RELIANCE
OILFIELD SERVICES

Pulsed Neutron Gamma Ray Casing Collar Log

Company	TEP Rocky Mountain LLC		
Well	Ware SR 13-12		
Field	Rulison		
County	Garfield	State	Colorado
Location:	API # : 05-045-23454 1804' FSL & 2290' FWL NESW SEC 12 TWP 7S RGE 94W	Other Services	RBL
Permanent Datum	Ground Level	Elevation	7479'
Log Measured From	Kelly Bushing 24 FT	Elevation	K.B. 7503' D.F. 7502' G.L. 7479'
Drilling Measured From	Kelly Bushing		

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Well Ware SR 13-12
Field Rulison
County Garfield
State Colorado

Date	14-DEC-2017
Run Number	One
Depth Driller	9870 FT
Depth Logger	9816 FT
Bottom Logged Interval	9810 FT
Top Log Interval	5749 FT
Open Hole Size	8.750"
Type Fluid	Fresh Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	--
Estimated Cement Top	--
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	--
Location	Grand Junction, CO
Recorded By	A. Ellsworth
Witnessed By	--

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size (in)	Wgt (lbs/Ft)	Grade	Top	Bottom
Surface Casing	9 5/8	32.3	H-40	Surface	1131 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	9830 FT
Intermediate #2					
Liner					

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Log ran per customer request
Depth referenced to Reliance Bond Log dated 14-DEC-2017
Log ran from 9810 FT to 5749 FT
Pulsed Neutron Data logged with the Hunter RAS Tool

Thank you for choosing Reliance Oilfield Services, LLC!!

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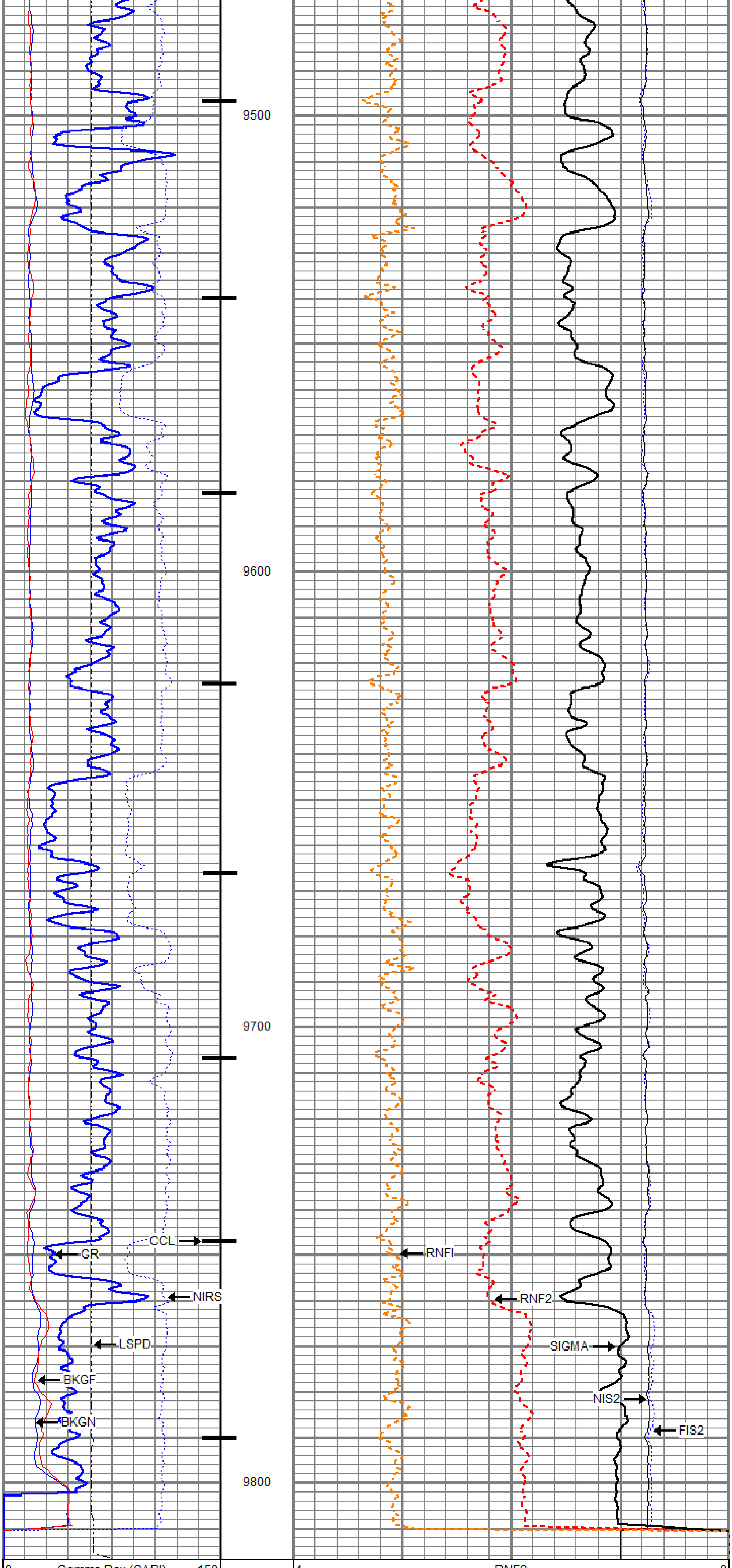
Main Pass

Database File	tep\sr 13-12\pn\tep_ware sr 13-12_pn_12-14-17.db
Dataset Pathname	tep_sr_13-12_pn_main_shift_make_log
Presentation Format	ros_pdn_hunter
Dataset Creation	Thu Dec 21 09:43:19 2017
Charted by	Depth in Feet scaled 1:240



0	Gamma Ray (GAPI)	150
	Casing Collar Locator	
-100	Line Speed (ft/min)	100
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0
	FIS2	
0	(cps)	45000
	NIS2	
0	(cps	100000

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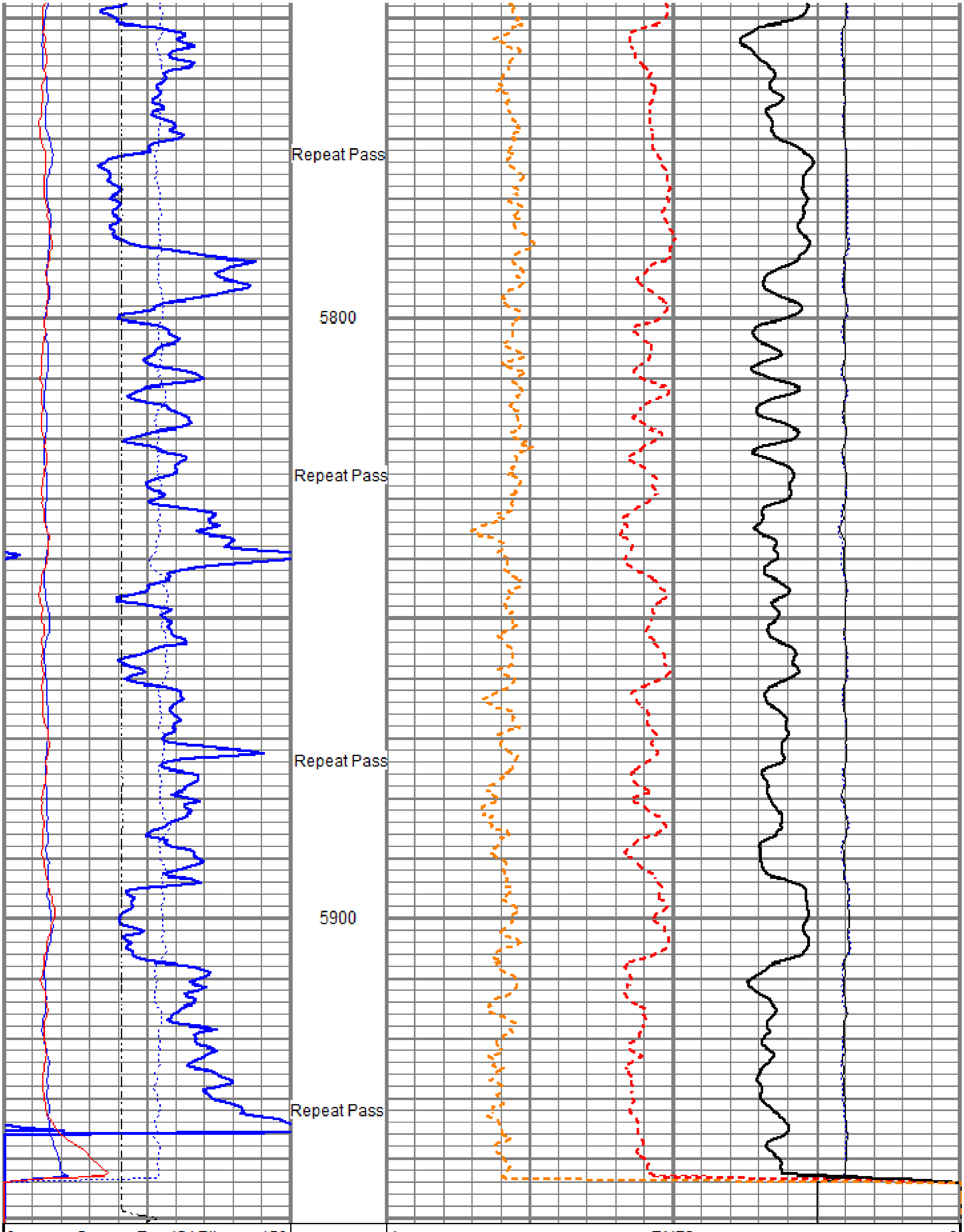
Repeat Pass

Database File	tep\sr 13-12\pn\tep_ware sr 13-12_pn_12-14-17.db
Dataset Pathname	repeat/tep_sr_13-12_pn_repeat_shift_make_log
Presentation Format	ros_pdn_hunter
Dataset Creation	Fri Dec 22 00:39:10 2017
Charted by	Depth in Feet scaled 1:240

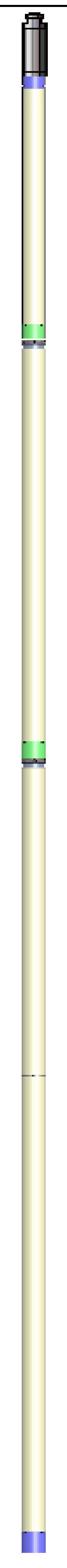
0	Gamma Ray (GAPI)	150
-100	Line Speed (ft/min)	100
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0
	FIS2	
0	(cps)	45000
	NIS2	
0	(cps	100000



0	Gamma Ray (GAPI)	150
-100	Line Speed (ft/min)	100
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0
	FIS2	
0	(cps)	45000
	NIS2	
0	(cps	100000

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan_Electric_Cable_Heads-Titan_1-11/1 Electric Cable Head with 1" Fishing Neck	1.03	1.69	5.40
			Telemetry-Antares Antares Telemetry / Gamma / CCL	4.07	1.70	17.60
			Generator-Antares Antares Neutron Generator	19.03	1.70	85.80

Dataset: pdn tool.db: field/well/run1/PDN_Tool_Diagram
Total length: 24.13 ft
Total weight: 108.80 lb
O.D.: 1.70 in

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