Surface BOP Kill Sheet Deviated Well (API Field Units)

DATE : _____

NAME : _____

FORMATION STRENGTH DATA:

SURFACE LEAK -OFF PRESSURE FROM FORMATION STRENGTH TEST (A) _____ psi

MUD WEIGHT AT TEST (B) _____ ppg

MAXIMUM ALLOWABLE MUD WEIGHT =

$$(B) + \frac{(A)}{\text{SHOE T.V. DEPTH} \times 0.052} = (C) \_\_\_\_ \text{ ppg}$$

INITIAL MAASP =

((C) - CURRENT MUD WEIGHT) x SHOE T.V. DEPTH x 0.052

= _____ psi

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

SLOW PUMP RATE DATA:	(PL) DYNAMIC PRESSURE LOSS	
	PUMP NO. 1	PUMP NO. 2
SPM	psi	psi
SPM	psi	psi

CURRENT WELL DATA:

DRILLING MUD DATA:

WEIGHT _____ ppg

GRADIENT _____ psi/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

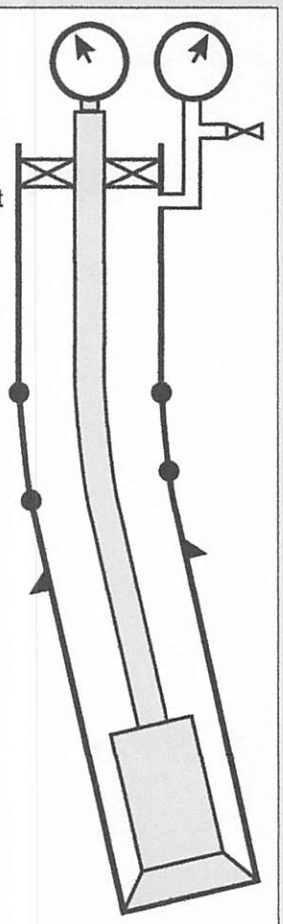
T.V. DEPTH _____ ft

HOLE DATA:

SIZE _____ in

M. DEPTH _____ ft

T.V. DEPTH _____ ft



PRE-RECORDED VOLUME DATA:	LENGTH ft	CAPACITY bbls / ft	VOLUME bbls
DP - SURFACE TO KOP	x	=	
DP - KOP TO EOB	x	=	+
DP - EOB TO BHA	x	=	+
HEVI WALL DRILL PIPE	x	=	+
DRILL COLLAR	x	=	+
DRILL STRING VOLUME		(D)	bbls
DC x OPEN HOLE	x	=	
DP / HWDP x OPEN HOLE	x	=	+
OPEN HOLE VOLUME		(F)	bbls
DP x CASING	x	= (G)	+
TOTAL ANNULUS VOLUME		(F+G) = (H)	bbls
TOTAL WELL SYSTEM VOLUME		(D+H) = (I)	bbls
ACTIVE SURFACE VOLUME		(J)	bbls
TOTAL ACTIVE FLUID SYSTEM		(I+J)	bbls

PUMP STROKES strokes		TIME minutes
(L)	stks	
(M)	stks	
(N1)	stks	
(N2)	stks	
(N3)	stks	
stks		min
stks		min
stks		min
stks		min
stks		min

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KICK DATA :

SIDPP [ ] psi SICP [ ] psi PIT GAIN [ ] bbl

KILL MUD WEIGHT

KMW

$$\text{KMW} = \text{CURRENT MUD WEIGHT} + \frac{\text{SIDPP}}{\text{TVD} \times 0.052}$$

..... + ( ) X 0.052 = ... ppg

INITIAL CIRC. PRESSURE

ICP

DYNAMIC PRESSURE LOSS + SIDPP

..... + ... = ... psi

FINAL CIRCULATING PRESSURE

FCP

$$\text{FCP} = \frac{\text{KILL MUD WEIGHT}}{\text{CURRENT MUD WEIGHT}} \times \text{DYNAMIC PRESSURE LOSS}$$

( ) x ..... = ... psi

DYNAMIC PRESSURE LOSS AT KOP (O)

$$\text{PL} + \left[(\text{FCP} - \text{PL}) \times \frac{\text{KOPMD}}{\text{TDMD}}\right] = \text{PL} + \left[(\text{FCP} - \text{PL}) \times \frac{\text{KOPMD}}{\text{TDMD}}\right]$$

..... + [(.....-.....) x ( )] = ... psi

REMAINING SIDPP AT KOP (P)

$$\text{SIDPP} - \left[(\text{KMW} - \text{CMW}) \times 0.052 \times \text{KOPTVD}\right]$$

= ..... - [(.....-.....) x 0.052 x ..... =] ..... psi

CIRCULATING PRESS. AT KOP (KOP CP)

(O) + (P) = ... + ... = ... psi

DYNAMIC PRESSURE LOSS AT EOB (R)

$$\text{PL} + \left[(\text{FCP} - \text{PL}) \times \frac{\text{EOBMD}}{\text{TDMD}}\right] = \text{PL} + \left[(\text{FCP} - \text{PL}) \times \frac{\text{EOBMD}}{\text{TDMD}}\right]$$

..... + [(.....-.....) x ( )] = ... psi

REMAINING SIDPP AT EOB (S)

$$\text{SIDPP} - \left[(\text{KMW} - \text{CMW}) \times 0.052 \times \text{EOBTVD}\right]$$

= ..... - [(.....-.....) x 0.052 x ..... =] ..... psi

CIRCULATING PRESSURE AT EOB (EOB CP)

(R) + (S) = ... + ... = ... psi

(T) = ICP - KOP CP = ... - ..... = ... psi

$$\frac{(T) \times 100}{(L)} = \frac{\quad \times 100}{\quad} = \ldots\ldots = \frac{\text{psi}}{100 \text{ strokes}}$$

(U) = KOP CP - EOB CP = ... - ..... = ... psi

$$\frac{(U) \times 100}{(M)} = \frac{\quad X\ 100}{\quad} = \ldots\ldots = \frac{\text{psi}}{100 \text{ strokes}}$$

(W) = EOB CP - FCP = ... - ..... = ... psi

$$\frac{(W) \times 100}{(N1+N2+N3)} = \frac{\quad X\ 100}{\quad} = \ldots\ldots = \frac{\text{psi}}{100 \text{ strokes}}$$

International Well Control Forum

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STATIC & DYNAMIC DRILL PIPE PRESSURE [psi] →

STROKES →

PRESSURE [psi]																														
STROKES																														