

Name: Date: Level:

Measured Depth:ft. True Vertical Depth:ft.

Measured Depth to Casing Shoe:ft. Casing Shoe TVD:ft.

CAPACITIES AND VOLUMES

DRILL STRING DATA

	O.D. (in)	I.D. (in)	Wt. (lb/ft)	CAPACITY x (bbl/ft)	LENGTH = (ft)	VOLUME (bbls)
DRILL PIPE						
HWDP						
DRILL COLLARS 1						
DRILL COLLARS 2						

CHECK THAT TOTAL LENGTH = MEASURED DEPTH



Total Length (ft)	Total Drill string (bbls)
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ANNULUS DATA

	CAPACITY x (bbl/ft)	LENGTH = (ft)	VOLUME (bbls)
DRILL PIPE IN CASING			
DP/HWDP IN OPEN HOLE			
COLLARS IN OPEN HOLE 1			
COLLARS IN OPEN HOLE 2			

CHECK THAT TOTAL LENGTH = MEASURED DEPTH.



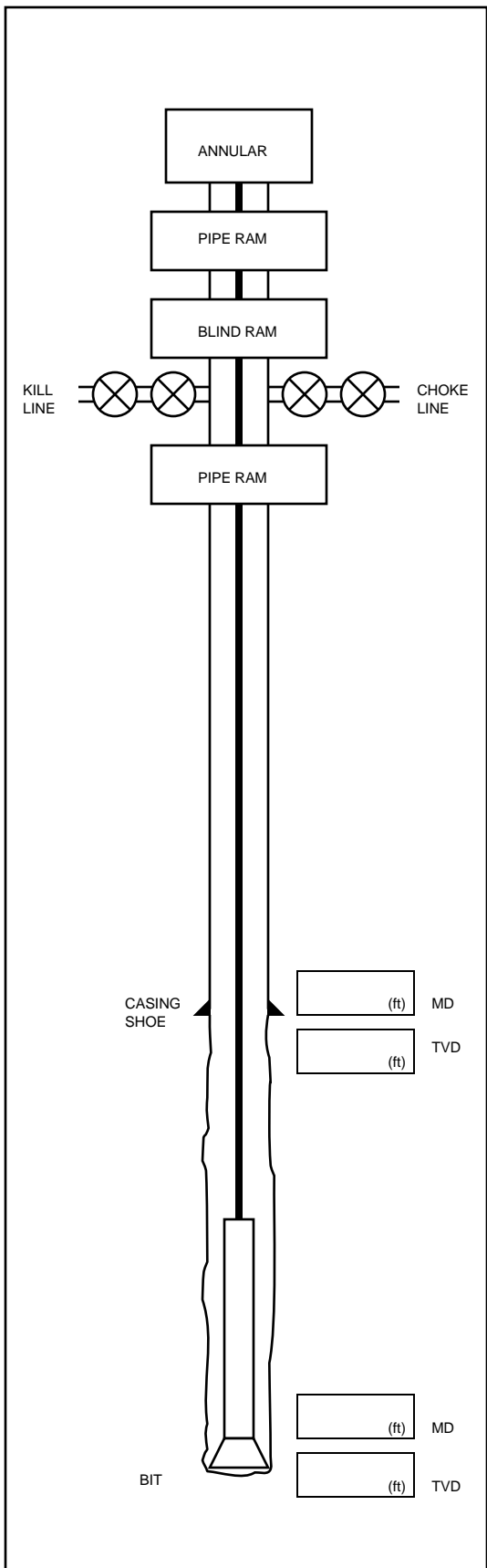
Total Length (ft)	Total Annulus (bbls)
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Bit to Shoe Volume

(bbls)

TOTAL WELL SYSTEM VOLUME

TOTAL DRILLSTRING (SURFACE TO BIT)	TOTAL ANNULUS (BIT TO SURFACE)	COMPLETE CIRCULATION
<div style="border: 1px solid black; width: 100%; height: 30px; margin: 5px 0;"></div> (bbls)	+	<div style="border: 1px solid black; width: 100%; height: 30px; margin: 5px 0;"></div> (bbls)
=		<div style="border: 1px solid black; width: 100%; height: 30px; margin: 5px 0;"></div> (bbls)



Read and record SLOW CIRCULATING RATES

Pump Output

(bbls/stk)

S.C.R

PUMP No.1

PUMP No.2

.....spm

(psi)

(psi)

..... spm

(psi)

(psi)

..... spm

(psi)

(psi)

Drill String Data

Drill String Volume (bbls)	÷	Pump Output (bbls/stk)	=	Surface to Bit Strokes
<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>
Surface to Bit Strokes	÷	Slow Circulating Rate (spm)	=	Surface to Bit Time
<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/> (min)

Open Hole Data

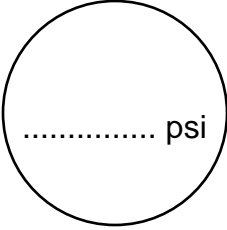
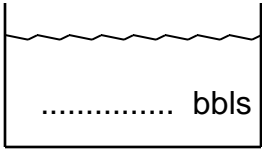
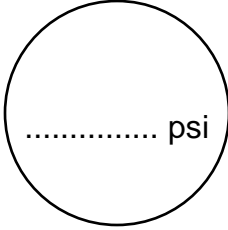
Bit to Shoe Volume (bbls)	÷	Pump Output (bbls/stk)	=	Bit to Shoe Strokes
<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>
Bit to Shoe Strokes	÷	Slow Circulating Rate (spm)	=	Bit to Shoe Time
<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/> (min)

Annulus Data

Bit to Surface Volume (bbls)	÷	Pump Output (bbls/stk)	=	Bit to Surface Strokes
<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>
Bit to Surface Strokes	÷	Slow Circulating Rate (spm)	=	Bit to Surface Time
<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/>		<input style="width: 100%; height: 100%;" type="text"/> (min)

Name:

Read and record SIDPP, SICP and PIT GAIN

<u>S.I.D.P.P.</u>	<u>PIT GAIN</u>	<u>S.I.C.P.</u>
 psi	 bbls	 psi
Day:	Date:	Time:

Max. Mud Wt.

Surface Leak Off Test	÷	Casing Shoe T.V.D.	÷	0.052	+	Leak Off Test Mud Weight	=	Maximum Mud Weight
				0.052				
(psi)		(ft)				(ppg)		(ppg)
<u>OR</u>								
		Formation Breakdown Gradient	÷	0.052			=	Maximum Mud Weight
				0.052				
		(psi/ft)						(ppg)

M.A.A.S.P.

Maximum Mud Weight	-	Drilling Mud Weight]	0.052	X	Casing T.V.D.	=	Maximum Allowable Annulus Surface Pressure
				0.052				
(ppg)		(ppg)				(ft)		(psi)

Kill Mud Wt.

S.I.D.P.P.	÷	T.V.D. from RKB	÷	0.052	+	Drilling Mud Weight	=	Kill Mud Weight
				0.052				
(psi)		(ft)				(ppg)		(ppg)

M.A.C.P.

If Casing Yield is known	Casing Yield	X	0.8	=	Maximum Allowable Casing Pressure
			0.8		

NEW M.A.A.S.P.

Maximum Mud Weight	-	Kill Mud Weight]	0.052	X	Casing T.V.D.	=	New Maximum Allowable Annulus Surface Pressure
				0.052				
(ppg)		(ppg)				(ft)		(psi)

