

RODSTAR 3.6.33

Company: Sandia Data

Well: Well 4

Disk file: Sandia Data Well 4.rsvx

Comment: Test Number: 04. Test Date Mar. 1996

Theta Oilfield Services, Inc.

(gotheta.com)

Norris/AOT DAL

432-561-8101

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Date: 9/12/2014

INPUT DATA				CALCULATED RESULTS				
Strokes per minute:	4.6	Fluid level		Production rate (bfpd):	166	Peak pol. pod load (lbs):	8462	
Run time (hrs/day):	24.0	(ft from surface):	2818	Oil production (BOPD):	2	Min. pol. rod load (lbs):	2470	
Tubing pres. (psi):	20	(ft over pump):	243	Strokes per minute:	4.58	MPRL/PPRL:	0.292	
Casing pres. (psi):	0	Stuf.box fr. (lbs):	100	System eff. (Motor->Pump):	36%	Unit struct. loading:	28%	
		Pol. rod. diam. 1.25"		Permissible load HP:	33.7	PRHP / PLHP:	0.18	
				Fluid load on pump (lbs):	2219	Buoyant rod weight (lbs):	4943	
				Polished rod HP:	6.1	N/No: .053 , Fo/SKr: .033		
Fluid Properties		Motor & Power Meter						
Water cut:	99%	Power meter	Detent					
Water sp. gravity:	1	Elect. cost:	\$.06/KWH					
Oil API gravity:	34.0	Type:	NEMA D					
Fluid sp. gravity:	1.0							
Pumping Unit: Lufkin Mark II								
API Size: M-640-305-168 (Unit ID: ML17)								
Crank hole number: # 1 (out of 3)								
Calculated stroke length (in): 168								
Crank rotation with well to right: CCW								
Max. cb moment (M in-lbs): Unknown								
Structural unbalance (lbs): -4680								
Crank offset angle (degrees): 19.0								
Tubing And Pump Information								
Tubing O.D. (in):	2.875	Upstr. rod-tbg fr. coeff.:	0.630					
Tubing I.D. (in):	2.441	Dnstr. rod-tbg fr. coeff.:	0.630					
Pump depth (ft):	3061	Tub.anch.depth (ft):	3058					
Pump conditions:	Full	Pump load adj. (lbs):	0.0					
Pump type:	Insert	Pump vol. efficiency:	85%					
Plunger size (in):	1.5	Pump friction (lbs):	200.0					
Rod string design								
Diameter (inches)	Rod Grade	Length (ft)	Min. Tensile Strength (psi)	Stress Load %	Top Maximum Stress (psi)	Top Minimum Stress (psi)	Bot. Minimum Stress (psi)	Stress Calc. Method
0.875	D (API)	1006	115000	35.8%	13905	4274	3524	API MG
0.75	D (API)	2030	115000	28.8%	11931	4177	-715	API MG
@ 1.25	C (API. SB)	25	90000	19.1%	2926	-1506	-163	API MG
Rod string stress analysis (service factor: 1)								

@ stress calculations based on elevator neck of 7/8 (for 1.25 sinker bars) or 1 (for other sinker bars).

NOTE: Displayed bottom minimum stress calculations do not include buoyancy effects (top minimum and maximum stresses always include buoyancy).

