

DEVON ENERGY CORP. NORTH PURE GOLD 9 FED #7 (OIL)
 LOS MEDANOS Field, EDDY Co., NM Area: INGLE WELLS/S&AN
 1980' FNL, 1290' FWL, Sec 9, 23S 31E. Elev: 3355.5' (16.5' AGL)

Last updated by:
 Jim Cromer 05/27/2019

Surface Casing Record
 13.375\"/>

Intermediate Casing Record
 8.625\"/>

Production Casing Record
 5.50\"/>

Tubing Record
 OUT

Well History (spudded 01/12/1994):
 2/17/1994 - DC. Set 5.5\"/>

5/2003 - Add pay. FF U Brushy Canyon 2 SPF @ 7085-7095' (2\"/>

8/08 - RIH to determine source of water flow from original perfs @ 7932 - 90'. Set CIBP @ 7905' GL, did not shut off flow. Set additional 5\"/>

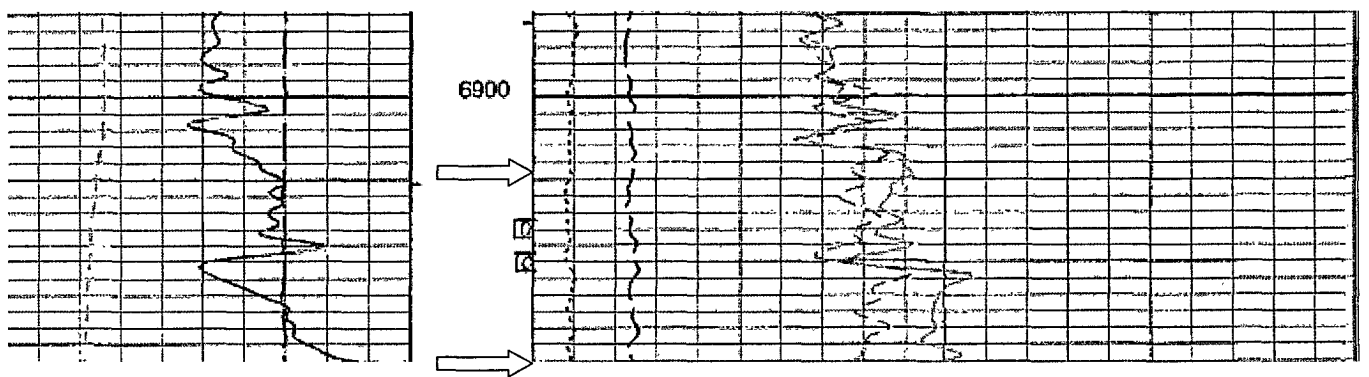
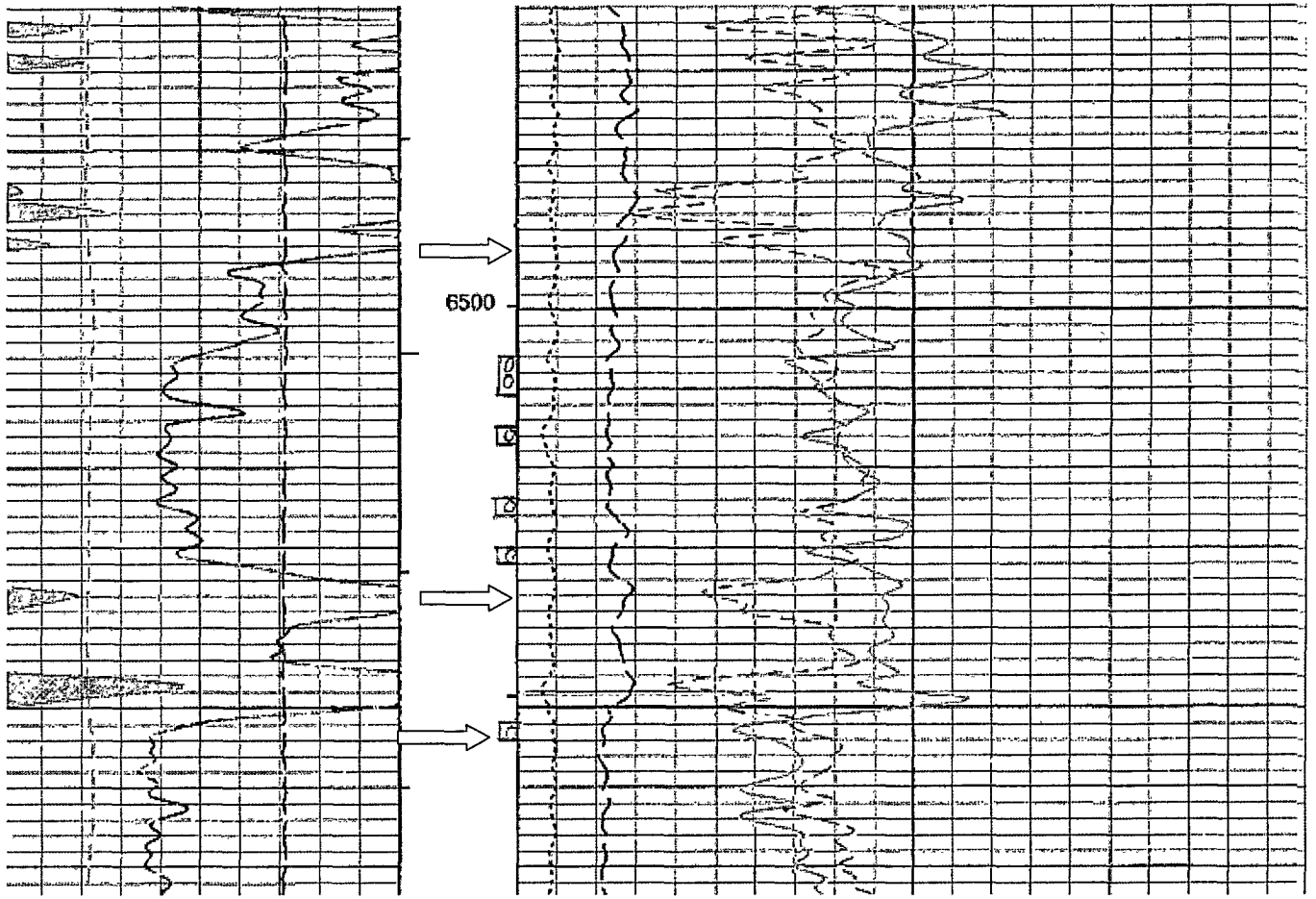
4/09 - TA w/ CIBP @ 7000'. Test casing to 520 psi, leaked off 50 psi in 30 min.

TUBING DETAIL					
Description	Qty	Cl. / Wt. / Gr.	Conn.	Depth	Int. / O.D.
TUBING	243	2.875\"/>			
3.5625\"/>					
TUBING	3	2.875\"/>			
FLTER SUB	1	1.250\"/>			
PLAST JOINT ST.	1	2.875\"/>			
SH	1	2.875\"/>			
TUBING	1	2.875\"/>			
R.P. PERFD SUB	1	2.875\"/>			
	0	3.000\"/>			

Plugs:
 CIBP @ 7300'
 CIBP @ 7216'
 FLTC @ 3104'

Perf Detail		
Interval	psi	Date
7532-7993'	0	1/1

Comments: TD = 8150' API# 30-015-27515 Current status: SI



Company: Devon Energy
 Well: NPG 9-7
 Disk file: NPG 9-7.rsvx
 Comment: New Drill Well

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 User:
 Date: 4/10/2010

INPUT DATA		CALCULATED RESULTS																					
Strokes per minute: 7	Fluid level (ft from surface): 6300	Production rate (bfpd): 124	Peak pol. rod load (lbs): 19041																				
Run time (hrs/day): 20.0	(ft over pump): 851	Oil production (BOPD): 43	Min. pol. rod load (lbs): 8358																				
Tubing pres. (psi): 150	Stuf. box fr. (lbs): 100	Strokes per minute: 7	Polished rod HP: 14																				
Casing pres. (psi): 50		System eff. (Motor->Pump): 34%	Unit struct. loading: 62%																				
		Permissible load HP: 42.3	PRHP / PLHP: 0.33																				
		Fluid load on pump (lbs): 3510	Buoyant rod weight (lbs): 11657																				
			N/No: .198, Fo/SKr: .131																				
Fluid properties Water cut: 65% Water sp. gravity: 1.05 Oil API gravity: 40.0 Fluid sp. gravity: 1.0118		Motor & power meter Power Meter: Detent Electr. cost: \$.06/KWH Type: NEMA D																					
Pumping Unit: Lufkin Conventional - New (C-456D-*) API size: C-456-305-144 (unit ID: CL22) Crank hole number: #1 (out of 4) Calculated stroke length (in): 145.9 Crank Rotation with well to right: CCW Max. CB moment (M in-lbs): Unknown Structural unbalance (lbs): -520 Crank offset angle (deg): 0.0 Bal. Rot. Moment of Inertia (lb-ft ²): 1400000 Art. Moment of Inertia (lb-ft ²): 688315		Required prime mover size (calc. speed var.: 10%) BALANCED (Min Torq) NEMA D motor: 40 HP Single/double cyl. engine: 30 HP Multicylinder engine: 40 HP																					
Tubing and pump information Tubing O.D. (ins): 2.375 Tubing I.D. (ins): 2.441 Pump depth (ft): 6951 Pump condition: Full Pump type: Insert Plunger size (ins): 1.25 Upstr. rod-tbg fr. coeff: 0.580 Dnstr. rod-tbg fr. coeff: 0.580 Tub. anch. depth (ft): 6400 Pump load adj. (lbs): 0.0 Pump vol. efficiency: 85% Pump friction (lbs): 200.0		Torque analysis and electricity consumption BALANCED (Min Torq) Peak q/box torq. (M in-lbs): 443 Gearbox loading: 97% Cyclic load factor: 1.8 Max. CB moment (M in-lbs): 1038.25 Counterbalance effect (lbs): 14648 Daily electr. use (KWH/day): 308 Monthly electric bill: \$563 Electr. cost per bbl. fluid: \$0.149 Electr. cost per bbl. oil: \$0.425																					
Rod string design (rod tapers calculated) <table border="1"> <thead> <tr> <th>Diameter (inches)</th> <th>Rod Grade</th> <th>Length (ft)</th> <th>Min. Tensile Strength (psi)</th> </tr> </thead> <tbody> <tr> <td>.875</td> <td>D (API)</td> <td>2326</td> <td>115000</td> </tr> <tr> <td>.75</td> <td>D (API)</td> <td>4125</td> <td>115000</td> </tr> <tr> <td>+ 1</td> <td>D (API)</td> <td>500</td> <td>115000</td> </tr> </tbody> </table>		Diameter (inches)	Rod Grade	Length (ft)	Min. Tensile Strength (psi)	.875	D (API)	2326	115000	.75	D (API)	4125	115000	+ 1	D (API)	500	115000	Tubing, pump and plunger calculations Tubing stretch (ins): .4 Prod. loss due to tubing stretch (bfpd): 0.4 Gross pump stroke (ins): 137.9 Pump spacing (in. from bottom): 20.9 Minimum pump length (ft): 21.0 Recommended plunger length (ft): 5.0					
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+ Requires slimhole couplings.
 NOTE Stress calculations do not include buoyancy effects.

