

Pump Data

Pump #1 **Model:** Gardiner-Denver **Size:** PA 8 **Type:** triplex
 Pump Rod Diameter: 45 **Liner Size:** 114.0 **Stroke Length:** 196
 Efficiency Rating (%): 100

Pump #2 **Model:** Gardner-Denver **Size:** PA8 **Type:** triplex
 Pump Rod Diameter: 45 **Liner Size:** 114.0 **Stroke Length:** 196
 Efficiency Rating (%): 100

Bit Data

Storage Units: Metric

Bit #: 1A **Make:** SEC **Type:** SS44G **IADC Series / Type:** 1 / 3
Serial #: 686384 **Size:** 222.0 **Jets / Nozzles:** 13.00 / 13.00 / open / blank **T.F.A.:** 12.00
Depth In: 10.00 **Depth Out:** 129.00 **Made:** 119.00 **Rotating Hours:** 7.00
 Average Drill Rate: 17.00 **Total Rotating Hours:** 7.00

Bit Grade / Condition **I.A.D.C.:** 0 / 1 / WT / G 1 / E / I / NO / TD / CM **T / B / G:** 3 / 3 / I

Remarks: Things just got bad.

Formations Drilled: Surface, Hebert

Drilling Parameters

	Min	Max		Min	Max
Force on Bit:	2,000 /	6,000	R.P.M.:	80 /	100
Pump 1 S.P.M. / Volume:	156 /	1,600	Pump 2 S.P.M. / Volume:	121 /	1,600
S.P.P.:	9,500 /	10,000	Fluid Density:	1,000 /	1,010
Drift Angle:	0.000 /	0.500	Funnel Viscosity:	28 /	29

Annular Velocity **Drill Collars:** 65.0 **HeavyWeight Drill Pipe:** 45.0 **Drill Pipe:** 25.0
Bottoms Up **Depth:** 100.00 **Theoretical:** 3 **Actual:** 2

Bit #: 2ARR **Make:** SEC **Type:** SS33J4 **IADC Series / Type:** 1 / 2
Serial #: 560360 **Size:** 311.0 **Jets / Nozzles:** 13.00 / 13.00 / 13.00 / 12.00 **T.F.A.:** 34.00
Depth In: 10.00 **Depth Out:** 135.00 **Made:** 125.00 **Rotating Hours:** 4.50
 Average Drill Rate: 27.78 **Total Rotating Hours:** 11.50

Bit Grade / Condition **I.A.D.C.:** 1 / 2 / WT / A / E / I / NO / TD / **T / B / G:** 1 / 2 / I

Remarks:

Formations Drilled: Hebert

Drilling Parameters

	Min	Max		Min	Max
Force on Bit:	2,000 /	4,000	R.P.M.:	60 /	100
Pump 1 S.P.M. / Volume:	90 /	1,600	Pump 2 S.P.M. / Volume:	90 /	1,600
S.P.P.:	100 /	120	Fluid Density:	1,000 /	1,010
Drift Angle:	0.000 /	0.500	Funnel Viscosity:	28 /	38

Annular Velocity **Drill Collars:** **HeavyWeight Drill Pipe:** **Drill Pipe:**
Bottoms Up **Depth:** **Theoretical:** **Actual:**