

SPECTRA<sup>®</sup>  
SCAN

Company Laredo Petroleum, Inc.

Well Sugg A-158 #1SU

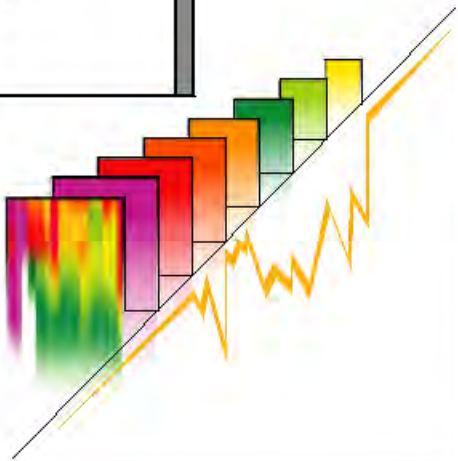
Field Spraberry

County Reagan

State Texas

Location 2433 FNL AND 595 FWL  
Sec. 158  
API #42-383-38562

Elevations KB 2700' DF 2699' GL 2670'



Date Processed	Dec/22/2015	Logs Processed	SpectraScan
Job Number	606013	Date Logged	Dec/18/2015
Interval Processed	6922' - 14529'	Type Fluid In Hole	Fresh Water
Processed By	R.M. Jackson	Location	Midland, Texas
Processed At	Houston	Computer Processed Product	

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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:

Recorded by: T. Nixon  
Traced by: J. Nunez & E. Gonzalez  
Proposal ID #50725

## Well Information

Production String: 5.5 [in] 20 [lb/ft] Top: 0 [ft] Bottom: 14625 [ft]

Tubing: 2 7/8 [in] 6.5 [lb/ft] Top: 0 [ft] Bottom: 6153 [ft]

Tubing: 2 3/8 [in] 4.6 [lb/ft] Top: 6153 [ft] Bottom: 14588 [ft]

## Tracer Information

### Segments 1-17 Refrac

Formation: Lower Spraberry

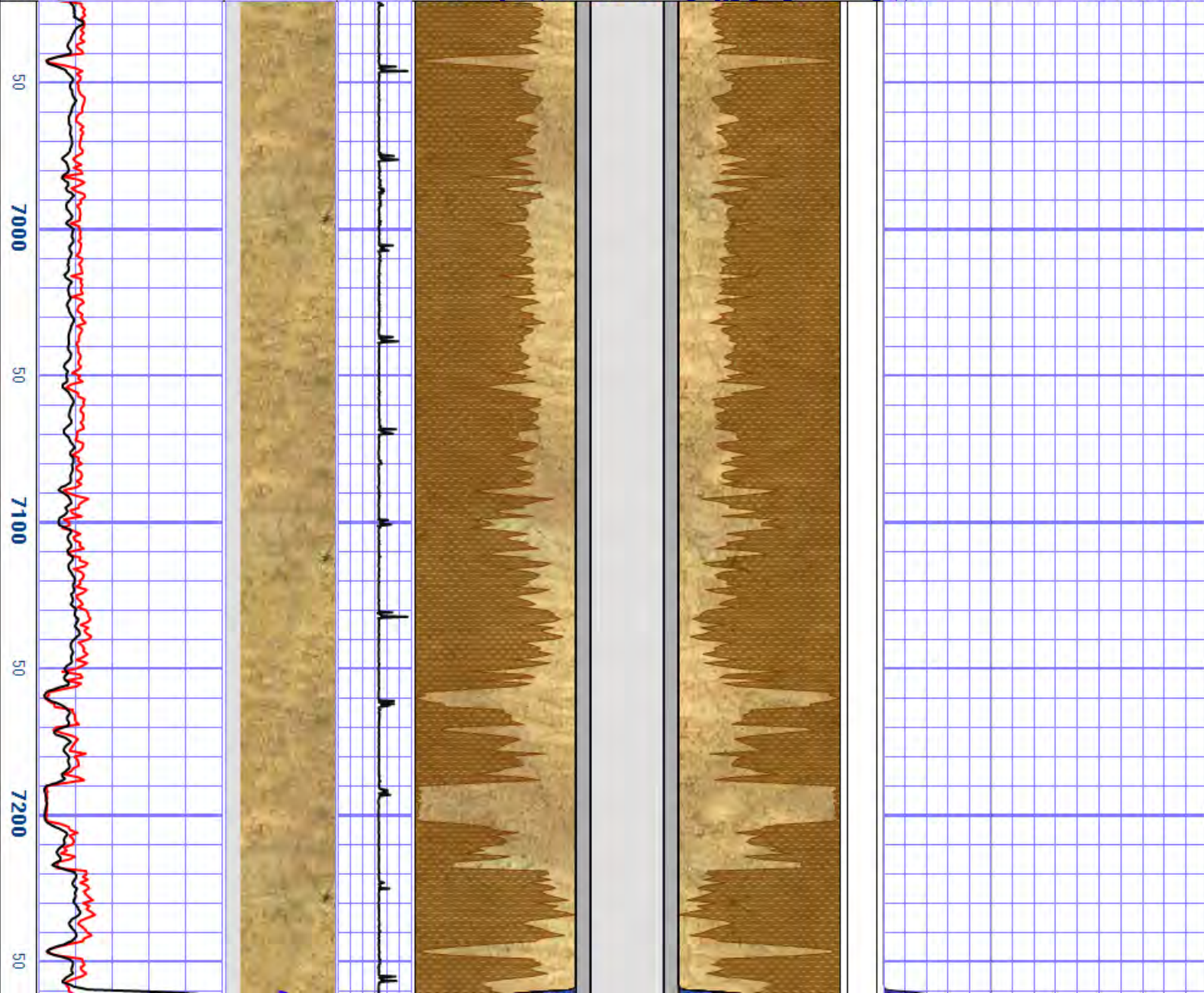
Perforations: Stage

1 14257-59; 14346-48; 14435-37; 14524-26; 14613-15 ft  
 2 13988.5-13991; 14078-14080.5; 14167.5-14170 ft  
 3 13720-13722.5; 13809.5-13812; 13899-13901.5 ft  
 4 13451.5-13454; 13541-13543.5; 13630.5-13633 ft  
 5 13183-13185.5; 13272.5-13275; 13362-13364.5 ft  
 6 12914.5-12917; 13004-13006.5; 13093.5-13096 ft  
 7 12646-12648.5; 12735.5-12738; 12825-12827.5 ft  
 8 12377.5-12380; 12467-12469.5; 12556.5-12559 ft  
 9 12109-12111.5; 12198.5-12201; 12288-12290.5 ft  
 10 11840.5-11843; 11930-11932.5; 12019.5-12022 ft  
 11 11572-11574.5; 11661.5-11664; 11751-11753.5 ft  
 12 11303.5-11306; 11393-11395.5; 11482.5-11485 ft  
 13 11035-11037.5; 11124.5-11127; 11214-11216.5 ft  
 14 10766.5-10769; 10856-10858.5; 10945.5-10948 ft  
 15 10498-10500.5; 10587.5-10590; 10677-10679.5 ft  
 16 10229.5-10232; 10319-10321.5; 10408.5-10411 ft  
 17 9961-9963.5; 10050.5-10053; 10140-10142.5 ft  
 18 9692.5-9695; 9782-9784.5; 9871.5-9874 ft  
 19 9424-9426.5; 9513.5-9516; 9603-9605.5 ft  
 20 9155.5-9158; 9245-9247.5; 9334.5-9337 ft  
 21 8887-8889.5; 8976.5-8979; 9066-9068.5 ft  
 22 8618.5-8621; 8708-8710.5; 8797.5-8800 ft  
 23 8350-8352.5; 8439.5-8442; 8529-8531.5 ft  
 24 8081.5-8084; 8171-8173.5; 8260.5-8263 ft  
 25 7813-7815.5; 7902.5-7905; 7992-7994.5 ft

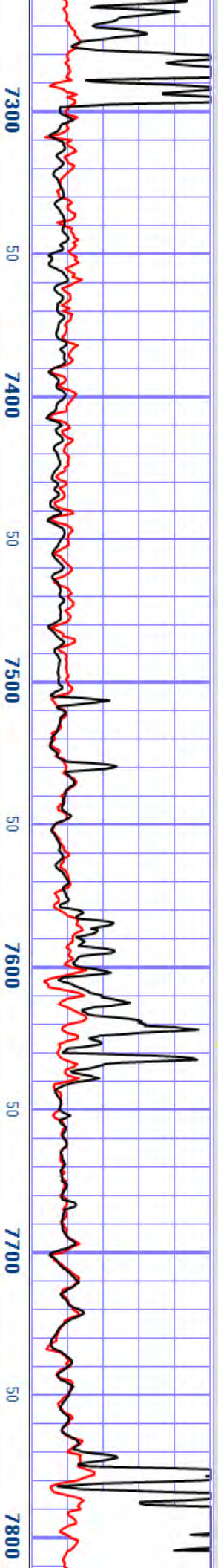
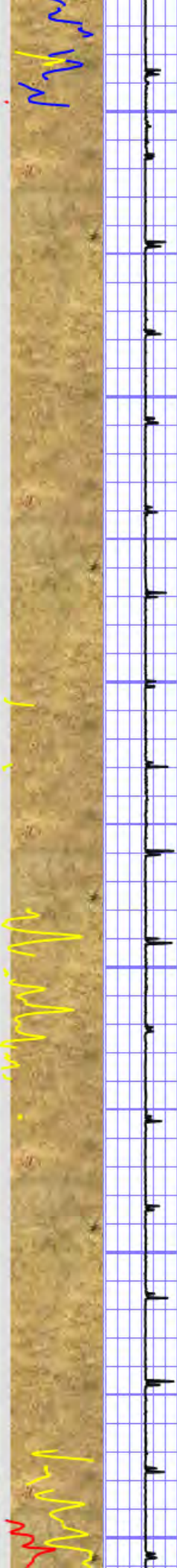
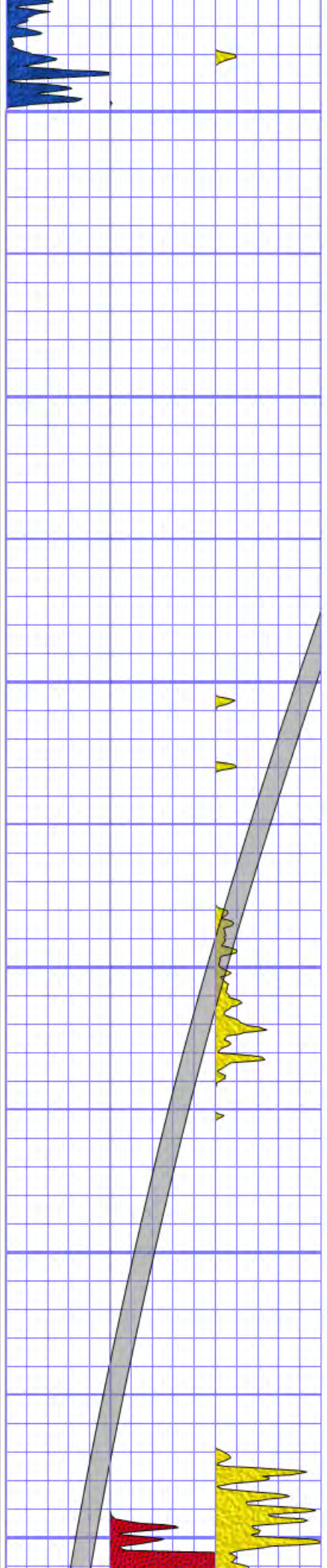
Treatment Date: Oct/26/2015

Tracers	Form	Type	Amount	Concentration	Total Activity
Sc-46 Zero Wash 1	Solid	.25-1.80 ppa (15# Linear Gel)	330,637 lbs	0.30 mCi/1000 lbs	99.0 mCi
		0.25# NuFlo Diveter			
Sc-46 Zero Wash 2	Solid	.25-1.70 ppa (15# Linear Gel)	349,260 lb	0.32 mCi/1000 lb	111.0 mCi
		0.25# NuFlo Diveter			
Sc-46 Zero Wash 3	Solid	.25-1.75 ppa (15# Linear Gel)	347,363 lb	0.29 mCi/1000 lb	99.0 mCi
		0.25# NuFlo Diveter			
Sc-46 Zero Wash 4	Solid	.25-1.80 ppa (15# Linear Gel)	338,827 lb	0.29 mCi/1000 lb	99.0 mCi
		0.25# NuFlo Diveter			
Ir-192 Zero Wash 5	Solid	.25-1.60 ppa (15# Linear Gel)	352,759 lb	0.28 mCi/1000 lb	99.0 mCi
		0.25# NuFlo Diveter			
Ir-192 Zero Wash 6	Solid	.25-1.50 ppa (15# Linear Gel)	349,298 lb	0.28 mCi/1000 lb	99.0 mCi
		0.50# NuFlo Diveter			
Ir-192 Zero Wash 7	Solid	.25-1.65 ppa (15# Linear Gel)	353,023 lb	0.28 mCi/1000 lb	99.0 mCi
		0.50# NuFlo Diveter			
Ir-192 Zero Wash 8	Solid	.25-1.65 ppa (15# Linear Gel)	353,828 lb	0.28 mCi/1000 lb	99.0 mCi
		0.50# NuFlo Diveter			
Ir-192 Zero Wash 9	Solid	.25-1.75 ppa (15# Linear Gel)	354,299 lb	0.28 mCi/1000 lb	99.0 mCi
		0.50# NuFlo Diveter			
Sb-124 Zero Wash 10	Solid	.25-1.80 ppa (15# Linear Gel)	348,878 lb	0.28 mCi/1000 lb	99.0 mCi
		1.0# NuFlo Diveter			
Sb-124 Zero Wash 11	Solid	.25-1.80 ppa (15# Linear Gel)	64,975 lb	0.31 mCi/1000 lb	20.0 mCi
		1.0# NuFlo Diveter			
Sb-124 Zero Wash 12	Solid	.25-1.80 ppa (15# Linear Gel)	69,574 lb	0.29 mCi/1000 lb	20.0 mCi
		1.0# NuFlo Diveter			
Sb-124 Zero Wash 13	Solid	.25-1.80 ppa (15# Linear Gel)	70,823 lb	0.28 mCi/1000 lb	20.0 mCi
		1.0# NuFlo Diveter			
Sb-124 Zero Wash 14	Solid	.25-1.80 ppa (15# Linear Gel)	70,854 lb	0.28 mCi/1000 lb	20.0 mCi

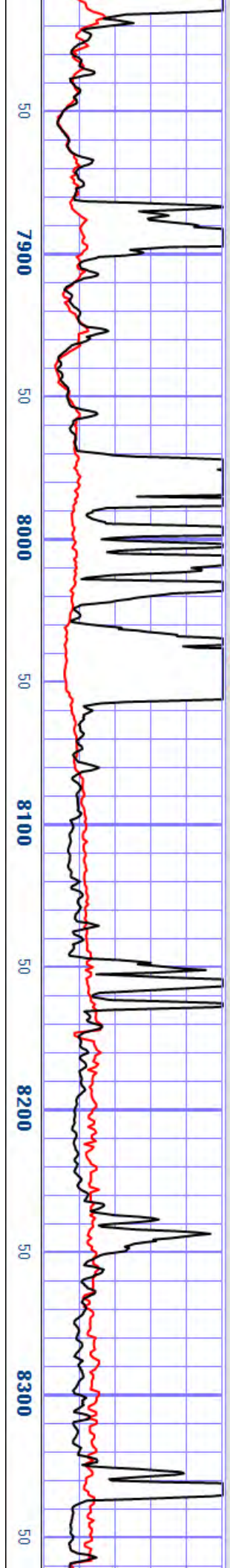
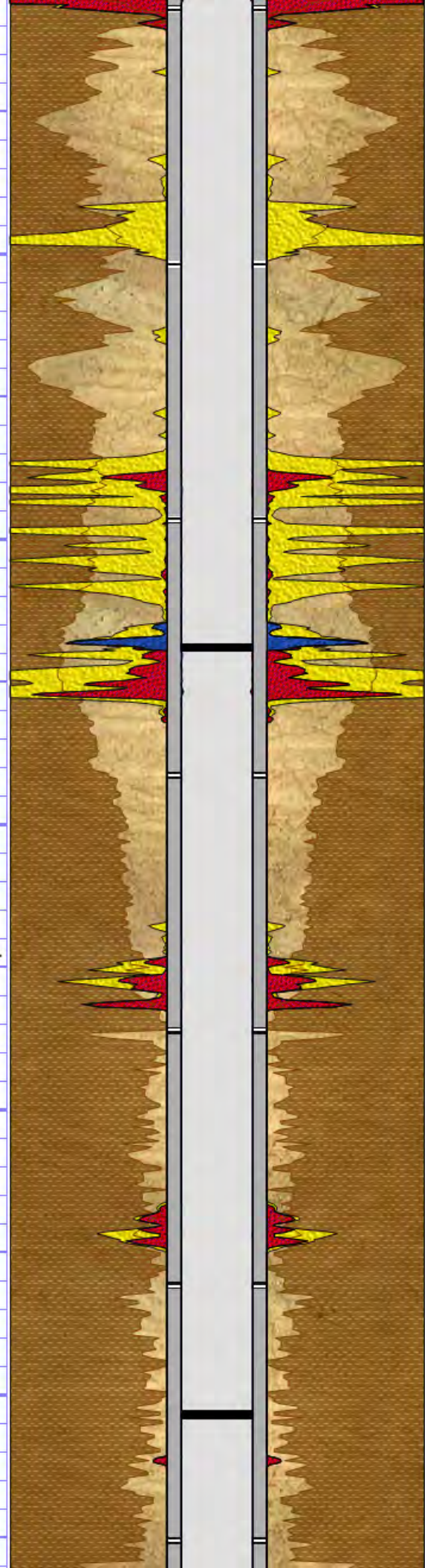
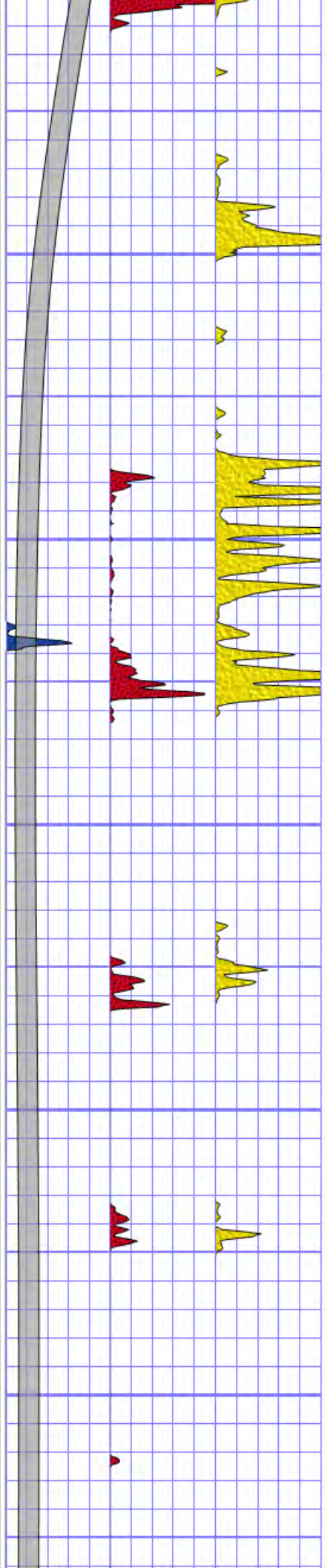




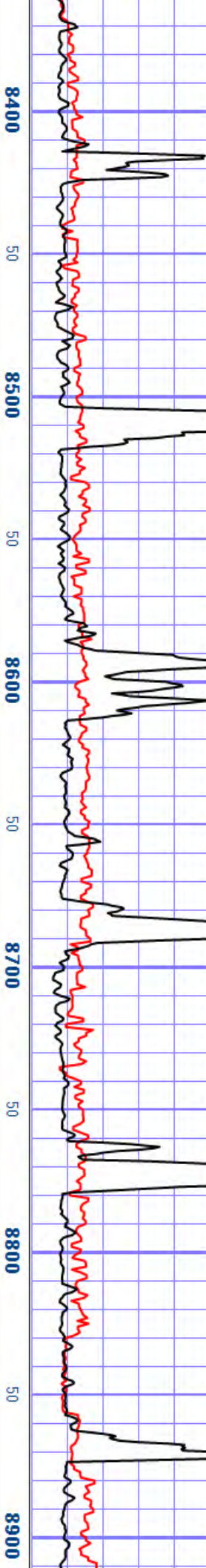
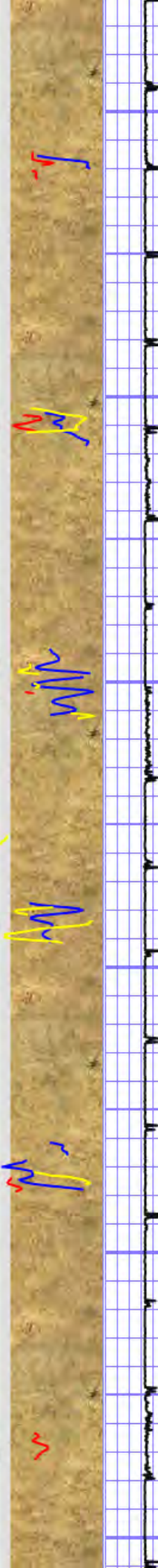
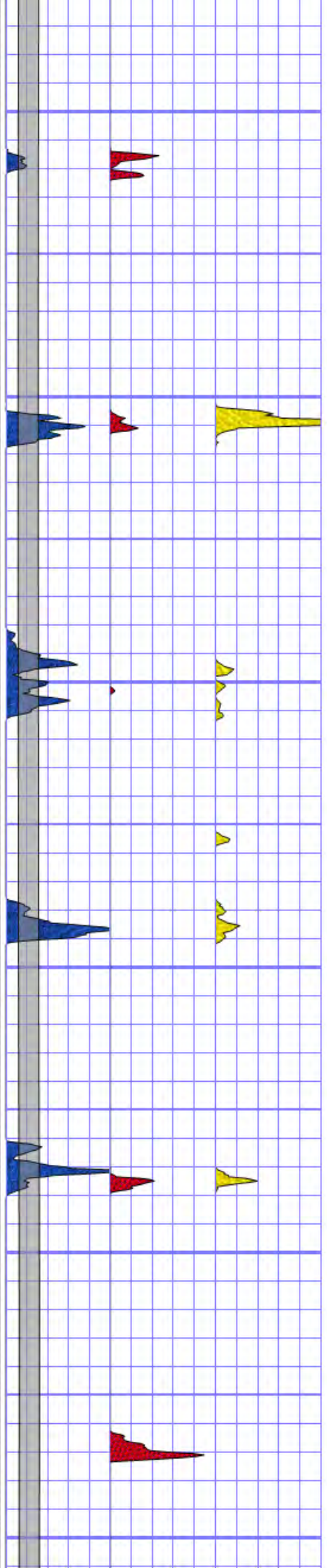




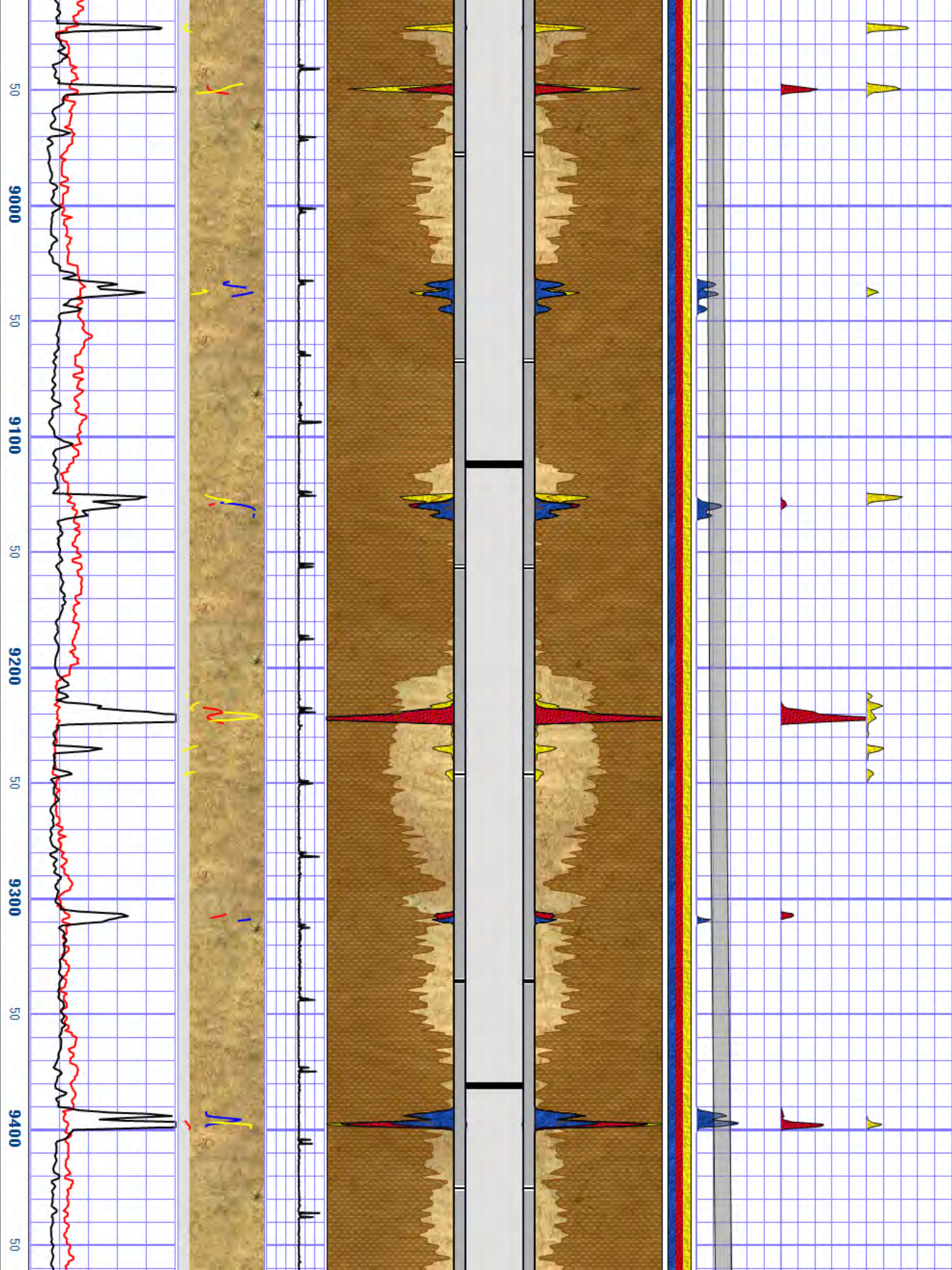








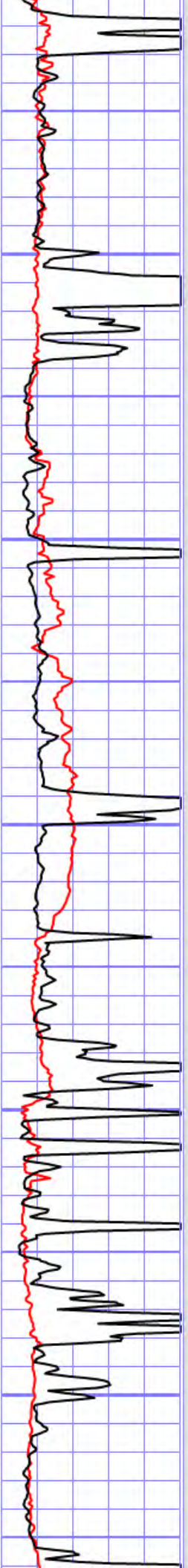
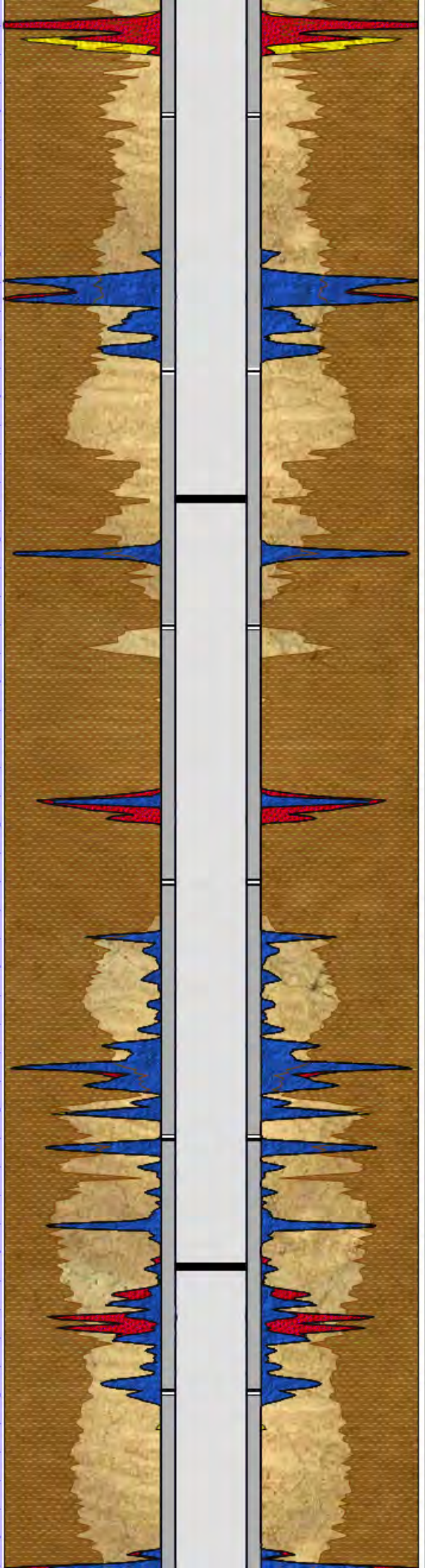
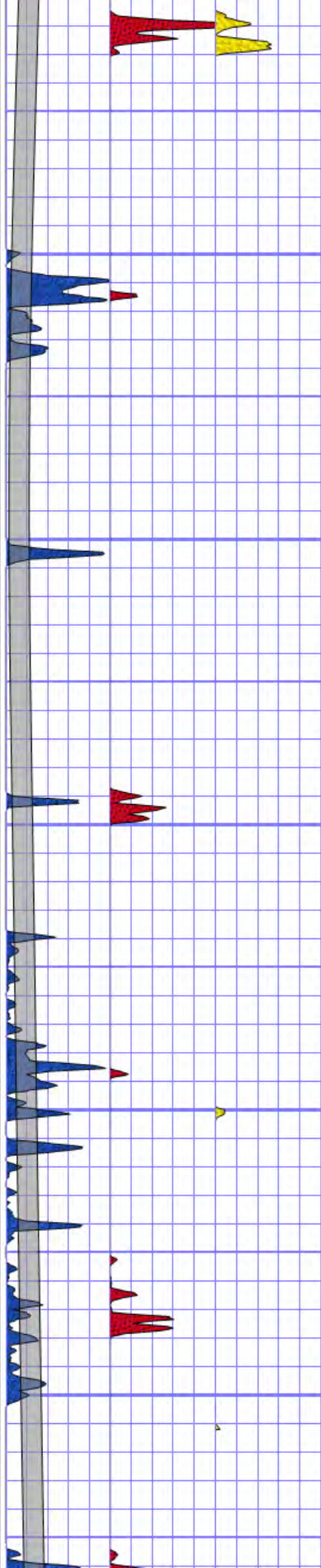






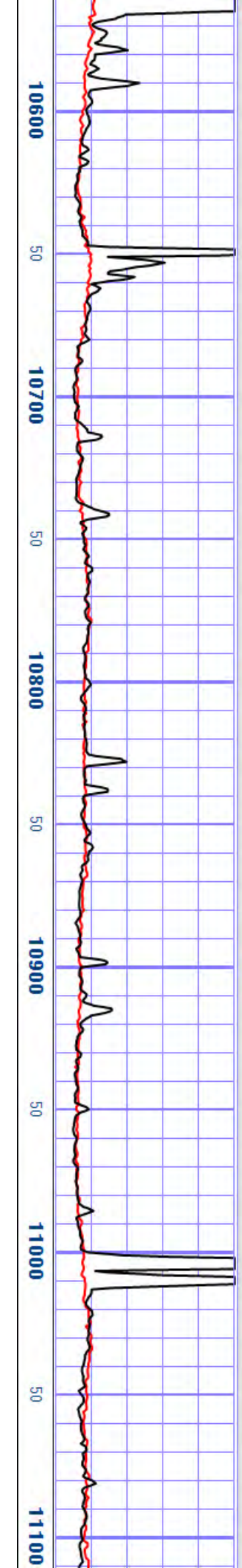
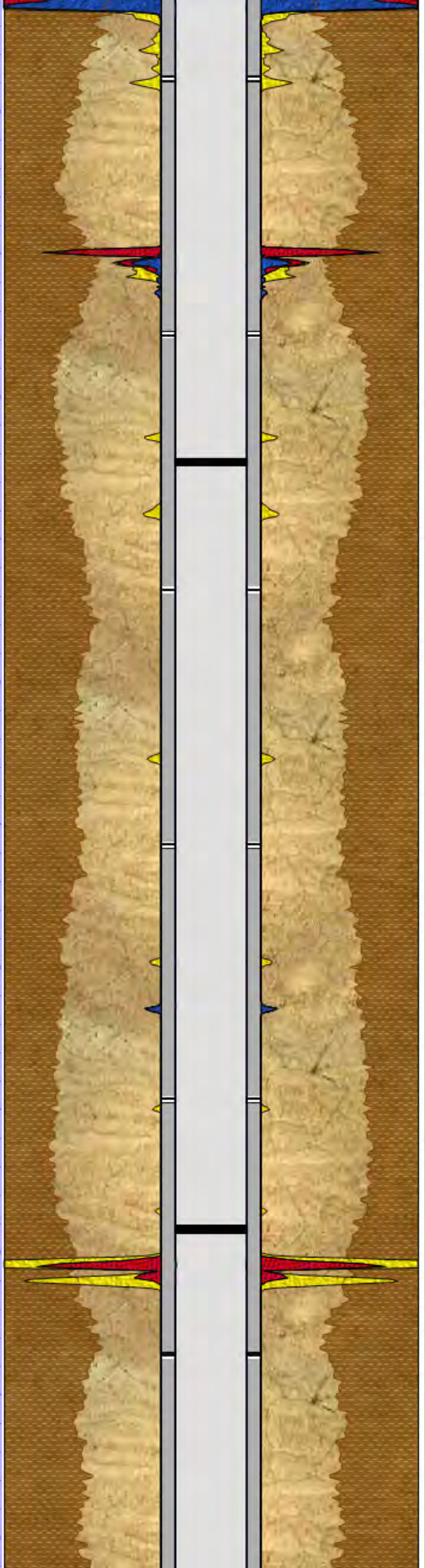
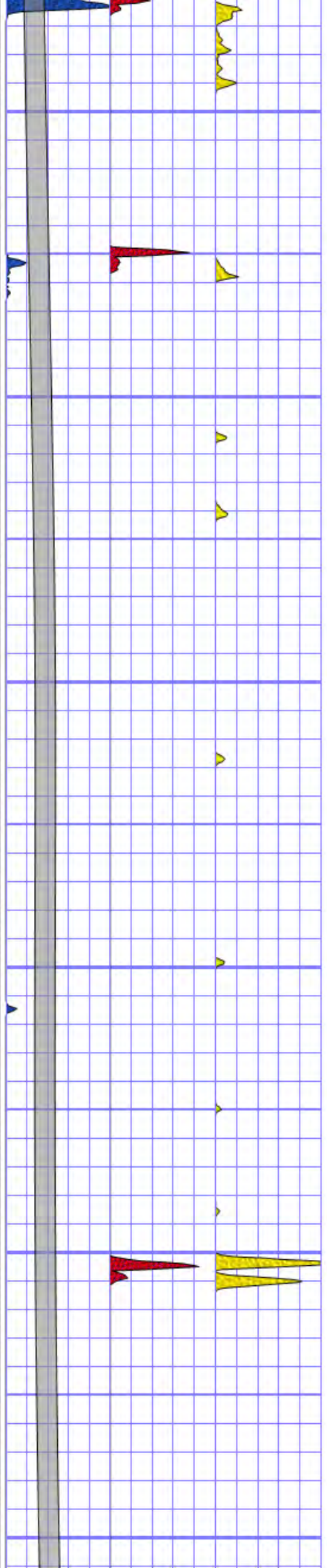




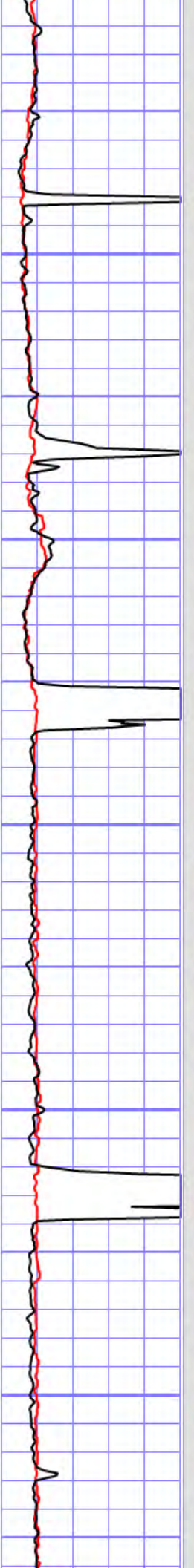
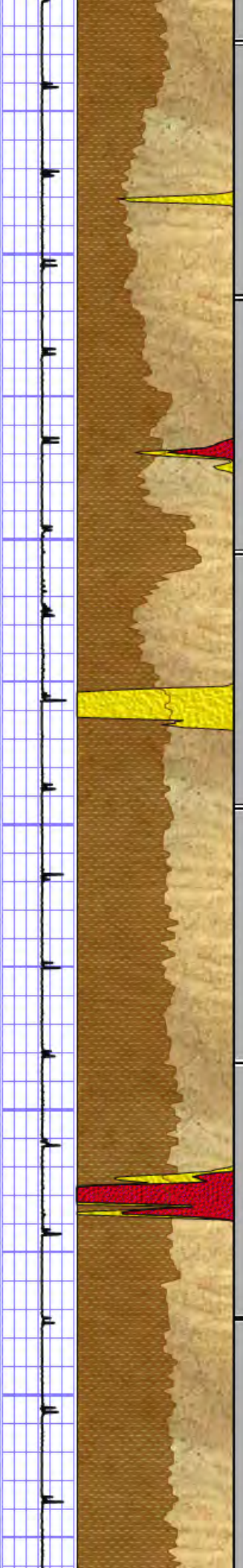
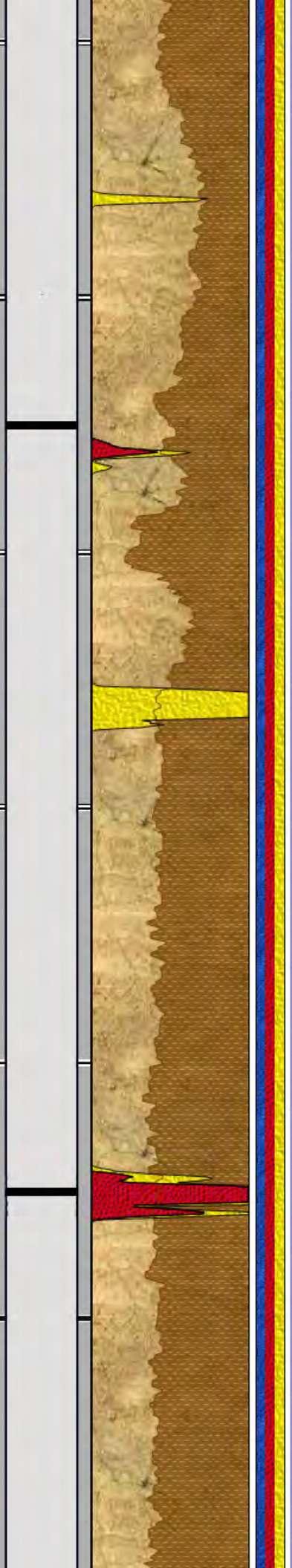
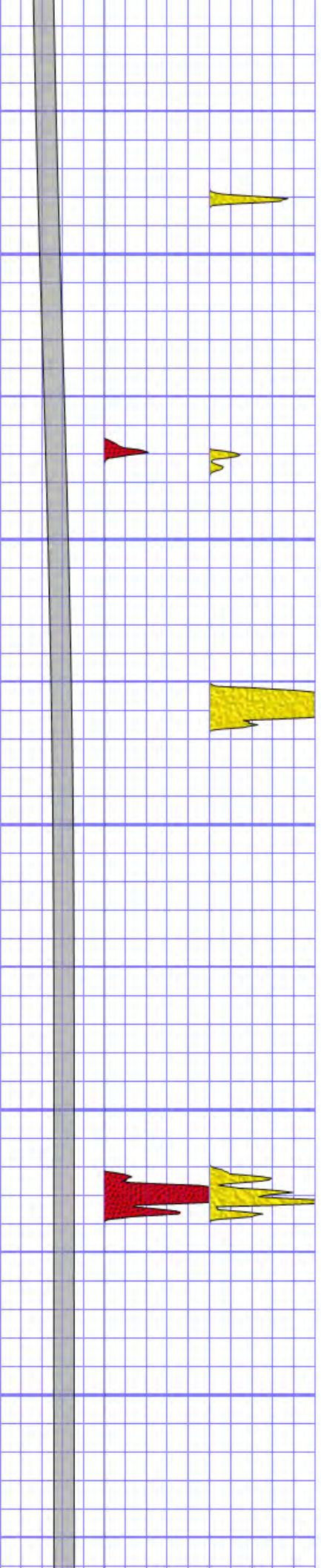


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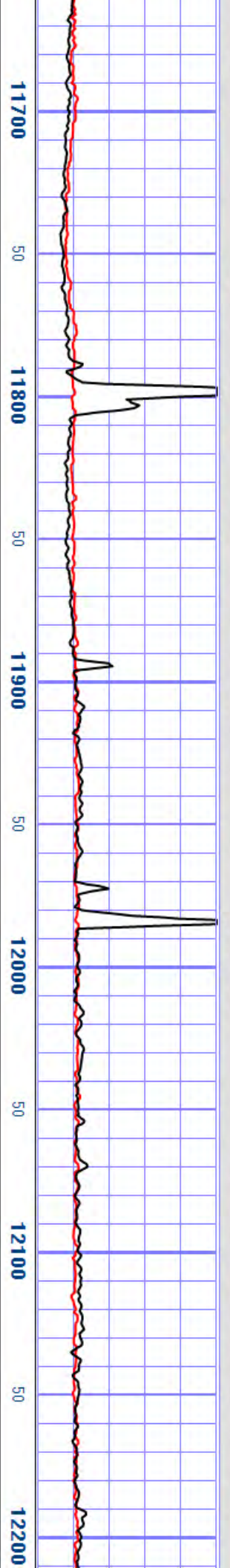
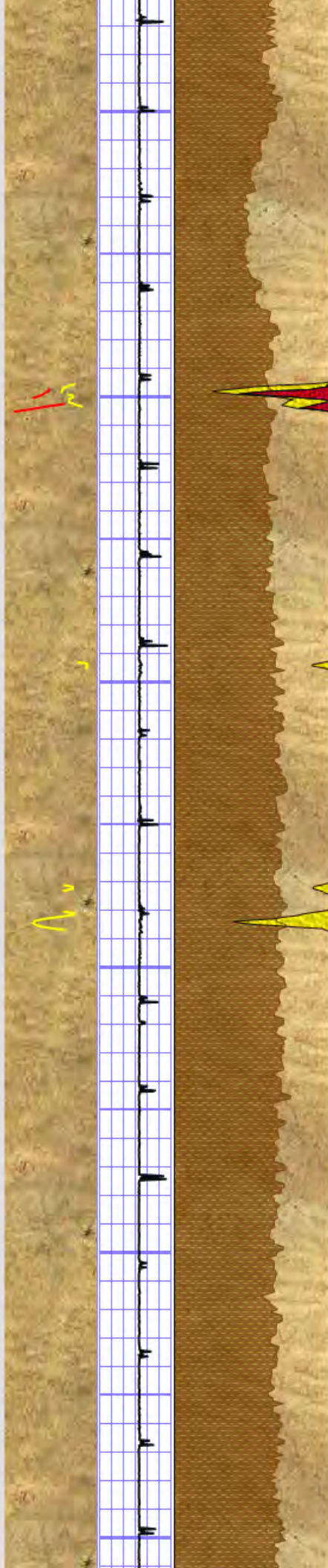
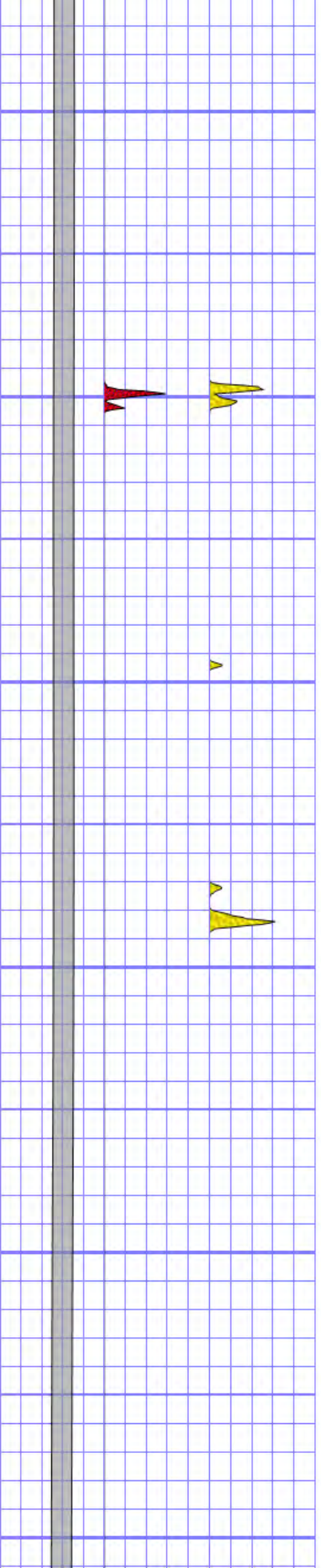




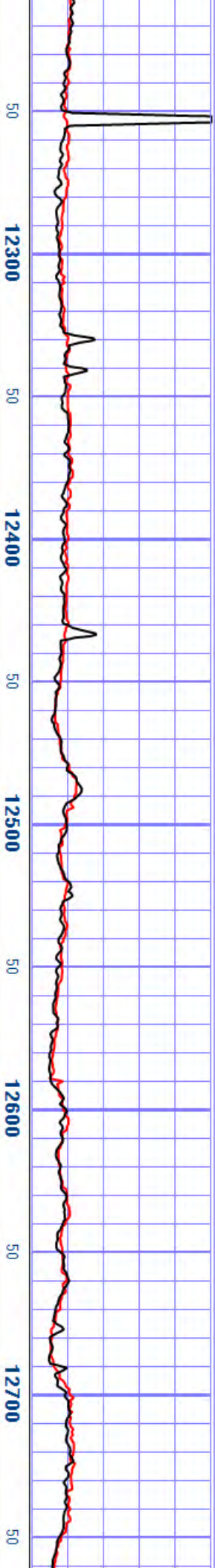
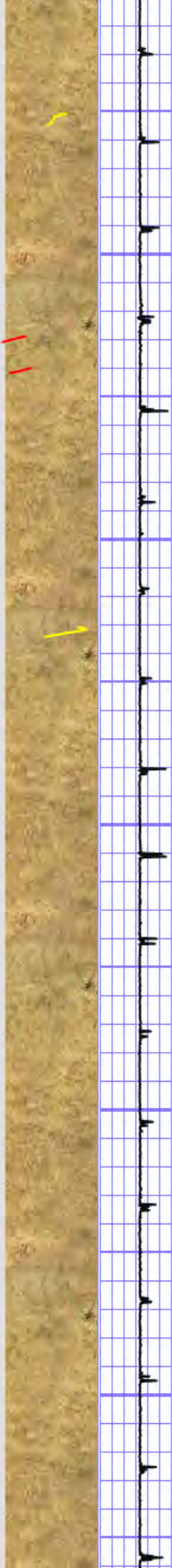
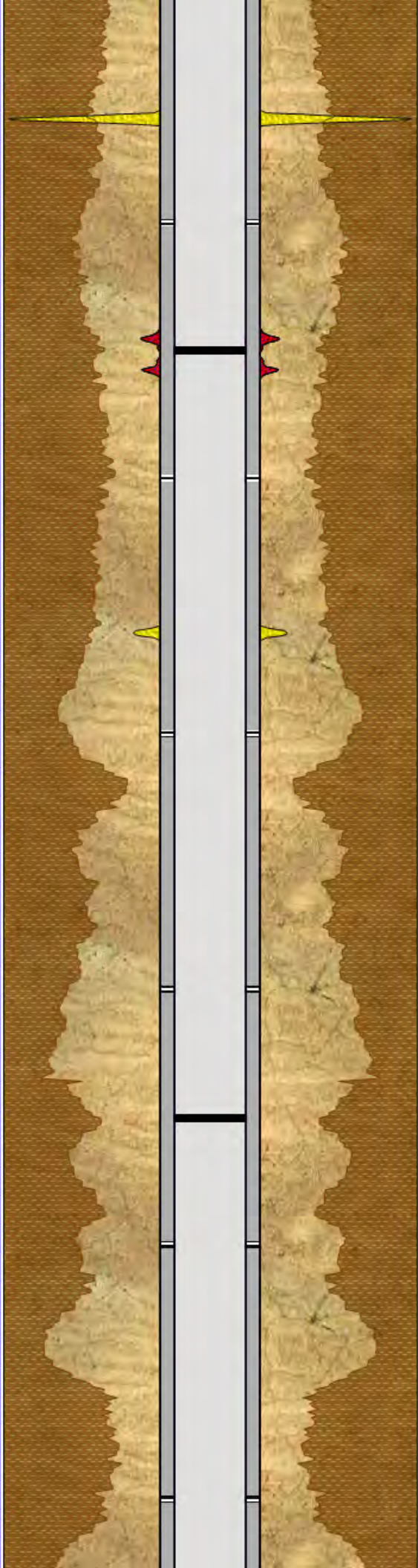
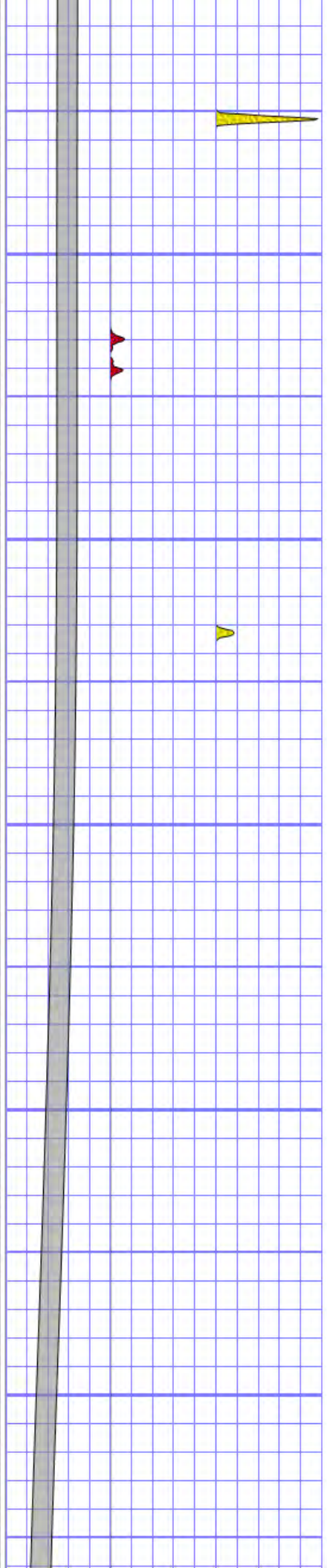


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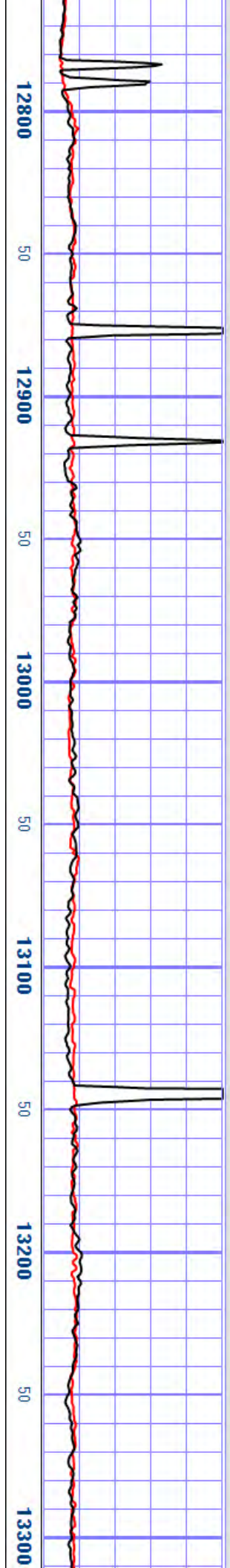
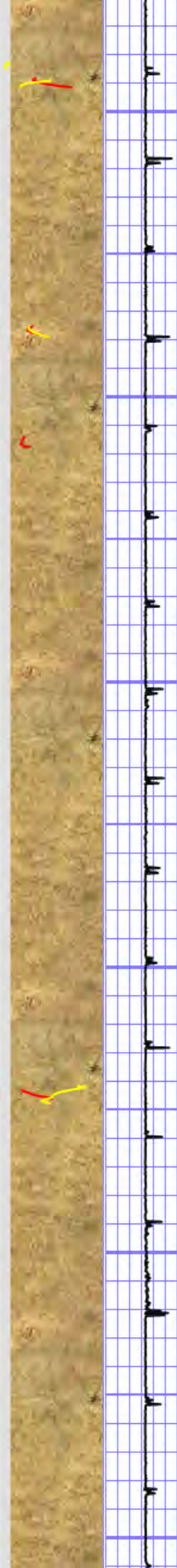
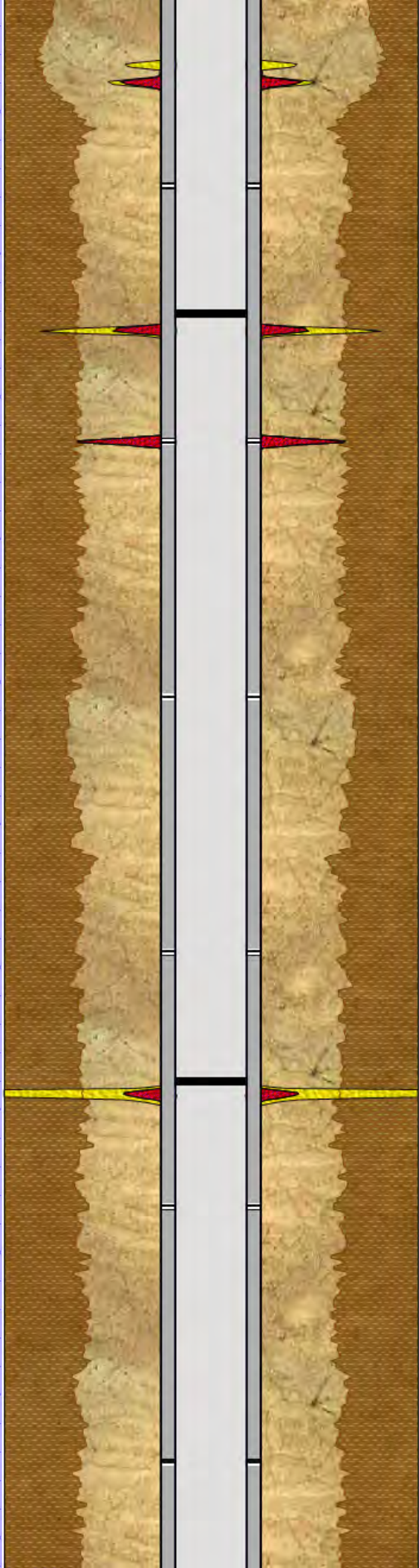
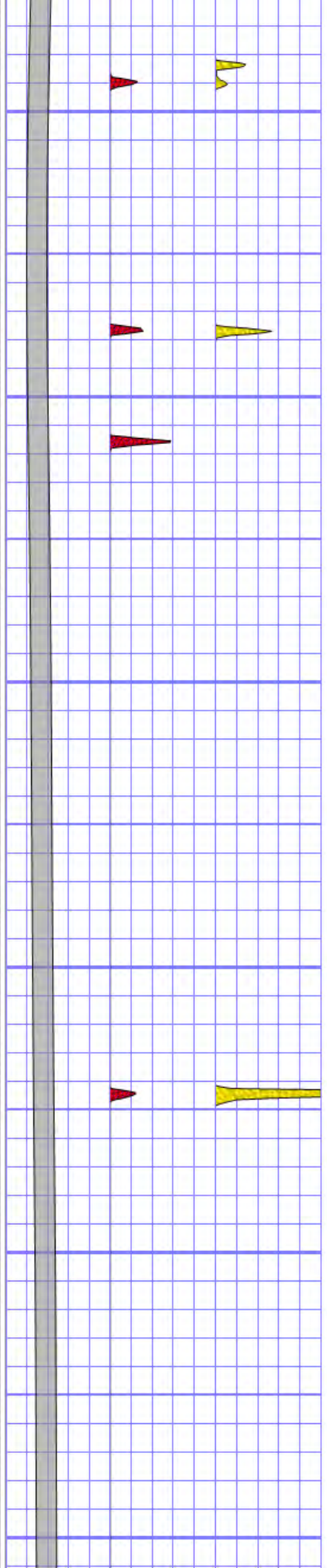




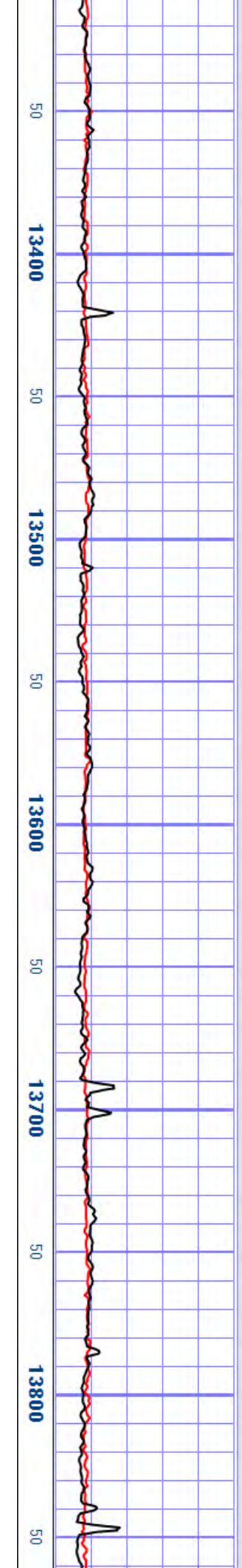
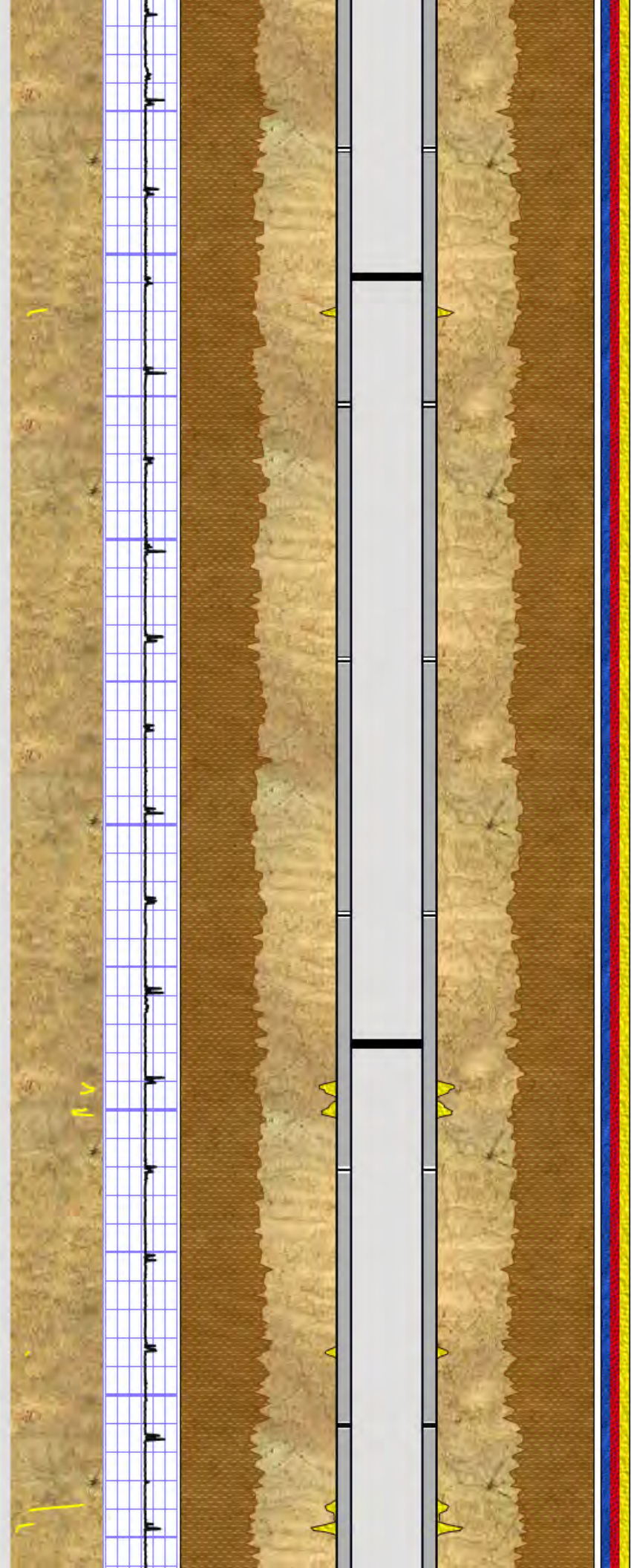
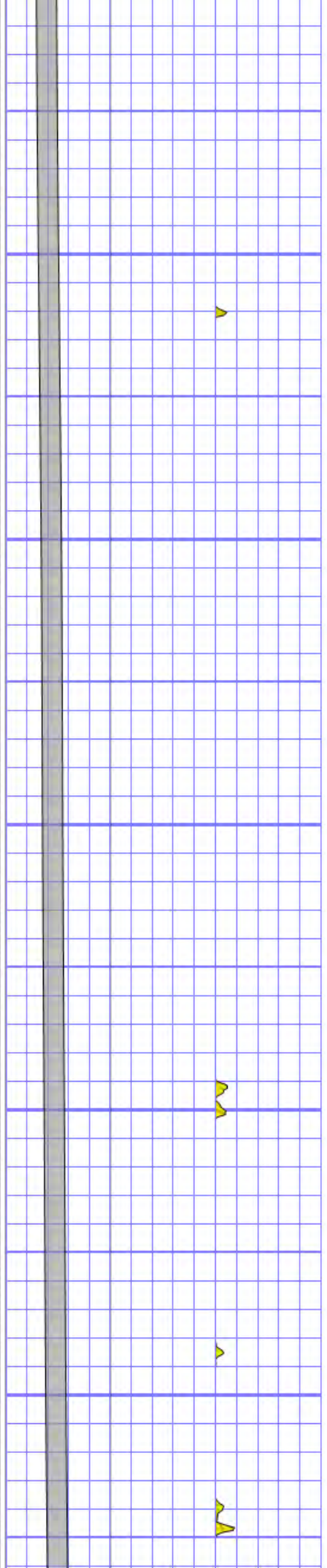




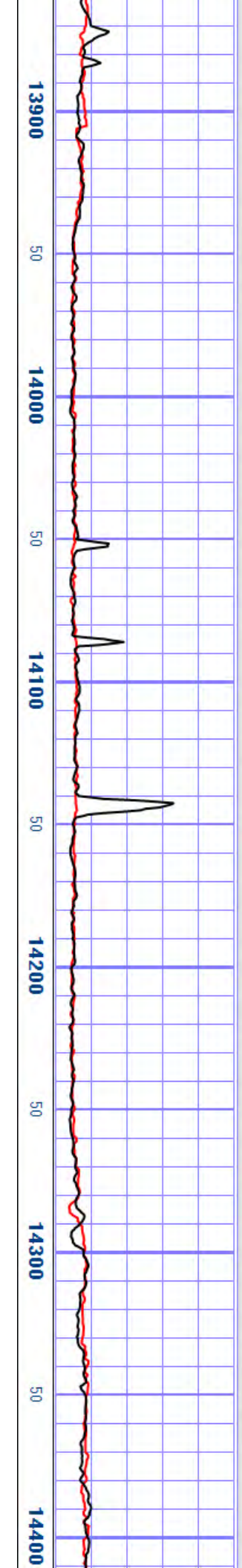
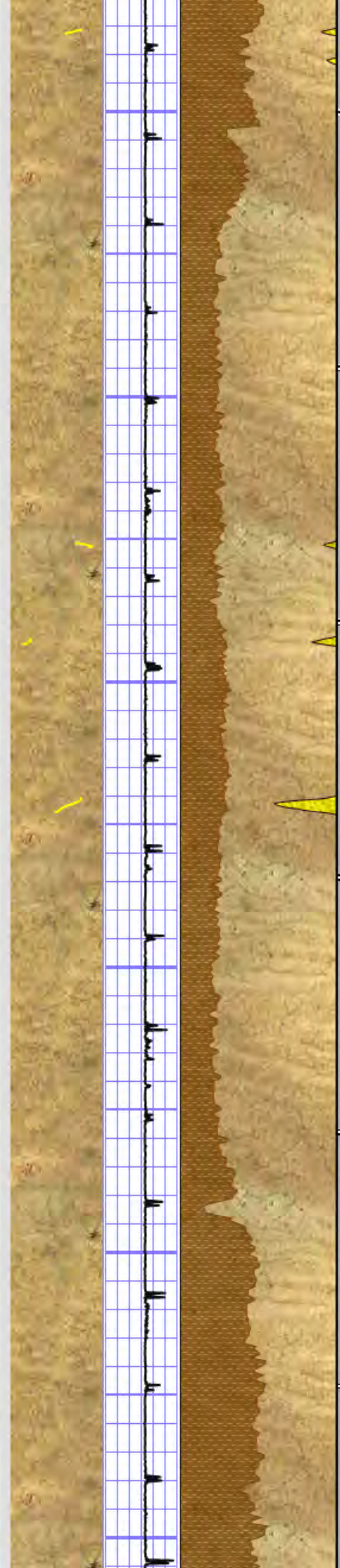
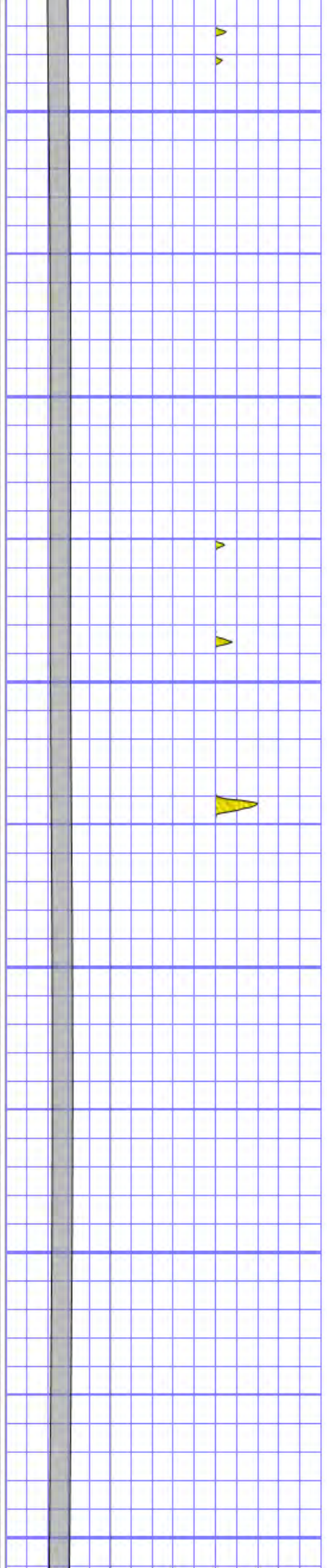














Antimony	Iridium	Scandium
True Vertical Depth		
SBTOT	IRTOT	SCTOT
0 1000	0 1000	0 1000
TVD		
7565	[ft]	7365

Company:	Laredo Petroleum, Inc.
Well:	Sugg A-158 #1SU
Field:	Spraberry
County:	Reagan

State: Texas