

Moss State 28#1

C-114D-135-48  
10HP/?A Electric 24 hr/day

Stroke 31 of 35

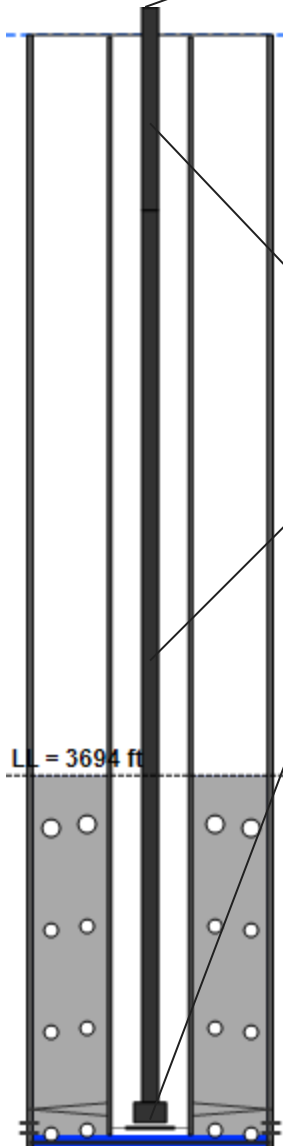
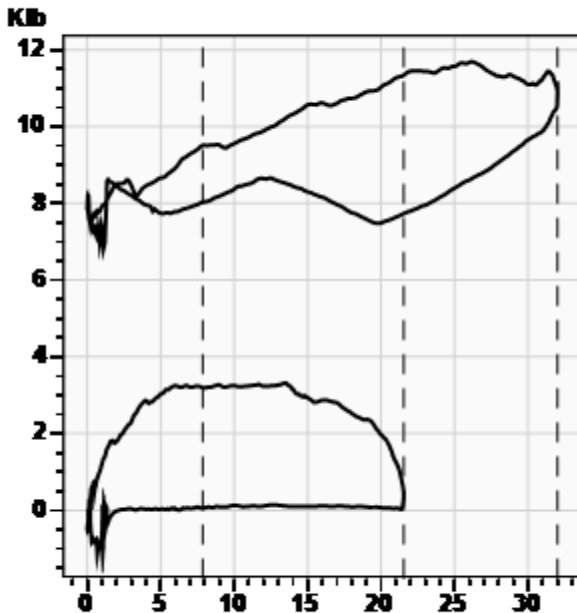
**Beam Loading** 86.6%

**Stroke**  
SPM 6.46 spm  
Meas. Length 32.00 in

**Polished Rod**  
Peak Load 11690.5 lb  
Min Load 6839.6 lb  
Power 1.0 HP



**Wellhead**  
Tubing Pressure 40.0 psi (g)  
Casing Pressure 29.8 psi (g)



**Rod Loading**

Diameter (in) / Length (ft)	Grade	Modified Goodman (85%)	Stress (lb)	Sensitivity (85%, H)
0.75 / 875	K	89.2%	26461.9	62.3%
0.75 / 4450	K	78.8%	23600.9	55.5%
1.5 / 100	C	13.0%	2203.4	5.2%

**Production**

Oil 5 BBL/D  
Water 1 BBL/D  
Gas 10 BBL/D

**System Efficiencies**

Polished Rod/Motor Eff. \*\*  
Pump/Motor Eff. \*\*  
Volumetric Eff. 36.5%

**Pump (API: 20-125 RHBC 12-4)**

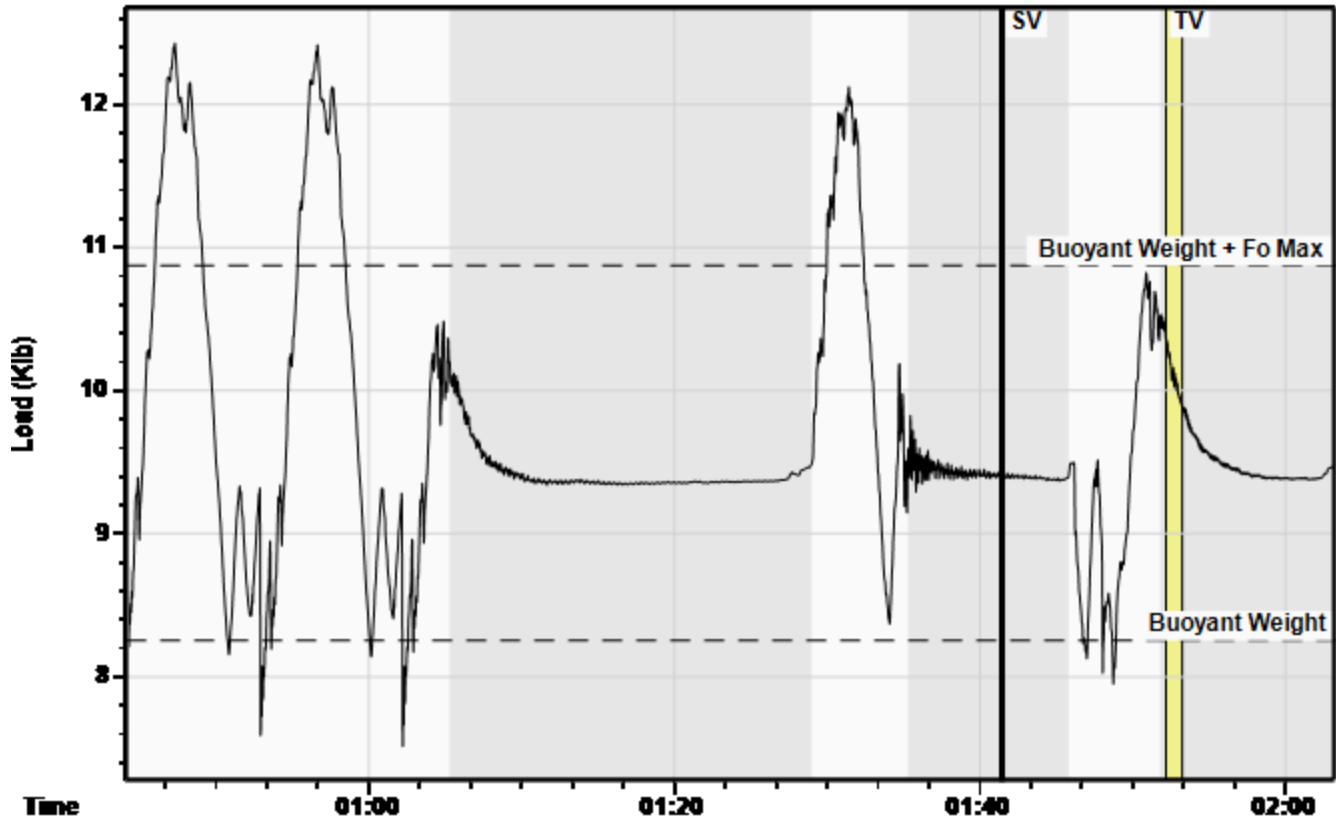
Max Stroke Length 21.54 in  
Gas Free Plunger Stroke 7.86 in  
Gas Free Fillage 36.5%  
Gas Free Slippage 9 BBL/D  
Gas Free Displacement -0 BBL/D  
Calculated Fluid Load Max 2608.2 lb  
Pump Fluid Load, Fo(Up-Dn) 3058 lb  
Damp Up 0.10453 Damp Dn 0.10453  
Kr 210 lb/in  
Kt 25533 lb/in  
Pump Intake Pressure 29.8 psi (g)  
Pump HP 0.9 HP

**Comments and Recommendations**

Upper rounded corners of pump card indicate highly worn pump. A 1.5" tag on the pump. Only a net 8" EFFECTIVE stroke: 0 BPD production w/ slippage.

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Valve Analysis 1 of 1



**Traveling Valve Analysis**

Calc. Buoyant Rod Wgt. + Fo Max	10.87 Klb
Measured Load	10.36 Klb
Leakage	11.29 BBL/D
Leakage Interval	1.07 sec

**Standing Valve Analysis**

Calc. Buoyant Rod Wgt.	8.25 Klb
Measured Load	9.43 Klb

**Calculated Fluid Load**

**0.94 Klb**

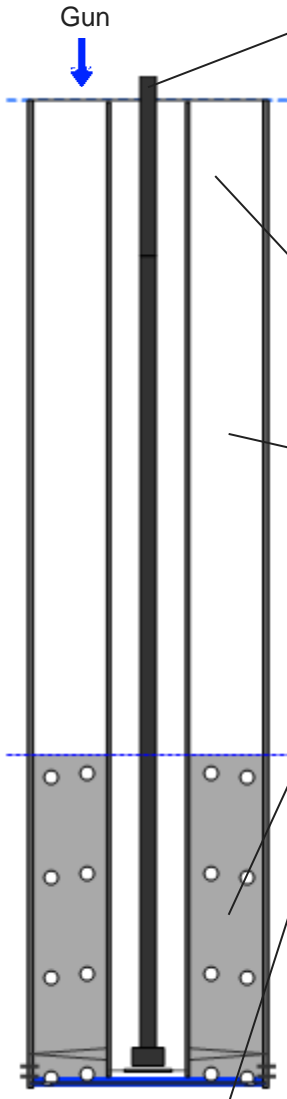
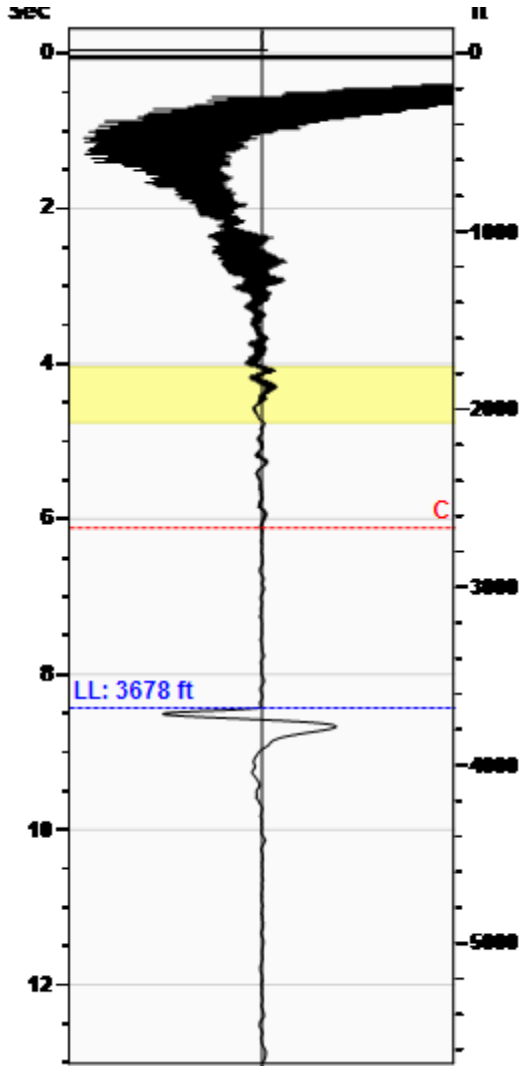
**Comments and Recommendations**

TV, SV, TV Tests: pump leakage 11+ BFPD.

Downhole Diagnostic  
Shawn Dawsey  
shawn@DownholeDiagnostic.com  
www.DownholeDiagnostic.com

**Liquid Level** 3678 ft

**Fluid Above Pump** 1775 ft  
**Equivalent Gas Free Above Pump** 1476 ft



<b>Production</b>			
Date Entered	05/14/15		
	Current	Potential	
Oil	5	**	BBL/D
Water	1	**	BBL/D
Gas	10.0	**	Mscf/D
IPR Method	Vogel		
Producing Efficiency	0.00%		

<b>Casing Pressure</b>	
Pressure	29.3 psi (g)

<b>Annular Gas Flow</b>	
Gas Flow	4.5 Mscf/D

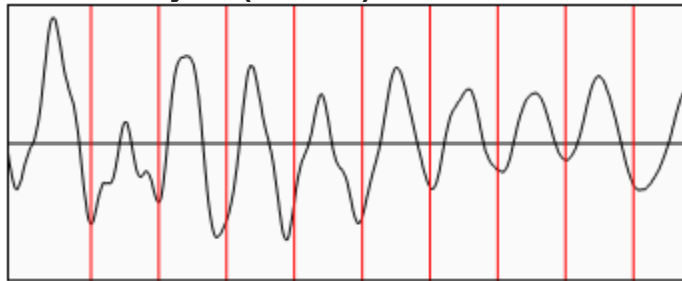
<b>Fluid Properties</b>	
% Liquid Above Pump	83.17%
% Liquid Below Pump	87.04%

<b>Wellbore Pressures</b>	
PIP	549.6 psi (g) @ 5453 ft
PBHP	563.0 psi (g) @ 5496 ft
SBHP	**
Gas/Liq Interface	35.8 psi (g) @ 3678 ft

<b>Depths</b>	
Pump Intake Depth	5453 ft
Formation Depth	5496 ft

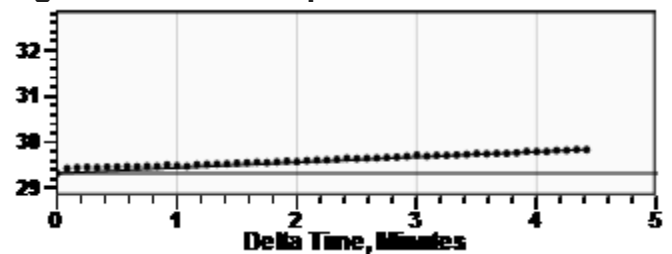
<b>Sensor Serial No.</b>	
WRF Gun (WRFG 198)	

**Collar Analysis (Manual)**



Average Acoustic Velocity 873 ft/s  
 Average Joints Per Sec. 14.00 Jts/sec  
 Joints To Liquid 118.01 Jts

**Casing Pressure Buildup**



Casing Pressure 29.3 psi (g)  
 Buildup 0.5 psi (g)  
 Buildup Time 4 min 25 sec  
 Gas Gravity 1.0896 Air = 1

**Comments and Recommendations**

Well is off (SI 3 days, on 24hrs before that, and SI the 2 days prior to that).  
 400# shot.

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