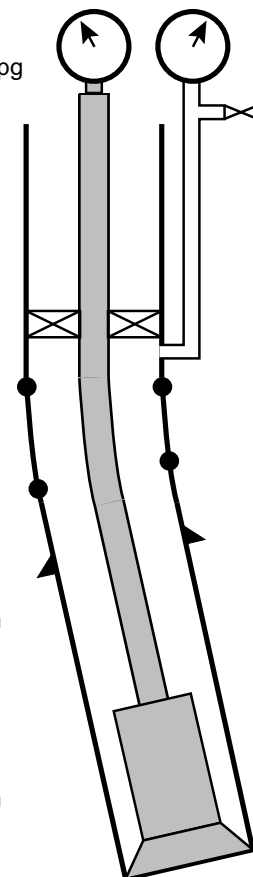
T.V. DEPTH ft

HOLE DATA:

SIZE in

M. DEPTH ft

T.V. DEPTH ft



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

SLOW PUMP RATE DATA:	(PL) DYNAMIC PRESSURE LOSS [psi]					
	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 ft	CAPACITY bbl / ft	VOLUME bbl	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) bbl	stks	min
DC x OPEN HOLE	x	=			
DP / HWDP x OPEN HOLE	x	=	+		
OPEN HOLE VOLUME			(F) bbl	stks	min
DP x CASING	x	= (G)	+	stks	min
CHOKELINE	x	= (H)	+	stks	min
TOTAL ANNULUS/CHOKELINE VOLUME			(F+G+H) = (I) bbl	stks	min
TOTAL WELL SYSTEM VOLUME			(D+I) = (J) bbl	stks	min
ACTIVE SURFACE VOLUME			(K) bbl	stks	
TOTAL ACTIVE FLUID SYSTEM			(J+K) bbl	stks	
MARINE RISER x DP	x	=	bbl	stks	

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KICK DATA : SIDPP psi SICP psi PIT GAIN bbl

KILL FLUID DENSITY KMD	$\text{CURRENT DRILLING FLUID DENSITY} + \frac{\text{SIDPP}}{\text{TVD} \times 0.052}$ $\dots\dots\dots + \frac{\dots\dots\dots}{\dots\dots\dots \times 0.052} = \dots\dots\dots \text{ ppg}$
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INITIAL CIRC. PRESS. ICP	$\text{DYNAMIC PRESSURE LOSS} + \text{SIDPP}$ $\dots\dots\dots + \dots\dots\dots = \dots\dots\dots \text{ psi}$
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INITIAL DYNAMIC CASING PRESS AT KILL PUMP RATE	$\text{SICP} - \text{CHOKE LINE FRICTION}$ $= \dots\dots\dots - \dots\dots\dots = \dots\dots\dots \text{ psi}$
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FINAL CIRCULATING PRESSURE FCP	$\frac{\text{KILL FLUID DENSITY}}{\text{CURRENT DRILLING FLUID DENSITY}} \times \text{DYNAMIC PRESSURE LOSS}$ $\frac{\dots\dots\dots}{\dots\dots\dots} \times \dots\dots\dots = \dots\dots\dots \text{ psi}$
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DYNAMIC PRESSURE LOSS AT KOP (O)	$PL + \left[(\text{FCP} - \text{PL}) \times \frac{\text{KOPMD}}{\text{TDMD}} \right] = \dots\dots\dots + \left[(\dots\dots\dots - \dots\dots\dots) \times \frac{\dots\dots\dots}{\dots\dots\dots} \right] = \dots\dots\dots \text{ psi}$
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REMAINING SIDPP AT KOP (P)	$\text{SIDPP} - \left[(\text{KMD} - \text{OMD}) \times \text{KOPTVD} \times 0.052 \right]$ $= \dots\dots\dots - \left[(\dots\dots\dots - \dots\dots\dots) \times 0.052 \times \dots\dots\dots \right] = \dots\dots\dots \text{ psi}$
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CIRCULATING PRESS. AT KOP (KOP CP)	$(\text{O}) + (\text{P}) = \dots\dots\dots + \dots\dots\dots = \dots\dots\dots \text{ psi}$
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DYNAMIC PRESS. LOSS AT EOB (R)	$PL + \left[(\text{FCP} - \text{PL}) \times \frac{\text{EOBMD}}{\text{TDMD}} \right] = \dots\dots\dots + \left[(\dots\dots\dots - \dots\dots\dots) \times \frac{\dots\dots\dots}{\dots\dots\dots} \right] = \dots\dots\dots \text{ psi}$
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REMAINING SIDPP AT EOB (S)	$\text{SIDPP} - \left[(\text{KMD} - \text{OMD}) \times \text{EOBTVD} \times 0.052 \right]$ $= \dots\dots\dots - \left[(\dots\dots\dots - \dots\dots\dots) \times 0.052 \times \dots\dots\dots \right] = \dots\dots\dots \text{ psi}$
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CIRCULATING PRESS. AT EOB (EOB CP)	$(\text{R}) + (\text{S}) = \dots\dots\dots + \dots\dots\dots = \dots\dots\dots \text{ psi}$
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(T) = ICP - KOP CP = $\dots\dots\dots - \dots\dots\dots = \dots\dots\dots \text{ psi}$	$\frac{(T) \times 100}{(L)} = \frac{\dots\dots\dots \times 100}{\dots\dots\dots} = \dots\dots\dots \frac{\text{psi}}{100 \text{ strokes}}$
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(U) = KOP CP - EOB CP = $\dots\dots\dots - \dots\dots\dots = \dots\dots\dots \text{ psi}$	$\frac{(U) \times 100}{(M)} = \frac{\dots\dots\dots \times 100}{\dots\dots\dots} = \dots\dots\dots \frac{\text{psi}}{100 \text{ strokes}}$
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(W) = EOB CP - FCP = $\dots\dots\dots - \dots\dots\dots = \dots\dots\dots \text{ psi}$	$\frac{(W) \times 100}{(N1+N2+N3)} = \frac{\dots\dots\dots \times 100}{\dots\dots\dots} = \dots\dots\dots \frac{\text{psi}}{100 \text{ strokes}}$
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