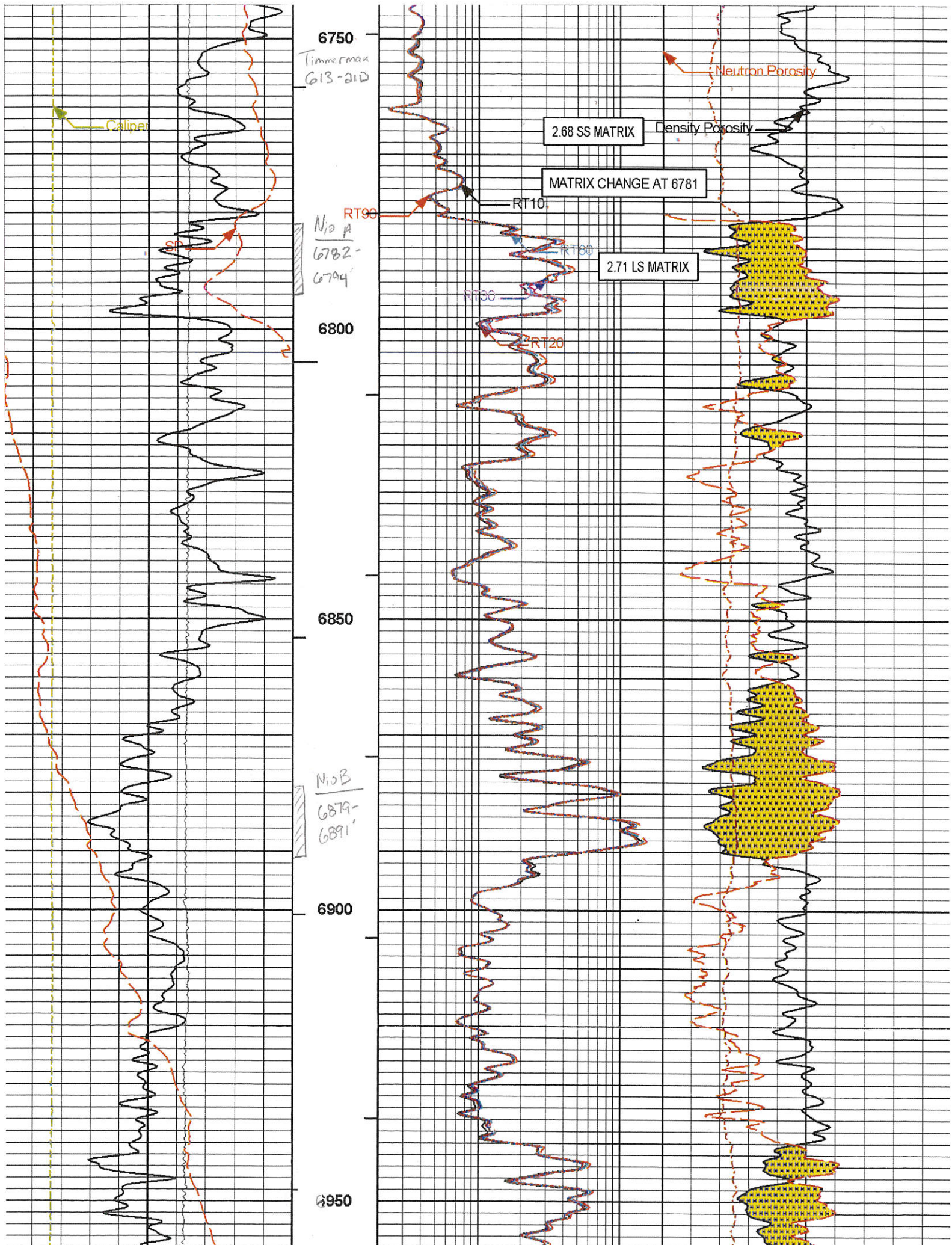


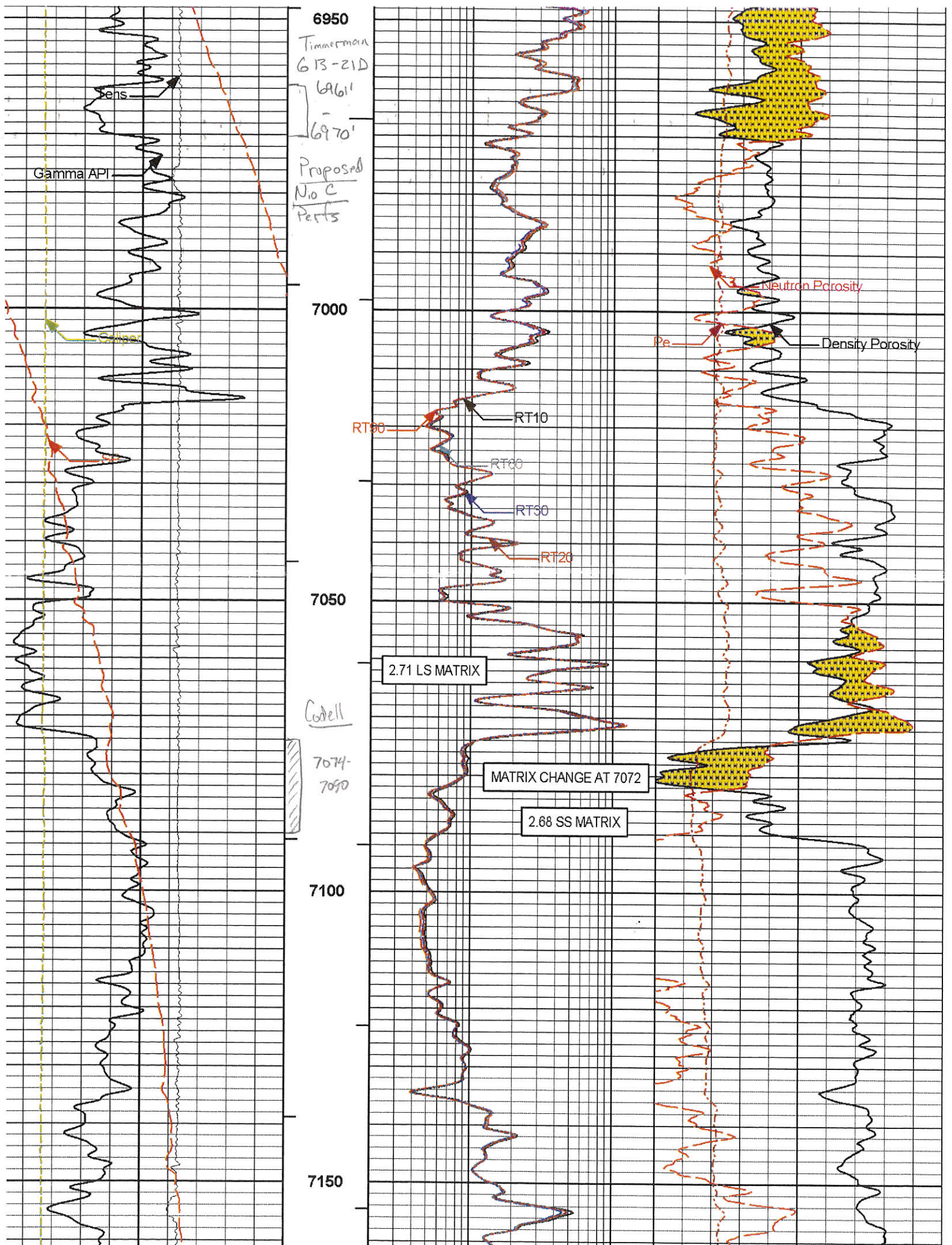
# HALLIBURTON

**ARRAY COMPENSATED  
TRUE RESISTIVITY  
SPECTRAL DENSITY  
DUAL SPACED NEUTRON**

COMPANY NOBLE ENERGY INC WELL TIMMERMAN G13-21D FIELD WATTENBERG COUNTY WELD STATE CO	COMPANY		NOBLE ENERGY INC		
	WELL		TIMMERMAN G13-21D		
	FIELD		WATTENBERG		
COUNTY		WELD		STATE	CO
API No.		05123350260000		Other Services: RWCH CSNG	
Location		SURFACE LOCATION: 2508' FNL & 2411' FWL SENW BOTTOM LOCATION: 2565' FNL & 2538' FWL SENW  LATITUDE: 40.312710° LONGITUDE: -104.612190°			
Sect.		13	Twp.		4N
			Rge.		65W
Permanent Datum		GL		Elev. 4775.0 ft	
Log measured from		KB		14.0 ft above perm. Datum	
Drilling measured from		KB			
Date		28-Apr-12			
Run No.		ONE			
Depth - Driller		7265.00 ft			
Depth - Logger		7267.0 ft			
Bottom - Logged Interval		7263 ft			
Top - Logged Interval		CASING			
Casing - Driller		8.625 in @ 798.0 ft		@	
Casing - Logger		798.0 ft			
Bit Size		7.875 in		@	
Type Fluid in Hole		WATER BASED MUD			
Density	Viscosity	9.5 ppg	48.00 s/qt		
PH	Fluid Loss	8.00 pH	13.6 cptm		
Source of Sample		MUD CELL			
Rm @ Meas. Temperature		1.180 ohmm @ 85.60 degF		@	
Rmf @ Meas. Temperature		1.15 ohmm @ 75.00 degF		@	
Rmc @ Meas. Temperature		1.170 ohmm @ 75.00 degF		@	
Source Rmf	Rmc	CHART	CHART		
Rm @ BHT		0.51 ohmm @ 206.0 degF		@	
Time Since Circulation		6.0 hr			
Time on Bottom		28-Apr-12 10:01			
Max. Rec. Temperature		206.0 degF @ 7267.0 ft		@	
Equipment	Location	11454566	BRIGHTON		
Recorded By		R. TWEETEN			
Witnessed By		M. McCLELLAND			

Fold here





6950

Timmerman  
6B-21D  
6961'  
6970'

Proposed  
No C  
Parts

7000

7050

7100

7150

Gamma API

dens

Neutron Porosity

Density Porosity

RT90

RT10

RT60

RT30

RT20

2.71 LS MATRIX

Codell

7074-  
7090

MATRIX CHANGE AT 7072

2.68 SS MATRIX