

Company: Carrizo Oil & Gas Inc

Well: WEP 4-28-11-3-64

Field: Wildcat

County: Adams State: Colorado

Cement Volume	
Caliper	
Sec. 28, T3S, R64W SHL: 369 FNL X 1164FWL NWNW	Elev. K.B. 5596.00 ft G.L. 5579.00 ft D.F. 5595.00 ft
Location:	Ground Level
Permanent Datum:	Log Measured From:
Drilling Measured From:	Kelly Bushing
API Serial No.	Section: 28
05-001-09753-0000	Township: 3S
	Range: 64W

Logging Date	30-Dec-2012
Run Number	Run 1: FMI
Depth Driller	11431.00 ft
Schlumberger Depth	11433.00 ft
Bottom Log Interval	11402.00 ft
Top Log Interval	7514.00 ft
Casing Driller Size @ Depth	7 in @ 7519.00 ft
Casing Schlumberger	7514 ft
Bit Size	6.125 in
Type Fluid In Hole	Chemical Gel
Density	9.6 lbm/gal
Fluid Loss	PH 7.6 cm3
Source of Sample	Active Tank
RM @ Meas Temp	1.33 ohm.m @ 59 degF
RMF @ Meas Temp	1.07 ohm.m @ 59 degF
RMC @ Meas Temp	1.6 ohm.m @ 59 degF
Source RMF	Calculated
RM @ BHT	0.4 @ 212 0.32 @ 212
Max Recorded Temperatures	
Circulation Stopped	31-Dec-2012 07:00:00
Logger on Bottom	01-Jan-2013 01:40:48
Unit Number	3030
Recorded By	Allison Johnston
Witnessed By	Rob Thomas

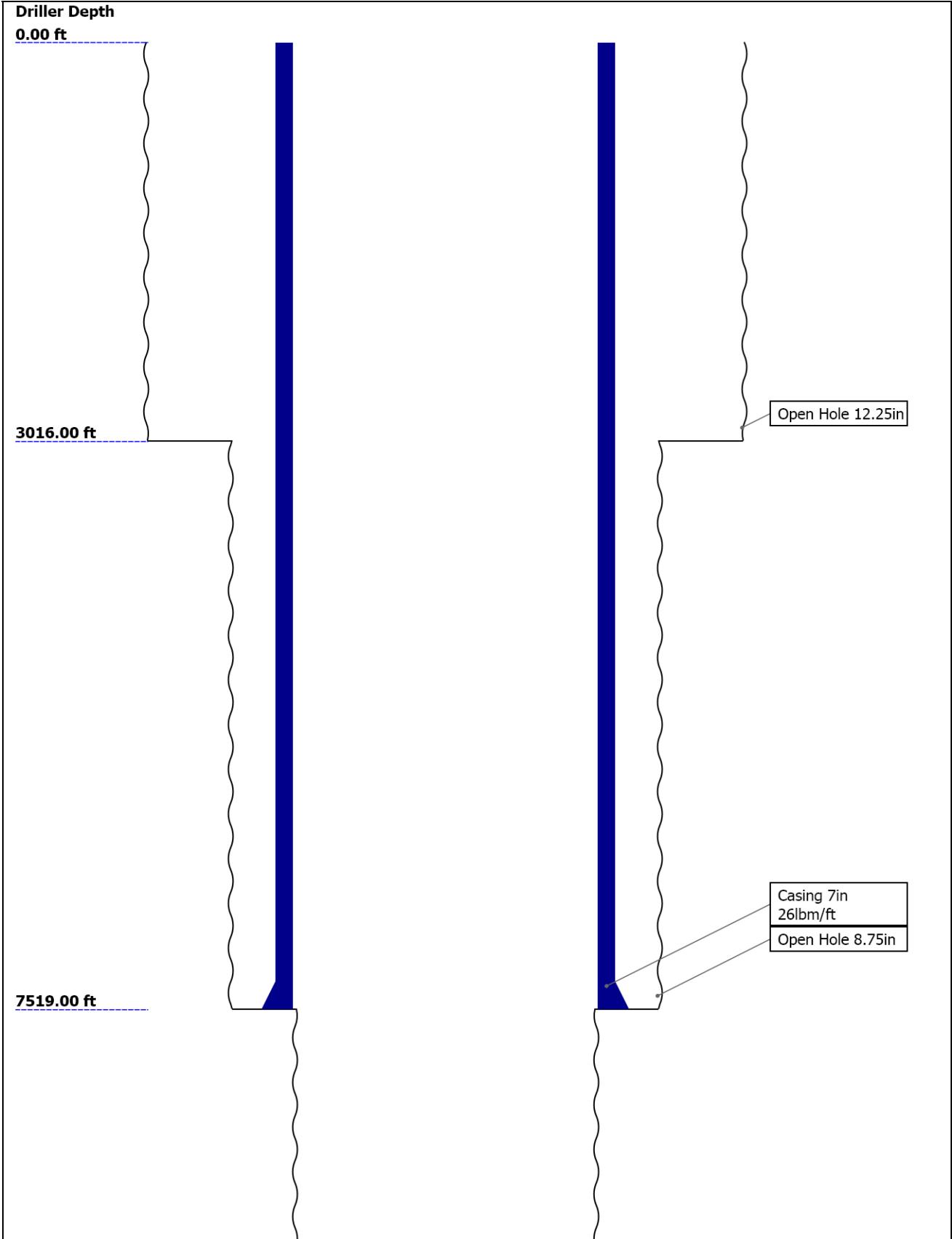
Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

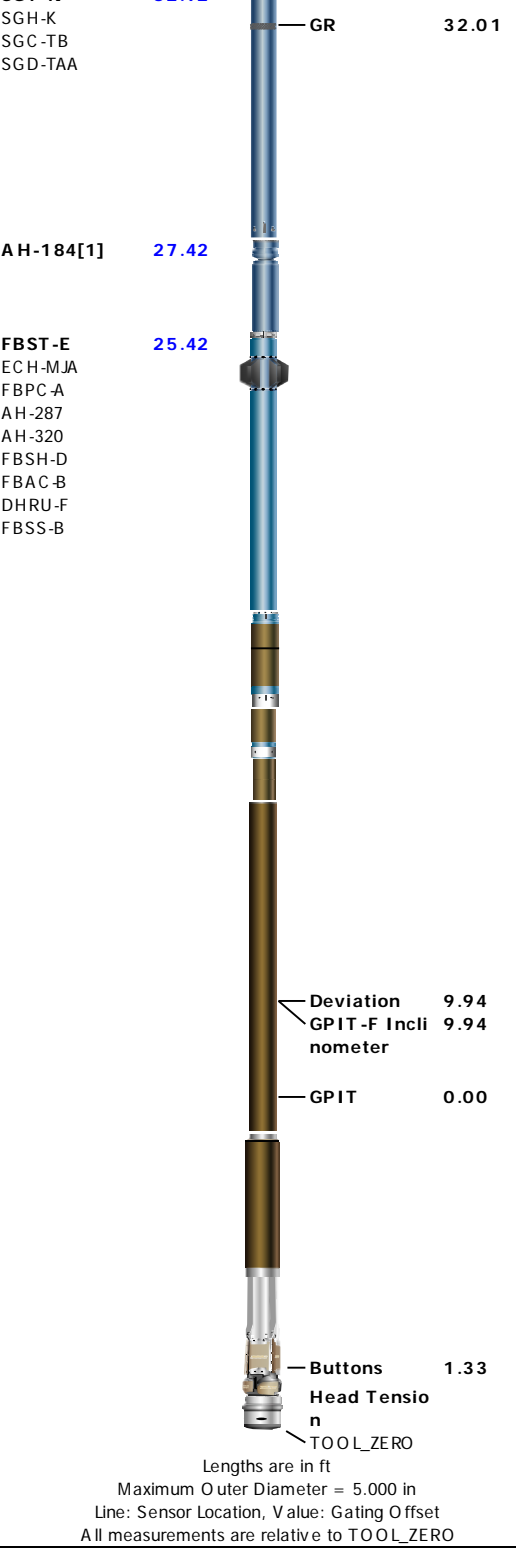
Contents

- 1. Header
- 2. Disclaimer
- 3. Contents
- 4. Well Sketch
- 5. Borehole Size/Casing/Tubing Record
- 6. Remarks and Equipment Summary
- 7. Depth Summary
- 8. Survey Record
- 9. Run 1: FMI
  - 9.1 Integration Summary
  - 9.2 Software Version
  - 9.3 Composite Summary
  - 9.4 Log ( Noble East Caliper )
  - 9.5 Parameter Listing
- 10. Tail

Well Sketch







## Depth Summary

Depth Control Parameters			
Conveyance Type	Run 1: FMI		
Log Sequence	Drill Pipe (TLC)		
Reference Log Date	First run in hole.		
Reference Log Name	29-Dec-2012		
Reference Log Run Number	Precision Directional Services		
Rig Type	1		
Depth Remark Parameters	Land		
Depth Remark 1	Run 1: FMI		
Depth Remark 2	All Schlumberger depth procedures followed.		
Depth Remark 3	IDW used for primary depth control, pipe tally used for secondary depth control.		
Depth Remark 4			

Depth Remark 3	Log correlated to Precision Directional Services LWD Gamma Ray		
Depth Measuring Device	Run 1: FMI		
Type	IDW-B		
Serial Number	6405		
Calibration Date	08-Nov-2012		
Calibration Cable Type	7-39-PLXS		
Wheel Correction 1	-6		
Wheel Correction 2	-5		
Tension Device	Run 1: FMI		
Type	CMTD-B/A		
Serial Number	1154		
Calibration Date	10-Dec-2012		
Calibration Points	10		
Calibration RMS	7		
Calibration Peak Error	12		
Logging Cable	Run 1: FMI		
Type	7-39P-LXS		
Serial Number	707030		
Logging Cable Length ( ft )	16000.00		

Survey Record

Survey Calculation			
Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	True North	Total Correction Formula :	Magnetic Dec

Rig Location			
Latitude :	39.767160 degrees	Longitude :	-104.56037 degrees
Tie In Point			
Measured Depth:	0.00 ft	Inclination:	0.00 deg
True Vertical Depth:	0.00 ft	North Displacement:	0.00 ft
		Azimuth:	0.00 deg
		East Displacement:	0.00 ft

Survey Quality Index			
9 : Manual	28 : Tie-In Point		

Survey Correction Index			
0 : No correction			

Survey Description Index			
0 : Not Flagged Survey			

Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/ -S (ft)	E/ -W (ft)	Closure (ft)	at Azim (deg)	DLS deg/100ft	Tool Type	QI	CI	DI
1	0.00	0.00	0.00	- - - -	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP	28	0	0
2	7464.50	37.18	262.45	7464.50	6951.56	-307.16	-307.16	-2317.82	2338.09	262.45	0.50	FBST-E	9	0	0
3	7494.50	41.41	279.04	30.00	6974.84	-306.79	-306.79	-2336.67	2356.73	262.52	37.64	FBST-E	9	0	0
4	7524.50	44.21	93.40	30.00	7002.09	-305.63	-305.63	-2335.87	2355.77	262.55	284.96	FBST-E	9	0	0
5	7554.50	47.28	93.89	30.00	7023.03	-306.99	-306.99	-2314.43	2334.71	262.44	10.29	FBST-E	9	0	0
6	7584.50	51.86	92.34	30.00	7042.48	-308.22	-308.22	-2291.64	2312.27	262.34	15.78	FBST-E	9	0	0
7	7614.50	56.68	93.02	30.00	7059.99	-309.37	-309.37	-2267.32	2288.32	262.23	16.16	FBST-E	9	0	0
8	7644.50	61.95	93.79	30.00	7075.30	-310.90	-310.90	-2241.57	2263.02	262.10	17.72	FBST-E	9	0	0
9	7674.50	67.71	93.85	30.00	7088.05	-312.71	-312.71	-2214.49	2236.45	261.96	19.21	FBST-E	9	0	0
10	7704.50	73.28	94.28	30.00	7098.06	-314.72	-314.72	-2186.30	2208.83	261.81	18.60	FBST-E	9	0	0
11	7734.50	79.73	94.74	30.00	7105.06	-317.01	-317.01	-2157.23	2180.41	261.64	21.55	FBST-E	9	0	0
12	7764.50	84.17	95.07	30.00	7109.26	-319.55	-319.55	-2127.64	2151.51	261.46	14.84	FBST-E	9	0	0
13	7794.50	87.97	94.30	30.00	7111.31	-322.00	-322.00	-2097.82	2122.38	261.27	12.93	FBST-E	9	0	0
14	7824.50	89.30	94.05	30.00	7112.03	-324.18	-324.18	-2067.91	2093.18	261.09	4.51	FBST-E	9	0	0
15	7854.50	91.82	93.67	30.00	7111.73	-326.20	-326.20	-2037.98	2063.91	260.91	8.49	FBST-E	9	0	0
16	7884.50	92.89	93.55	30.00	7110.50	-328.09	-328.09	-2008.07	2034.68	260.72	3.57	FBST-E	9	0	0

	7914.50	92.25	93.39	30.00	7108.89	-329.90	-329.90	-1978.16	2005.48	260.53	1.33	FBST-E	9	0	0
17	7914.50	93.25	93.39	30.00	7108.89	-329.90	-329.90	-1978.16	2005.48	260.53	1.33	FBST-E	9	0	0
18	7944.50	93.06	93.27	30.00	7107.24	-331.64	-331.64	-1948.26	1976.28	260.34	0.78	FBST-E	9	0	0
19	7974.50	92.15	93.07	30.00	7105.88	-333.30	-333.30	-1918.34	1947.08	260.14	3.09	FBST-E	9	0	0
20	8004.50	90.94	93.02	30.00	7105.07	-334.89	-334.89	-1888.39	1917.85	259.94	4.04	FBST-E	9	0	0
21	8034.50	90.43	93.32	30.00	7104.71	-336.55	-336.55	-1858.44	1888.68	259.74	2.00	FBST-E	9	0	0
22	8064.50	90.39	94.20	30.00	7104.49	-338.52	-338.52	-1828.50	1859.58	259.51	2.93	FBST-E	9	0	0
23	8094.50	90.49	94.80	30.00	7104.26	-340.87	-340.87	-1798.60	1830.61	259.27	2.03	FBST-E	9	0	0
24	8124.50	90.20	94.61	30.00	7104.08	-343.33	-343.33	-1768.70	1801.71	259.01	1.17	FBST-E	9	0	0
25	8154.50	90.40	94.77	30.00	7103.93	-345.78	-345.78	-1738.80	1772.83	258.75	0.85	FBST-E	9	0	0
26	8184.50	90.44	94.75	30.00	7103.71	-348.27	-348.27	-1708.90	1744.03	258.48	0.17	FBST-E	9	0	0
27	8214.50	90.35	93.63	30.00	7103.50	-350.47	-350.47	-1678.99	1715.19	258.21	3.75	FBST-E	9	0	0
28	8244.50	90.30	94.68	30.00	7103.33	-352.64	-352.64	-1649.07	1686.35	257.93	3.51	FBST-E	9	0	0
29	8274.50	90.50	94.37	30.00	7103.12	-355.01	-355.01	-1619.16	1657.61	257.63	1.24	FBST-E	9	0	0
30	8304.50	90.53	94.19	30.00	7102.85	-357.25	-357.25	-1589.25	1628.90	257.33	0.60	FBST-E	9	0	0
31	8334.50	90.56	94.28	30.00	7102.56	-359.46	-359.46	-1559.33	1600.23	257.02	0.31	FBST-E	9	0	0
32	8364.50	89.78	93.36	30.00	7102.47	-361.46	-361.46	-1529.40	1571.52	256.70	4.02	FBST-E	9	0	0
33	8394.50	89.51	93.21	30.00	7102.66	-363.18	-363.18	-1499.45	1542.81	256.38	1.03	FBST-E	9	0	0
34	8424.50	89.74	93.47	30.00	7102.85	-364.93	-364.93	-1469.50	1514.14	256.05	1.16	FBST-E	9	0	0
35	8454.50	89.64	93.70	30.00	7103.02	-366.80	-366.80	-1439.56	1485.56	255.71	0.84	FBST-E	9	0	0
36	8484.50	89.56	93.54	30.00	7103.22	-368.70	-368.70	-1409.62	1457.05	255.34	0.59	FBST-E	9	0	0
37	8514.50	89.76	93.56	30.00	7103.40	-370.56	-370.56	-1379.68	1428.58	254.97	0.65	FBST-E	9	0	0
38	8544.50	90.56	92.41	30.00	7103.32	-372.12	-372.12	-1349.72	1400.07	254.59	4.69	FBST-E	9	0	0
39	8574.50	90.74	92.13	30.00	7102.98	-373.31	-373.31	-1319.74	1371.52	254.21	1.10	FBST-E	9	0	0
40	8604.50	90.96	92.01	30.00	7102.53	-374.39	-374.39	-1289.77	1343.01	253.81	0.84	FBST-E	9	0	0
41	8634.50	91.01	91.81	30.00	7102.02	-375.39	-375.39	-1259.79	1314.53	253.41	0.67	FBST-E	9	0	0
42	8664.50	91.10	91.69	30.00	7101.46	-376.31	-376.31	-1229.81	1286.09	252.99	0.50	FBST-E	9	0	0
43	8694.50	90.97	91.68	30.00	7100.92	-377.19	-377.19	-1199.82	1257.71	252.55	0.43	FBST-E	9	0	0
44	8724.50	90.66	91.78	30.00	7100.49	-378.09	-378.09	-1169.84	1229.43	252.09	1.08	FBST-E	9	0	0
45	8754.50	90.86	91.30	30.00	7100.10	-378.90	-378.90	-1139.85	1201.18	251.61	1.71	FBST-E	9	0	0
46	8784.50	90.66	91.13	30.00	7099.70	-379.53	-379.53	-1109.86	1172.97	251.12	0.89	FBST-E	9	0	0
47	8814.50	90.71	90.88	30.00	7099.34	-380.06	-380.06	-1079.87	1144.78	250.61	0.83	FBST-E	9	0	0
48	8844.50	91.00	91.24	30.00	7098.89	-380.61	-380.61	-1049.88	1116.73	250.07	1.52	FBST-E	9	0	0
49	8874.50	90.84	90.84	30.00	7098.41	-381.16	-381.16	-1019.89	1088.78	249.51	1.42	FBST-E	9	0	0
50	8904.50	90.85	91.14	30.00	7097.96	-381.67	-381.67	-989.90	1060.93	248.91	1.00	FBST-E	9	0	0
51	8934.50	91.57	91.98	30.00	7097.33	-382.49	-382.49	-959.91	1033.30	248.27	3.68	FBST-E	9	0	0
52	8964.50	91.43	91.84	30.00	7096.54	-383.49	-383.49	-929.94	1005.91	247.59	0.67	FBST-E	9	0	0
53	8994.50	90.60	91.54	30.00	7096.01	-384.37	-384.37	-899.96	978.61	246.87	2.93	FBST-E	9	0	0
54	9024.50	89.65	91.09	30.00	7095.94	-385.06	-385.06	-869.97	951.38	246.13	3.50	FBST-E	9	0	0
55	9054.50	89.05	90.62	30.00	7096.28	-385.50	-385.50	-839.97	924.21	245.35	2.55	FBST-E	9	0	0
56	9084.50	88.59	90.18	30.00	7096.90	-385.71	-385.71	-809.98	897.15	244.54	2.11	FBST-E	9	0	0
57	9114.50	88.68	90.00	30.00	7097.62	-385.76	-385.76	-779.99	870.18	243.68	0.67	FBST-E	9	0	0
58	9144.50	90.14	91.32	30.00	7097.93	-386.11	-386.11	-749.99	843.54	242.76	6.57	FBST-E	9	0	0
59	9174.50	90.03	91.05	30.00	7097.88	-386.73	-386.73	-720.00	817.29	241.76	0.96	FBST-E	9	0	0
60	9204.50	90.14	90.87	30.00	7097.84	-387.23	-387.23	-690.00	791.24	240.70	0.71	FBST-E	9	0	0
61	9234.50	90.17	90.56	30.00	7097.76	-387.61	-387.61	-660.01	765.42	239.58	1.02	FBST-E	9	0	0
62	9264.50	90.63	90.50	30.00	7097.55	-387.89	-387.89	-630.01	739.83	238.38	1.56	FBST-E	9	0	0
63	9294.50	90.76	90.25	30.00	7097.19	-388.08	-388.08	-600.01	714.57	237.11	0.94	FBST-E	9	0	0
64	9324.50	90.75	90.56	30.00	7096.79	-388.29	-388.29	-570.01	689.70	235.74	1.02	FBST-E	9	0	0
65	9354.50	91.07	89.87	30.00	7096.32	-388.40	-388.40	-540.02	665.19	234.27	2.53	FBST-E	9	0	0
66	9384.50	91.42	89.92	30.00	7095.66	-388.35	-388.35	-510.03	641.04	232.71	1.17	FBST-E	9	0	0
67	9414.50	91.67	89.89	30.00	7094.86	-388.30	-388.30	-480.04	617.42	231.03	0.83	FBST-E	9	0	0
68	9444.50	91.57	91.69	30.00	7094.01	-388.71	-388.71	-450.05	594.69	229.18	6.01	FBST-E	9	0	0
69	9474.50	91.78	91.65	30.00	7093.13	-389.59	-389.59	-420.08	572.93	227.16	0.70	FBST-E	9	0	0
70	9504.50	91.78	91.68	30.00	7092.20	-390.46	-390.46	-390.11	551.94	224.97	0.09	FBST-E	9	0	0

71	9534.50	91.44	92.65	30.00	7091.36	-391.59	-391.59	-360.14	532.02	222.60	3.45	FBST-E	9	0	0
72	9564.50	91.38	92.60	30.00	7090.62	-392.96	-392.96	-330.18	513.25	220.04	0.29	FBST-E	9	0	0
73	9594.50	90.63	93.25	30.00	7090.09	-394.49	-394.49	-300.22	495.73	217.27	3.30	FBST-E	9	0	0
74	9624.50	90.07	93.71	30.00	7089.91	-396.31	-396.31	-270.28	479.69	214.29	2.41	FBST-E	9	0	0
75	9654.50	90.33	93.73	30.00	7089.80	-398.26	-398.26	-240.34	465.16	211.11	0.87	FBST-E	9	0	0
76	9684.50	90.28	93.53	30.00	7089.64	-400.16	-400.16	-210.40	452.10	207.74	0.69	FBST-E	9	0	0
77	9714.50	89.82	93.41	30.00	7089.62	-401.97	-401.97	-180.46	440.62	204.18	1.59	FBST-E	9	0	0
78	9744.50	88.82	93.04	30.00	7089.97	-403.66	-403.66	-150.51	430.81	200.45	3.54	FBST-E	9	0	0
79	9774.50	89.28	93.53	30.00	7090.47	-405.38	-405.38	-120.56	422.93	196.56	2.23	FBST-E	9	0	0
80	9804.50	89.63	93.61	30.00	7090.76	-407.24	-407.24	-90.62	417.19	192.55	1.21	FBST-E	9	0	0
81	9834.50	89.98	94.52	30.00	7090.86	-409.37	-409.37	-60.70	413.85	188.43	3.26	FBST-E	9	0	0
82	9864.50	90.32	93.63	30.00	7090.78	-411.50	-411.50	-30.77	412.66	184.28	3.18	FBST-E	9	0	0
83	9894.50	90.56	94.13	30.00	7090.55	-413.53	-413.53	-0.84	413.55	180.12	1.84	FBST-E	9	0	0
84	9924.50	91.07	94.67	30.00	7090.12	-415.83	-415.83	29.06	416.86	176.00	2.47	FBST-E	9	0	0
85	9954.50	91.10	94.53	30.00	7089.56	-418.24	-418.24	58.96	422.38	171.98	0.47	FBST-E	9	0	0
86	9984.50	90.88	94.23	30.00	7089.04	-420.53	-420.53	88.87	429.82	168.07	1.23	FBST-E	9	0	0
87	10014.50	90.11	93.42	30.00	7088.78	-422.53	-422.53	118.80	438.91	164.30	3.72	FBST-E	9	0	0
88	10044.50	89.87	93.42	30.00	7088.78	-424.32	-424.32	148.75	449.64	160.68	0.79	FBST-E	9	0	0
89	10074.50	89.55	93.17	30.00	7088.94	-426.04	-426.04	178.70	462.01	157.24	1.37	FBST-E	9	0	0
90	10104.50	89.38	93.29	30.00	7089.22	-427.73	-427.73	208.65	475.92	154.00	0.68	FBST-E	9	0	0
91	10134.50	89.39	93.63	30.00	7089.54	-429.54	-429.54	238.59	491.37	150.95	1.16	FBST-E	9	0	0
92	10164.50	89.40	93.65	30.00	7089.86	-431.45	-431.45	268.53	508.20	148.10	0.06	FBST-E	9	0	0
93	10194.50	89.33	93.32	30.00	7090.19	-433.27	-433.27	298.47	526.12	145.44	1.11	FBST-E	9	0	0
94	10224.50	89.21	93.45	30.00	7090.57	-435.05	-435.05	328.42	545.08	142.95	0.60	FBST-E	9	0	0
95	10254.50	88.85	93.17	30.00	7091.08	-436.78	-436.78	358.36	564.99	140.63	1.53	FBST-E	9	0	0
96	10284.50	88.59	93.27	30.00	7091.75	-438.47	-438.47	388.31	585.70	138.47	0.93	FBST-E	9	0	0
97	10314.50	88.30	93.25	30.00	7092.56	-440.17	-440.17	418.25	607.19	136.46	0.96	FBST-E	9	0	0
98	10344.50	89.34	90.37	30.00	7093.18	-441.12	-441.12	448.22	628.87	134.54	10.20	FBST-E	9	0	0
99	10374.50	87.89	93.11	30.00	7093.91	-442.03	-442.03	478.20	651.21	132.75	10.32	FBST-E	9	0	0
100	10404.50	87.67	93.02	30.00	7095.07	-443.63	-443.63	508.13	674.54	131.12	0.78	FBST-E	9	0	0
101	10434.50	86.07	95.43	30.00	7096.71	-445.84	-445.84	538.00	698.72	129.65	9.61	FBST-E	9	0	0
102	10464.50	89.41	92.09	30.00	7097.89	-447.80	-447.80	567.91	723.23	128.26	15.72	FBST-E	9	0	0
103	10494.50	89.26	91.81	30.00	7098.24	-448.83	-448.83	597.89	747.60	126.90	1.06	FBST-E	9	0	0
104	10524.50	89.32	91.92	30.00	7098.61	-449.80	-449.80	627.87	772.38	125.62	0.42	FBST-E	9	0	0
105	10554.50	89.18	91.88	30.00	7099.00	-450.80	-450.80	657.85	797.47	124.42	0.50	FBST-E	9	0	0
106	10584.50	89.86	92.02	30.00	7099.25	-451.82	-451.82	687.83	822.97	123.30	2.34	FBST-E	9	0	0
107	10614.50	90.03	92.04	30.00	7099.28	-452.88	-452.88	717.81	848.75	122.25	0.56	FBST-E	9	0	0
108	10644.50	89.88	91.83	30.00	7099.30	-453.90	-453.90	747.80	874.77	121.26	0.86	FBST-E	9	0	0
109	10674.50	89.75	91.58	30.00	7099.40	-454.79	-454.79	777.78	900.98	120.32	0.94	FBST-E	9	0	0
110	10704.50	90.08	91.75	30.00	7099.44	-455.67	-455.67	807.77	927.43	119.43	1.21	FBST-E	9	0	0
111	10734.50	90.06	91.72	30.00	7099.40	-456.57	-456.57	837.76	954.10	118.59	0.12	FBST-E	9	0	0
112	10764.50	89.75	91.16	30.00	7099.45	-457.33	-457.33	867.75	980.87	117.79	2.13	FBST-E	9	0	0
113	10794.50	90.19	91.48	30.00	7099.47	-458.02	-458.02	897.74	1007.84	117.03	1.83	FBST-E	9	0	0
114	10824.50	90.29	91.28	30.00	7099.34	-458.74	-458.74	927.73	1034.94	116.31	0.76	FBST-E	9	0	0
115	10854.50	91.43	88.34	30.00	7098.89	-458.64	-458.64	957.72	1061.88	115.59	10.51	FBST-E	9	0	0
116	10884.50	90.25	91.31	30.00	7098.45	-458.55	-458.55	987.71	1088.98	114.90	10.67	FBST-E	9	0	0
117	10914.50	89.88	90.87	30.00	7098.42	-459.12	-459.12	1017.71	1116.47	114.28	1.93	FBST-E	9	0	0
118	10944.50	88.13	94.66	30.00	7098.94	-460.57	-460.57	1047.66	1144.42	113.73	13.90	FBST-E	9	0	0
119	10974.50	89.80	90.37	30.00	7099.48	-461.89	-461.89	1077.62	1172.44	113.20	15.34	FBST-E	9	0	0
120	11004.50	89.91	90.51	30.00	7099.56	-462.12	-462.12	1107.62	1200.16	112.65	0.60	FBST-E	9	0	0
121	11034.50	89.78	90.15	30.00	7099.64	-462.29	-462.29	1137.62	1227.95	112.12	1.30	FBST-E	9	0	0
122	11064.50	89.72	89.99	30.00	7099.77	-462.33	-462.33	1167.62	1255.81	111.60	0.56	FBST-E	9	0	0
123	11094.50	89.75	91.19	30.00	7099.91	-462.63	-462.63	1197.62	1283.86	111.12	4.00	FBST-E	9	0	0
124	11124.50	89.78	91.09	30.00	7100.04	-463.23	-463.23	1227.61	1312.11	110.67	0.33	FBST-E	9	0	0

Run 1: FMI	

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	360.88	ft3
IHV	Integrated Hole Volume	GCSE_UP_PASS	790.51	ft3

Acquisition System	Version
MaxWell	3.1.9755.0
Application Patch	SP-20120723-3.1.9755.1112
	EXP_APL-MASTAXIS-3.1.9755.1221

Pass Summary								
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
Run 1: FMI	Log[2]:Up	Up	7461.16 ft	11404.43 ft	31-Dec-2012 1:02:33 AM	31-Dec-2012 4:32:20 AM	0.00 ft	true

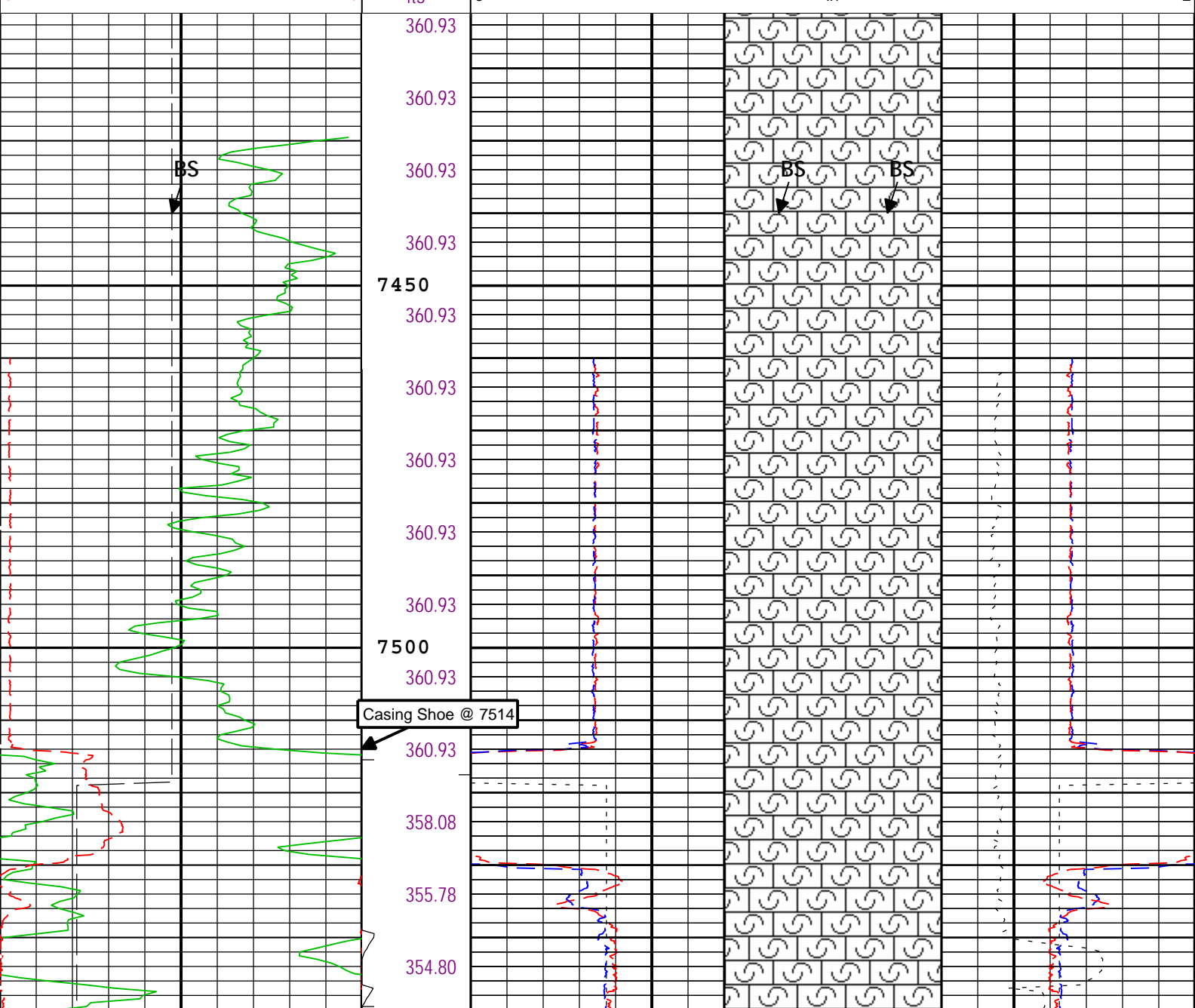
Log

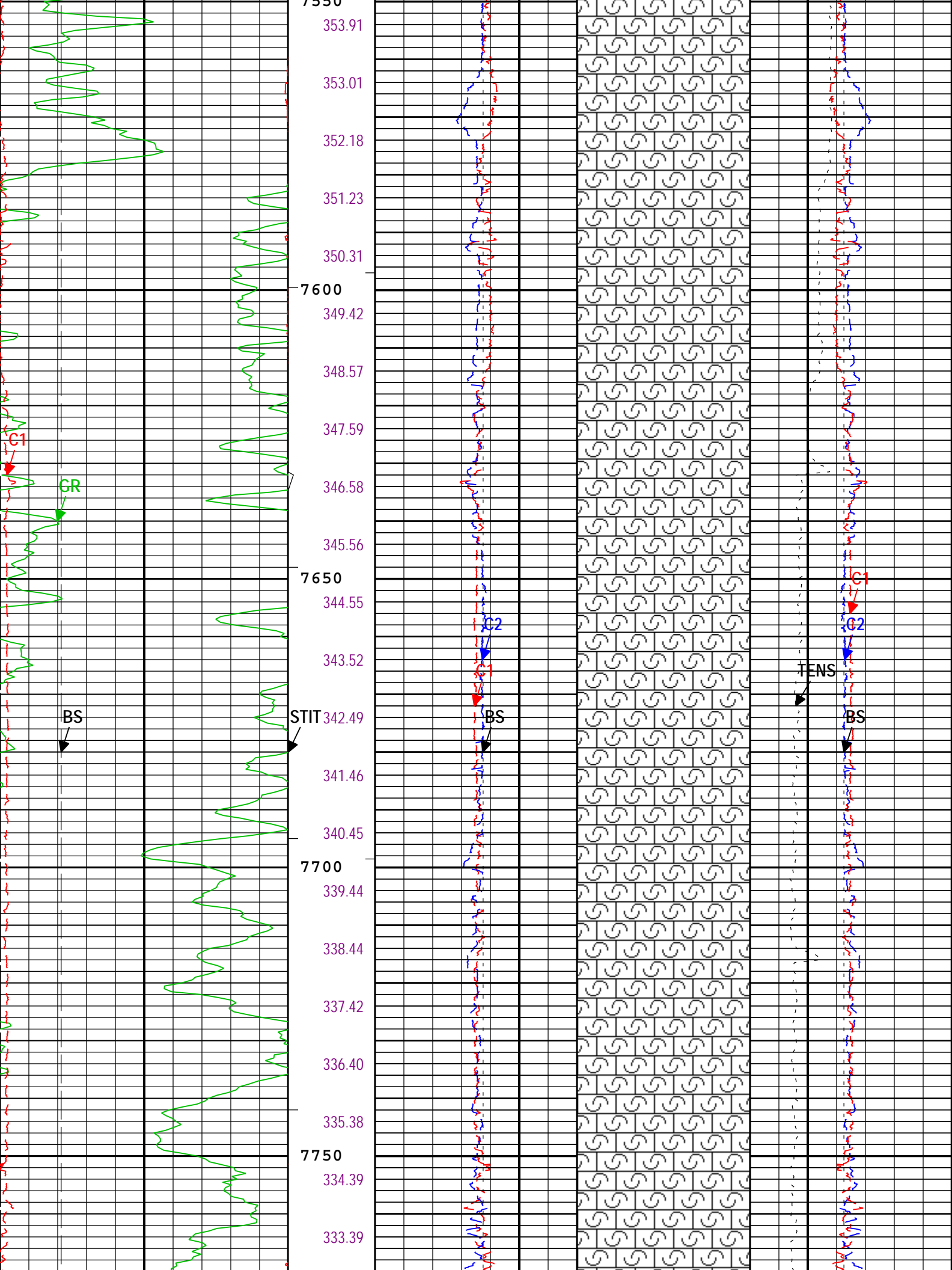
Run 1: FMI: Log[Z]:Op

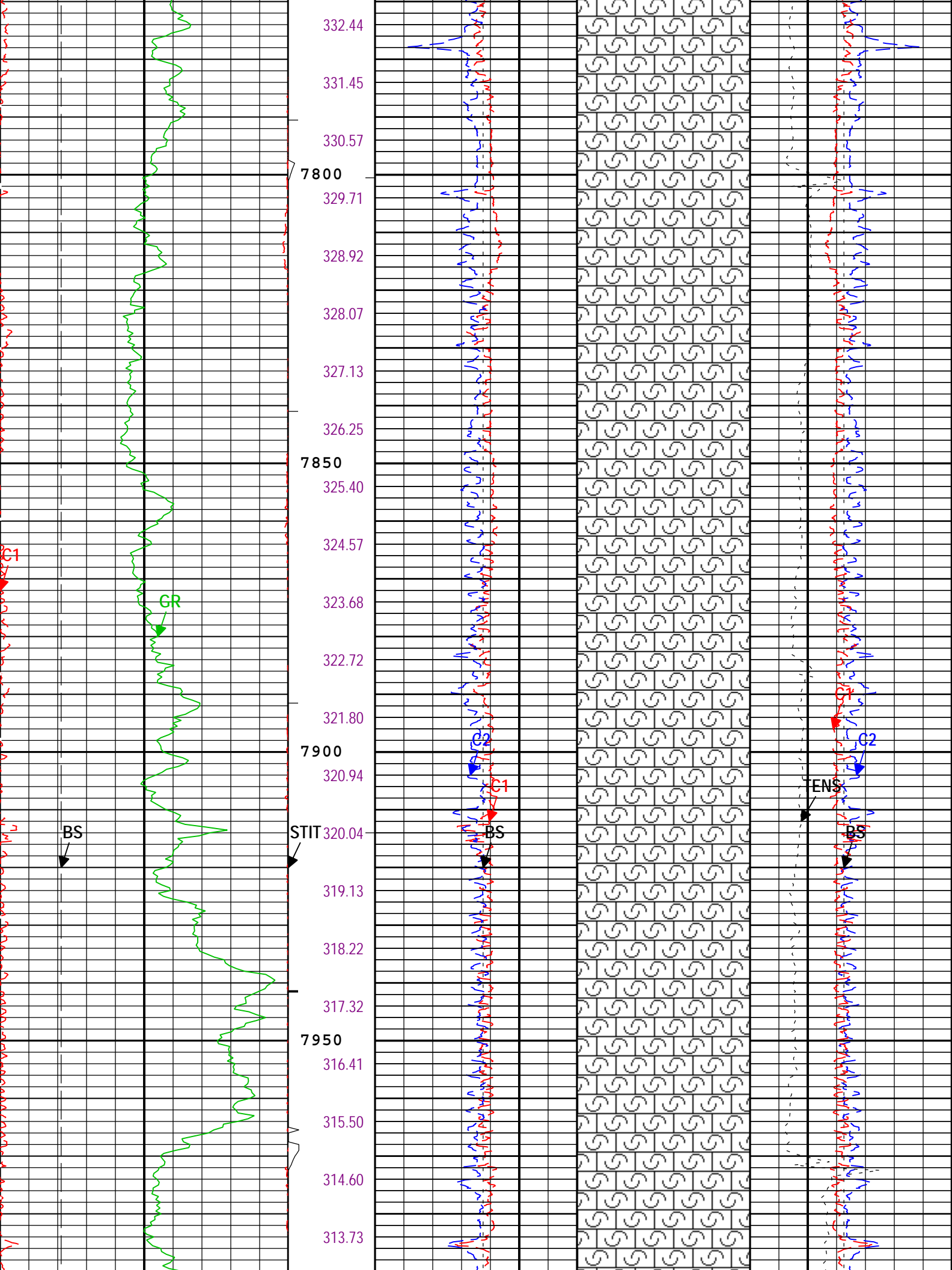
Channel	Source	Sampling
ICV	Borehole	6in
BS	Borehole	6in
C1	FBST-E:FBPC-A:FBPC-A	1.5in
C2	FBST-E:FBPC-A:FBPC-A	1.5in
GR	SGT-N:SGT-N:SGC-TB	6in
ICV	Borehole	6in
IHV	Borehole	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in
STIT	DepthCorrection	6in

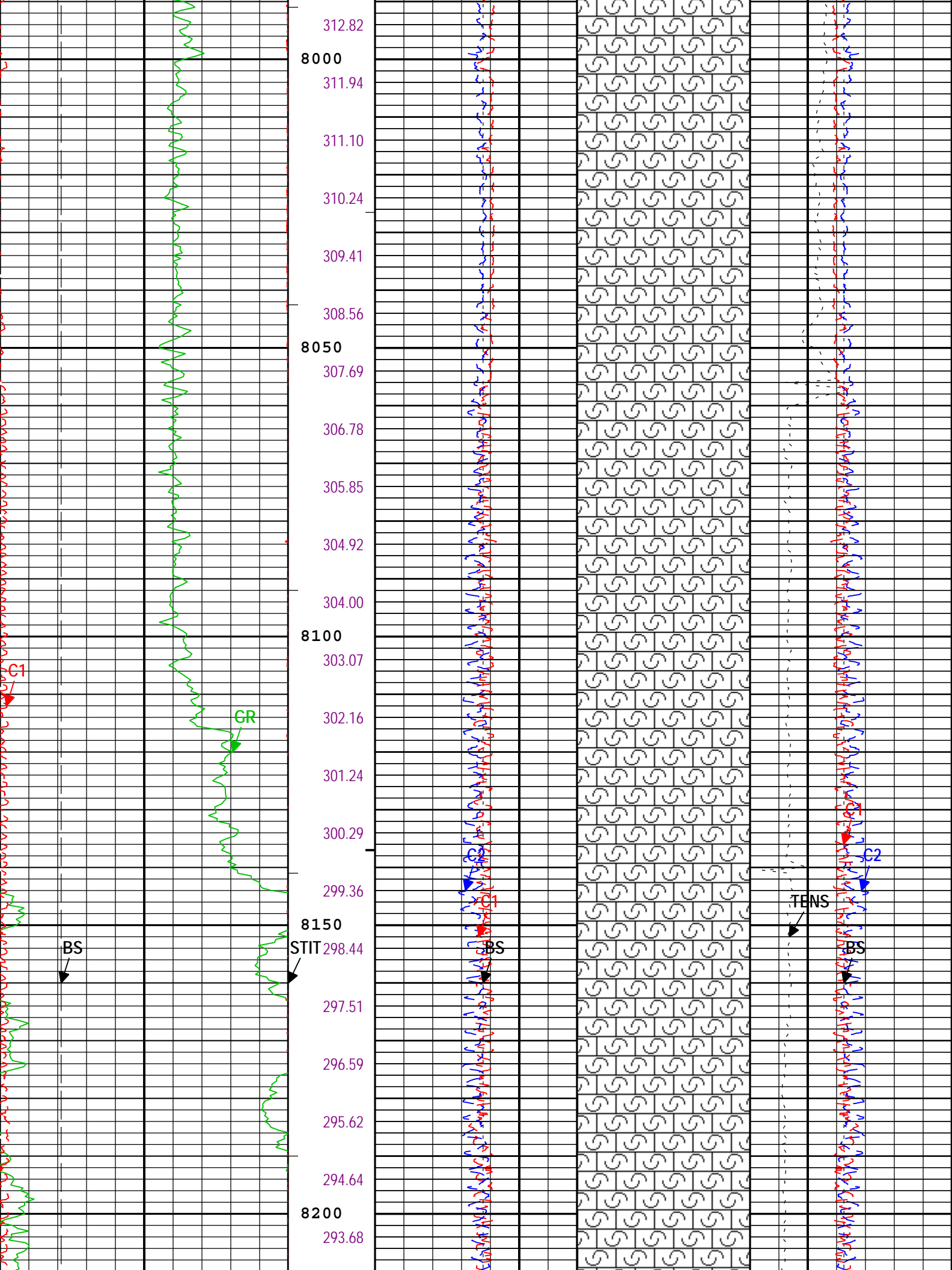
—ICV - Integrated Cement Volume every 100.00 (ft3)

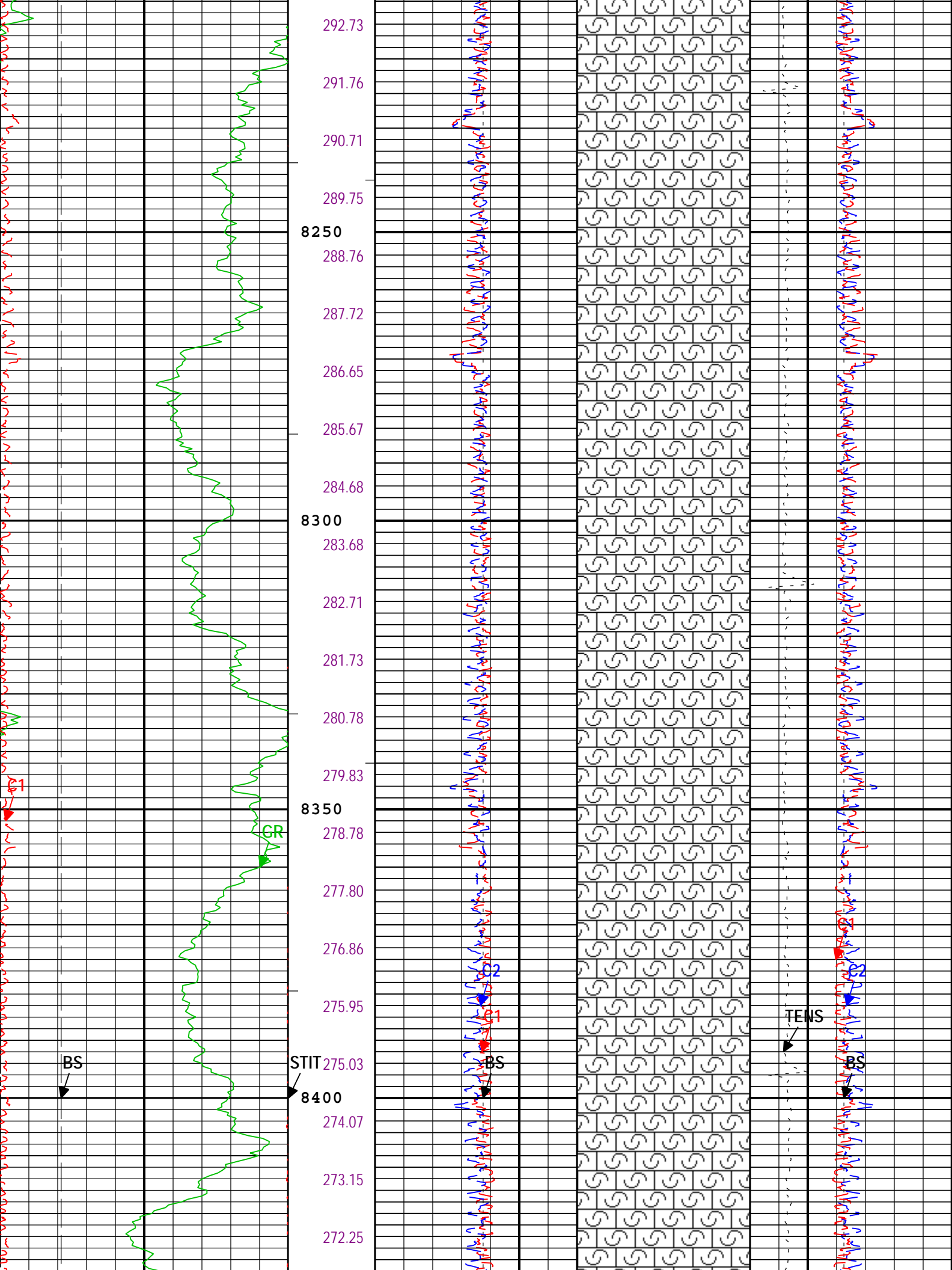


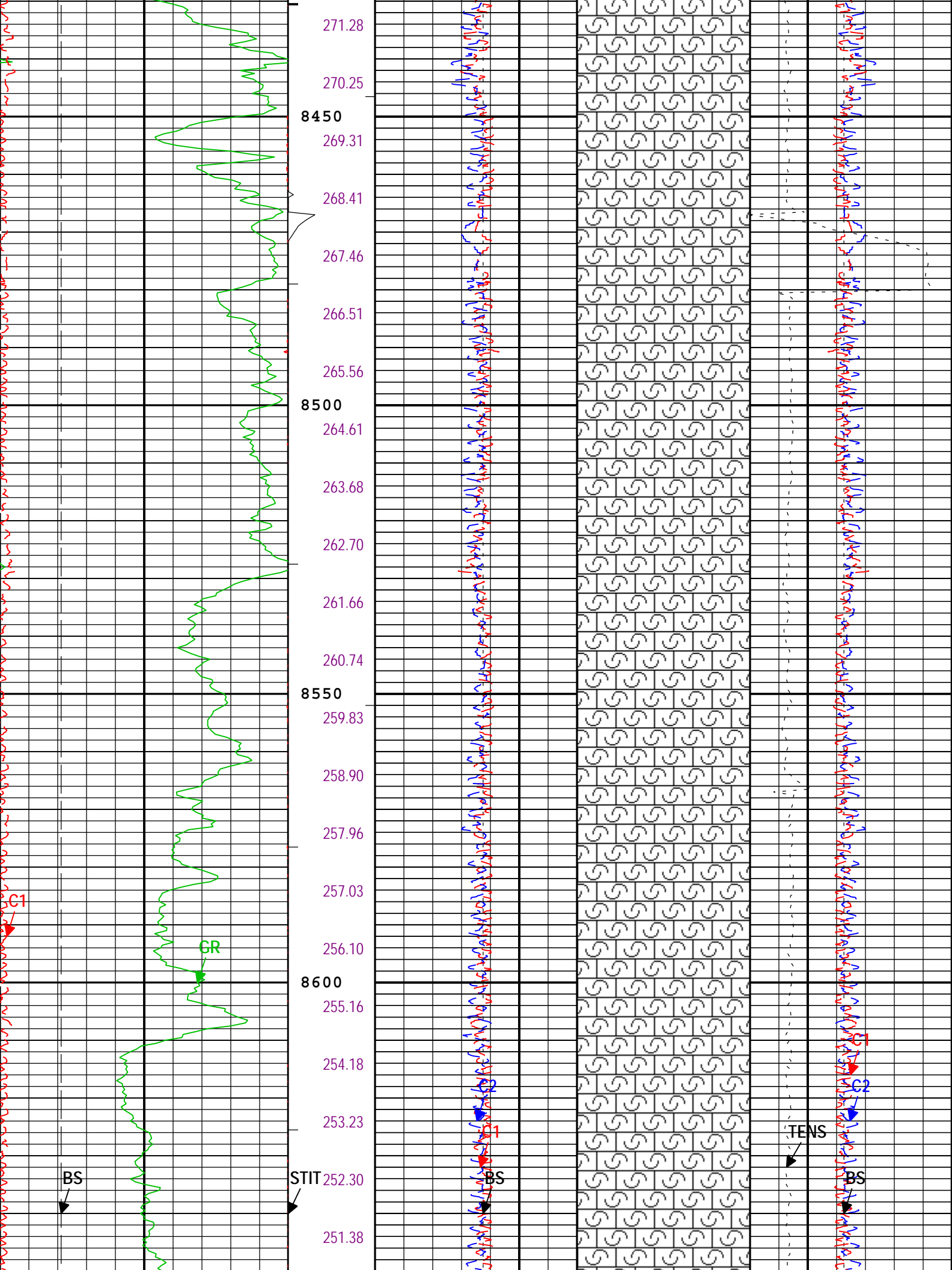


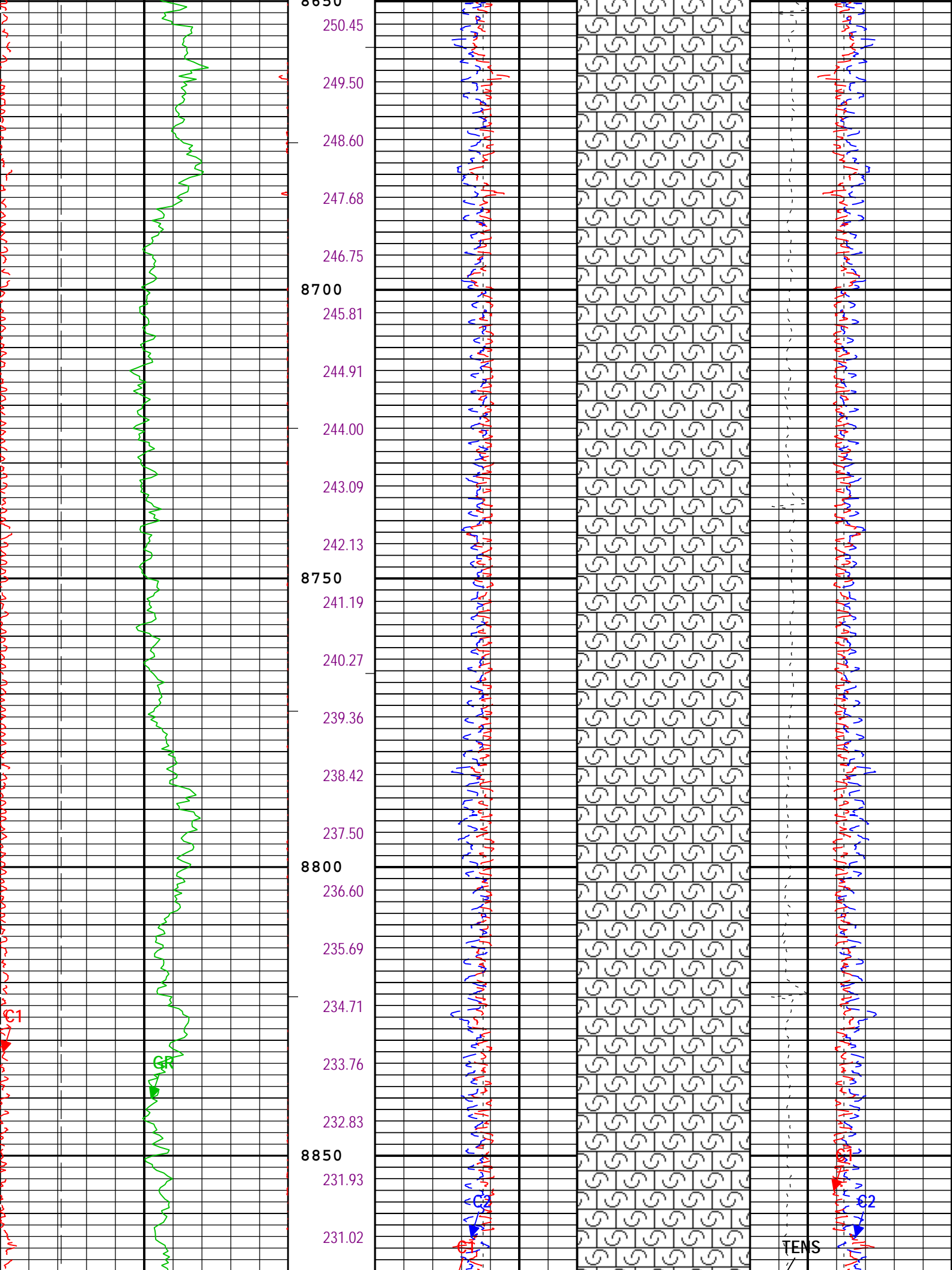


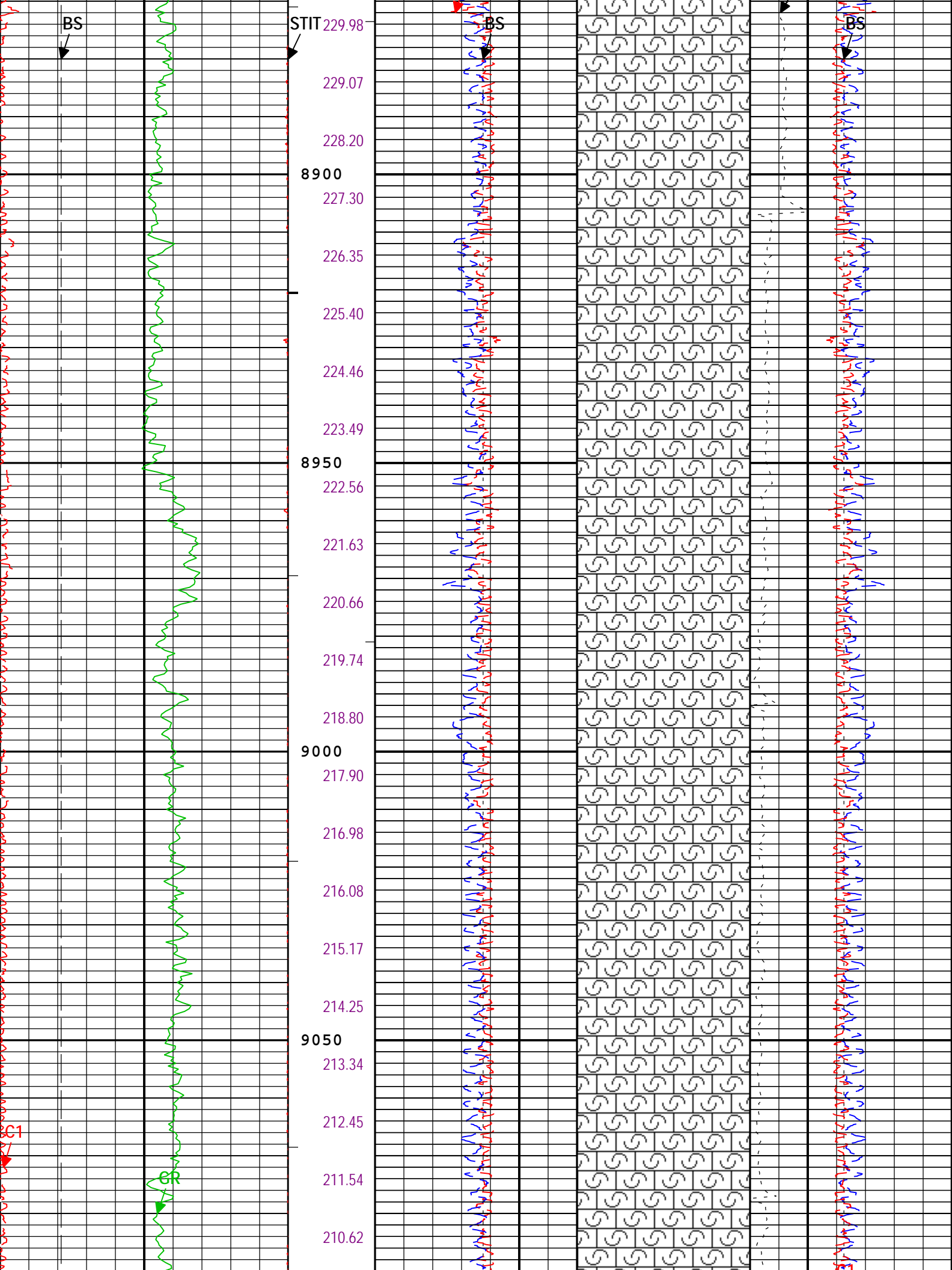




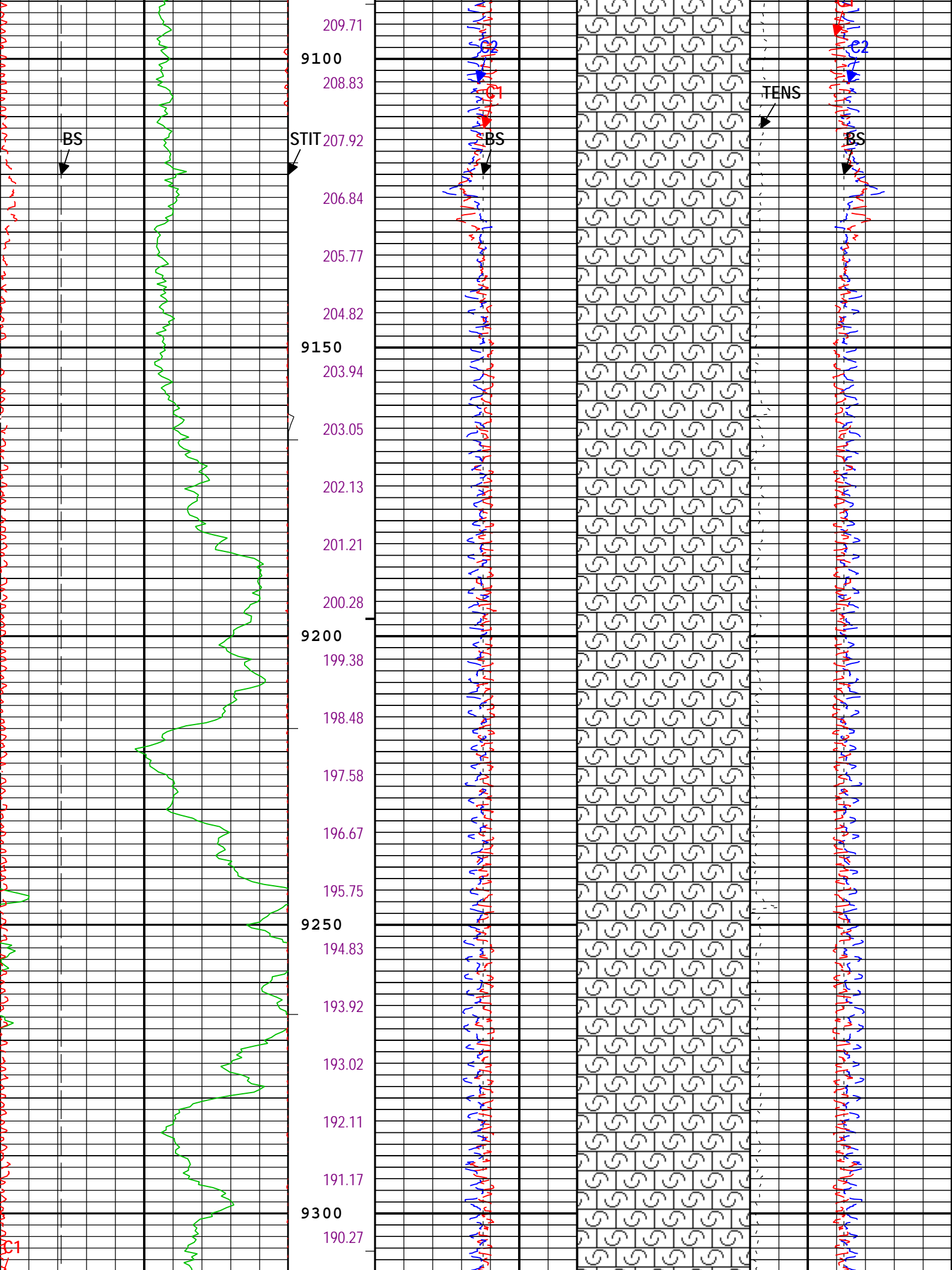


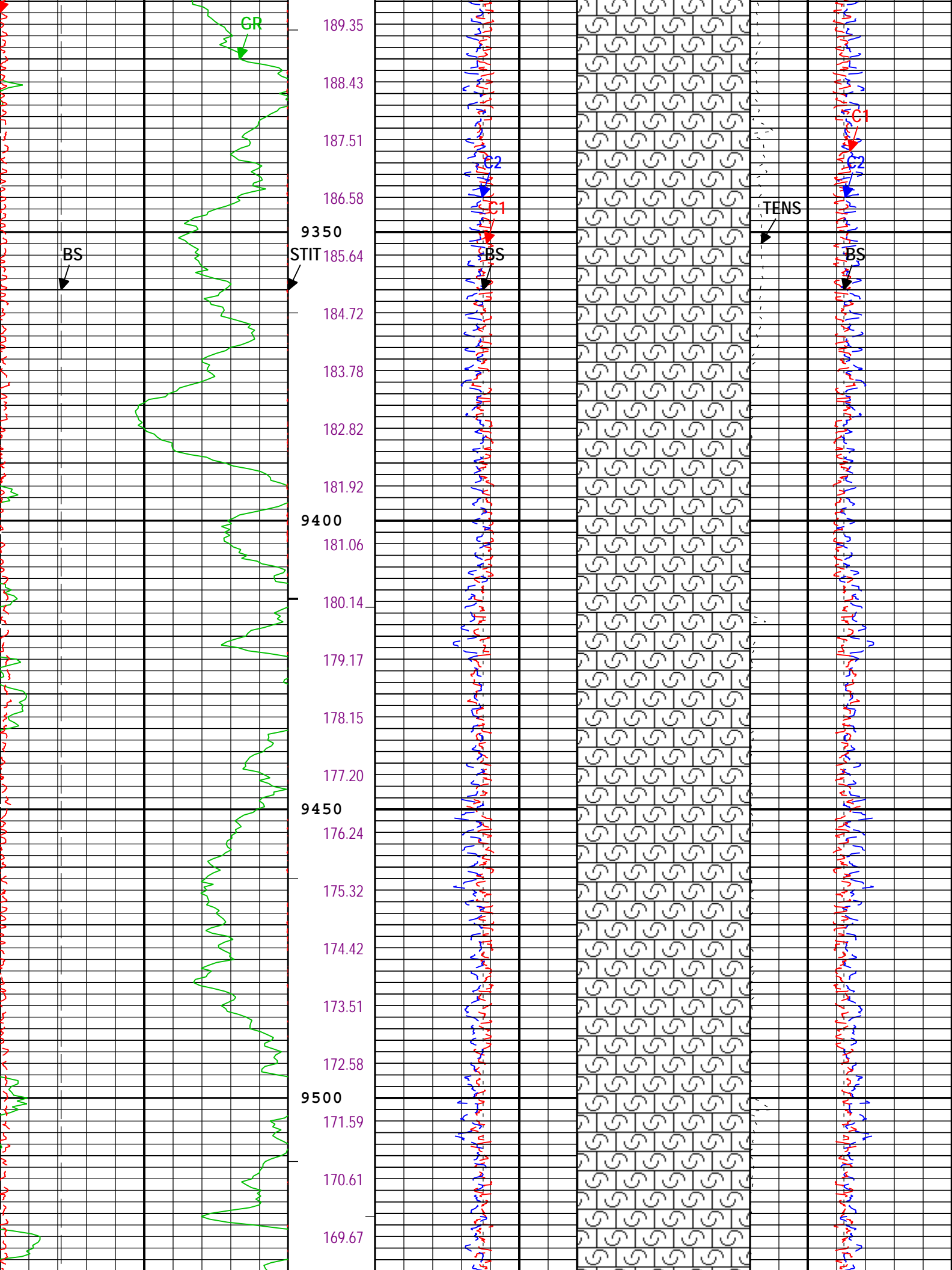


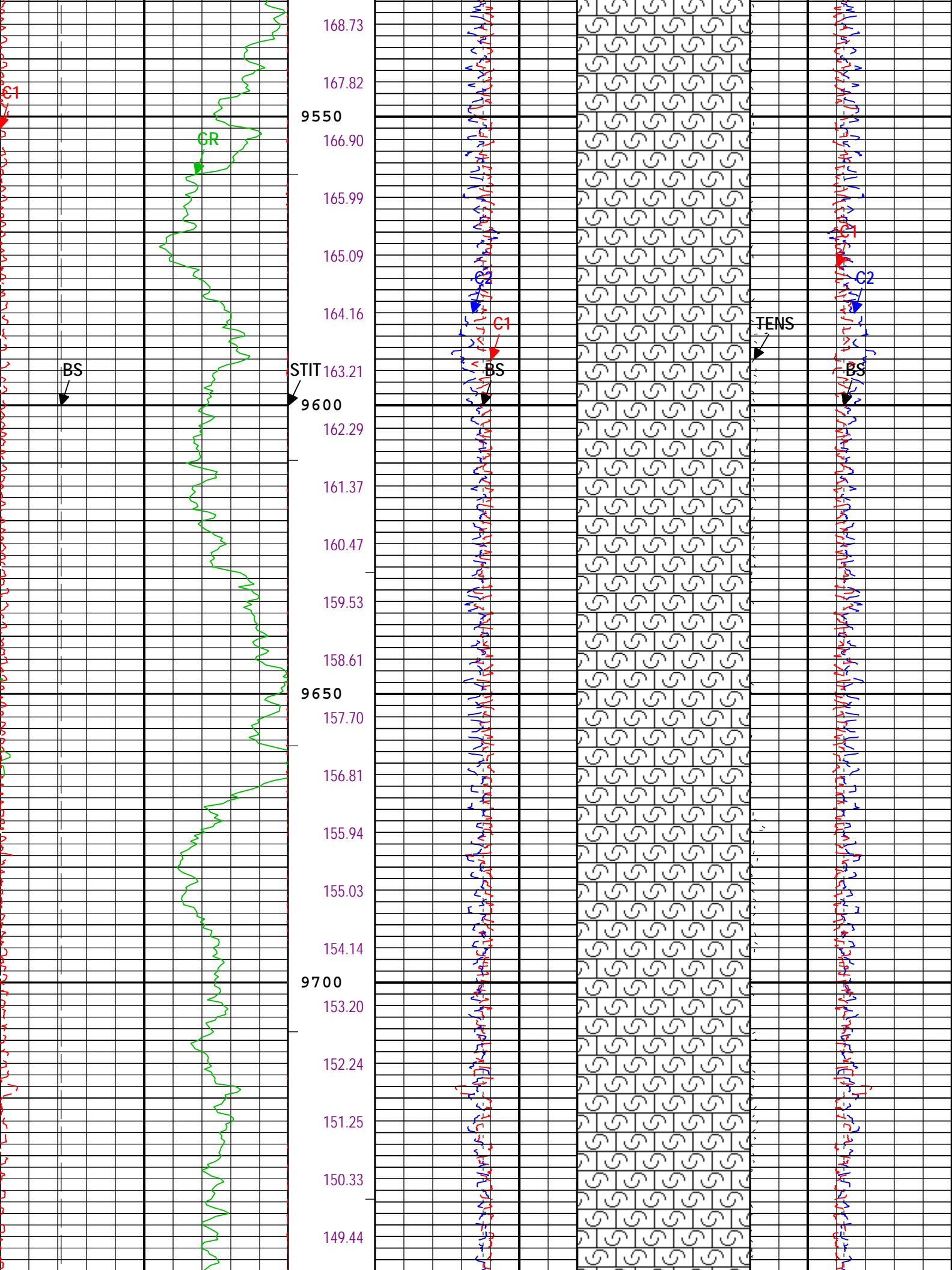


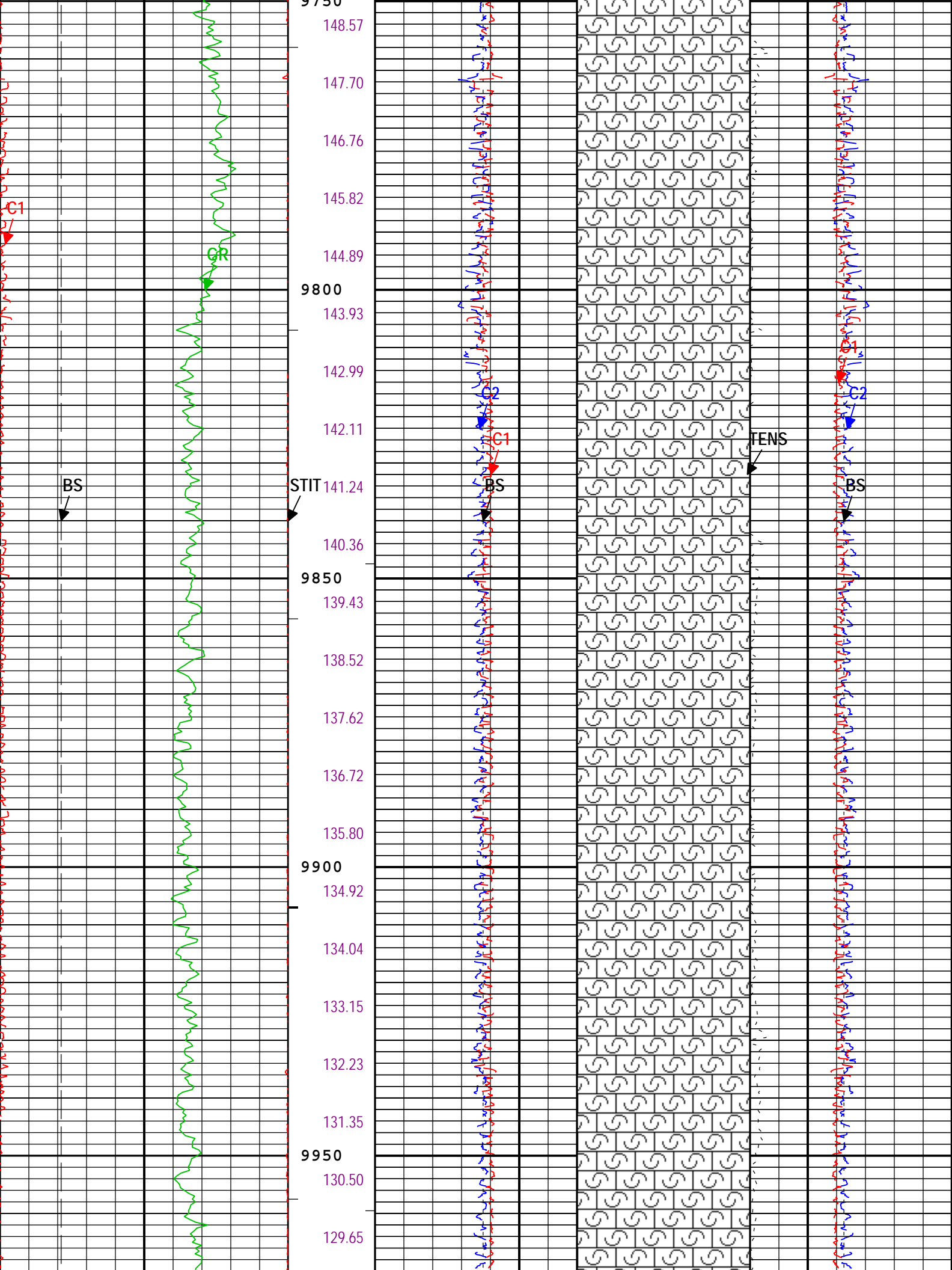


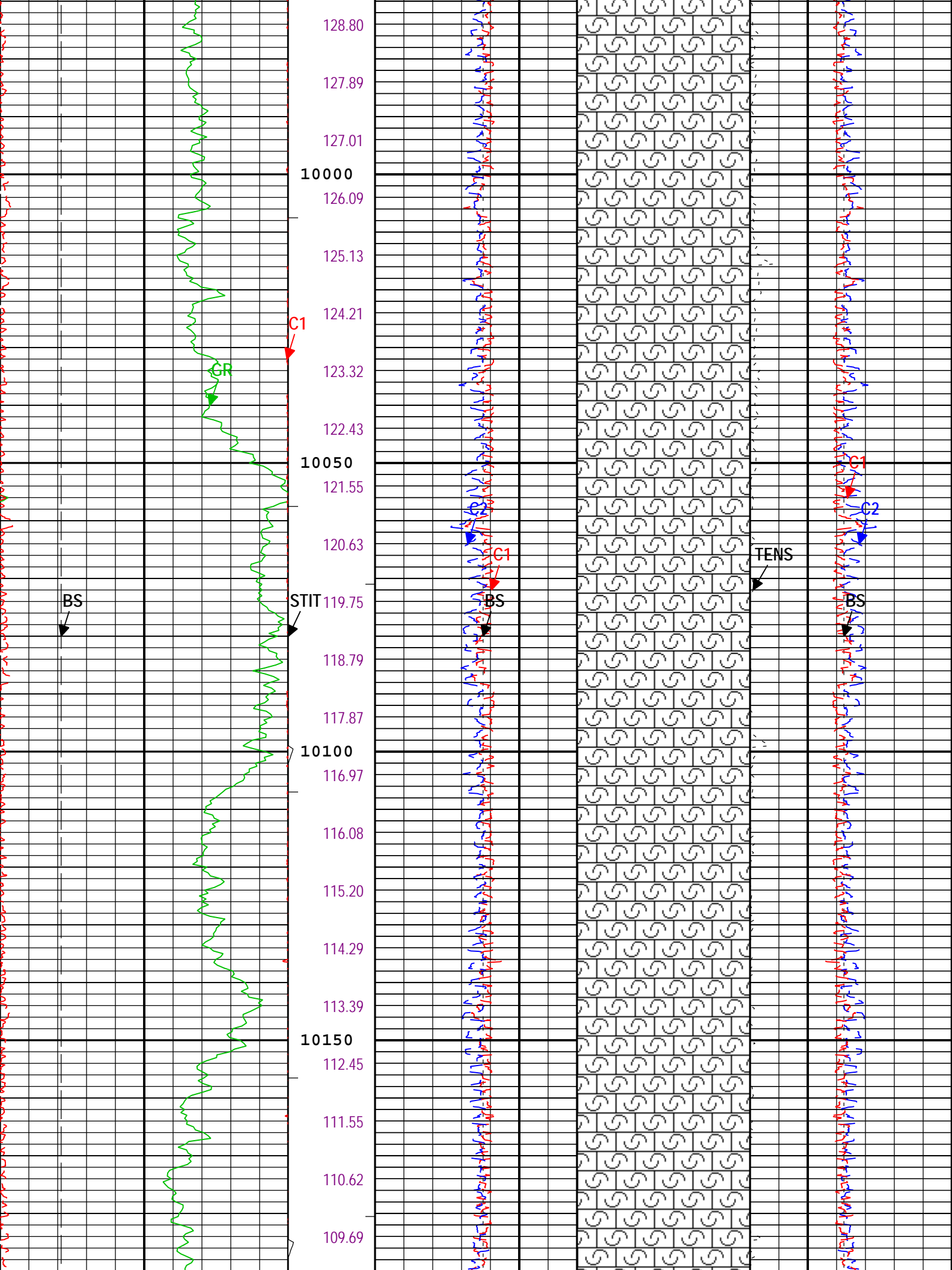


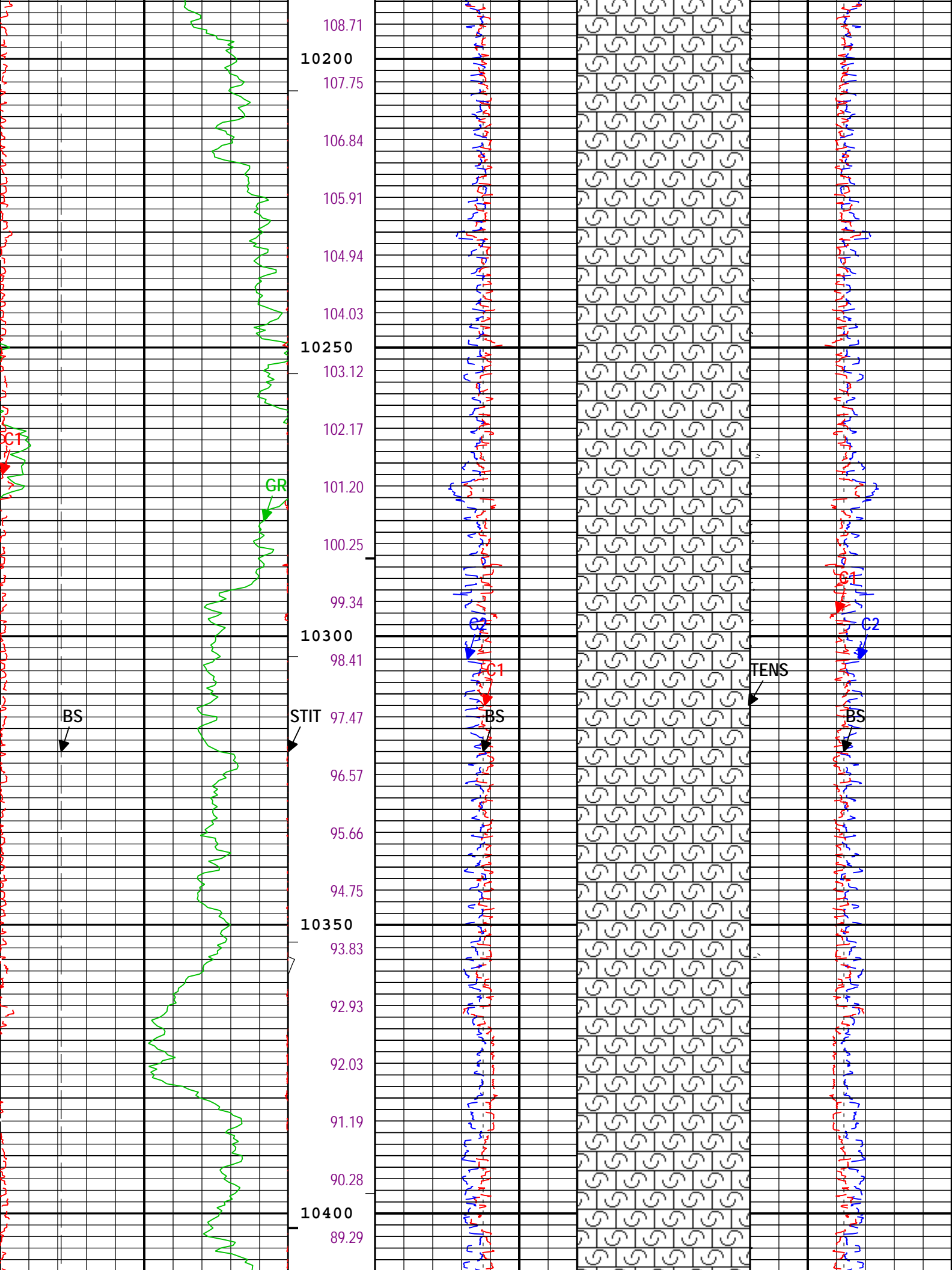


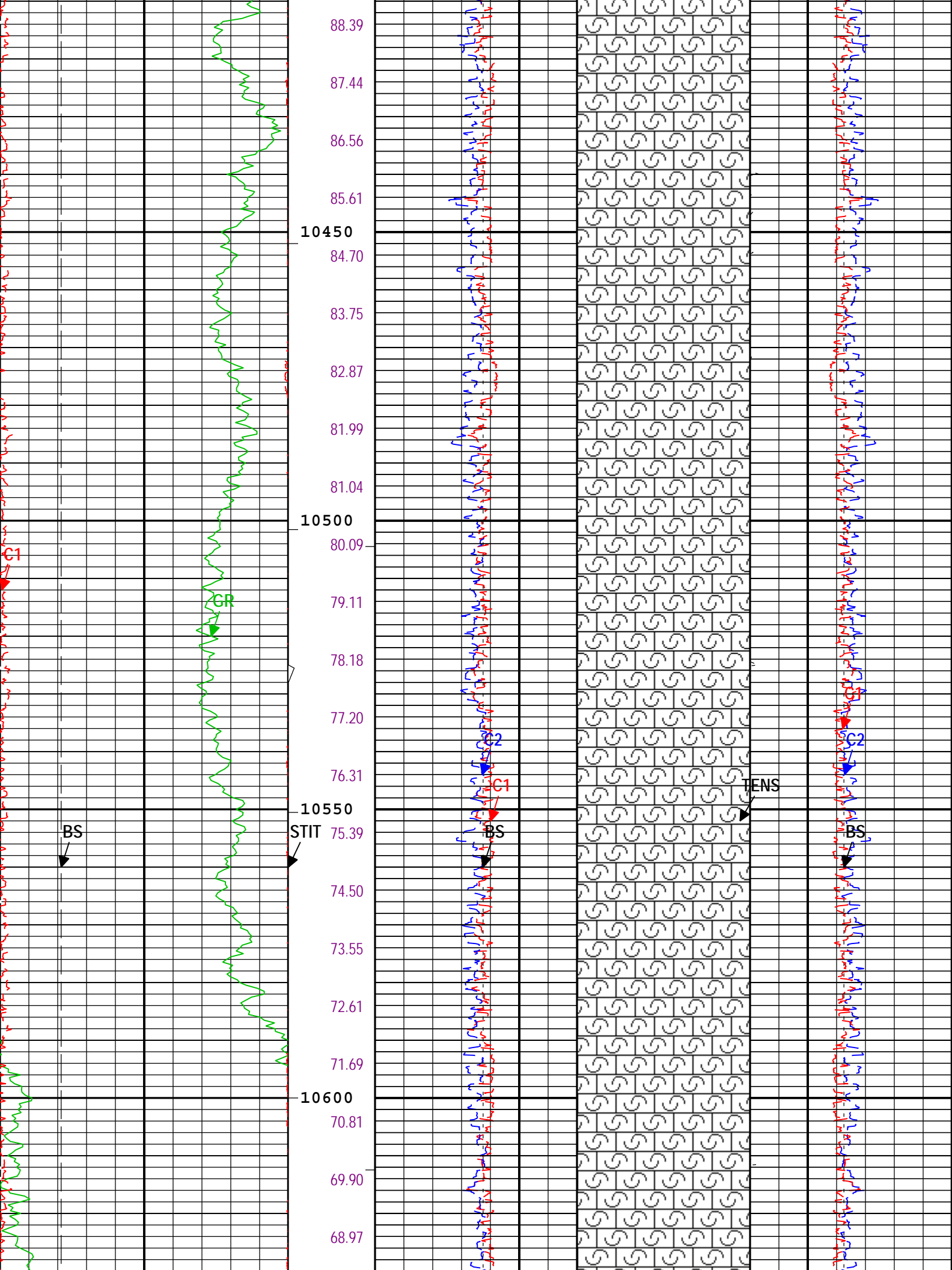


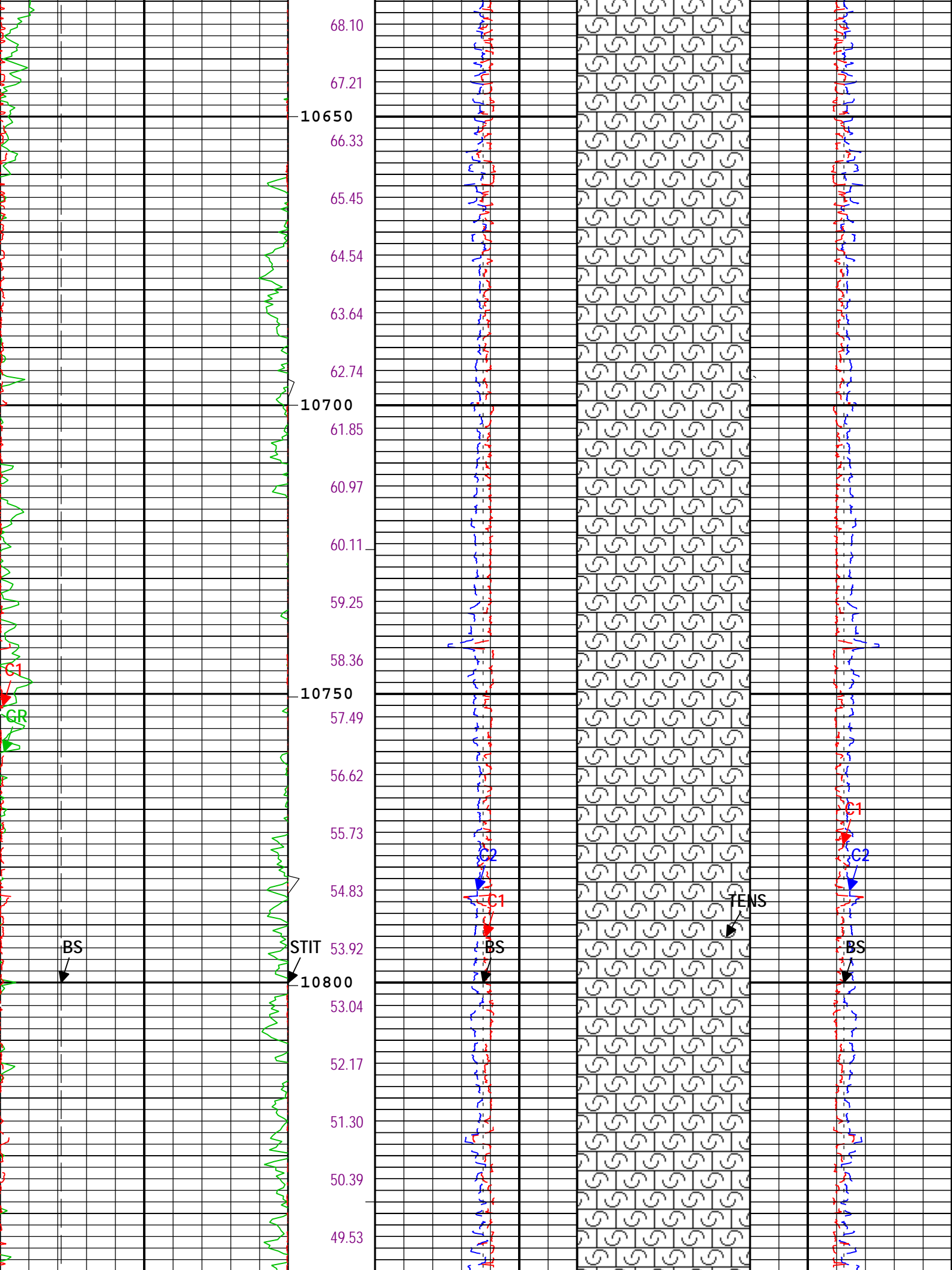




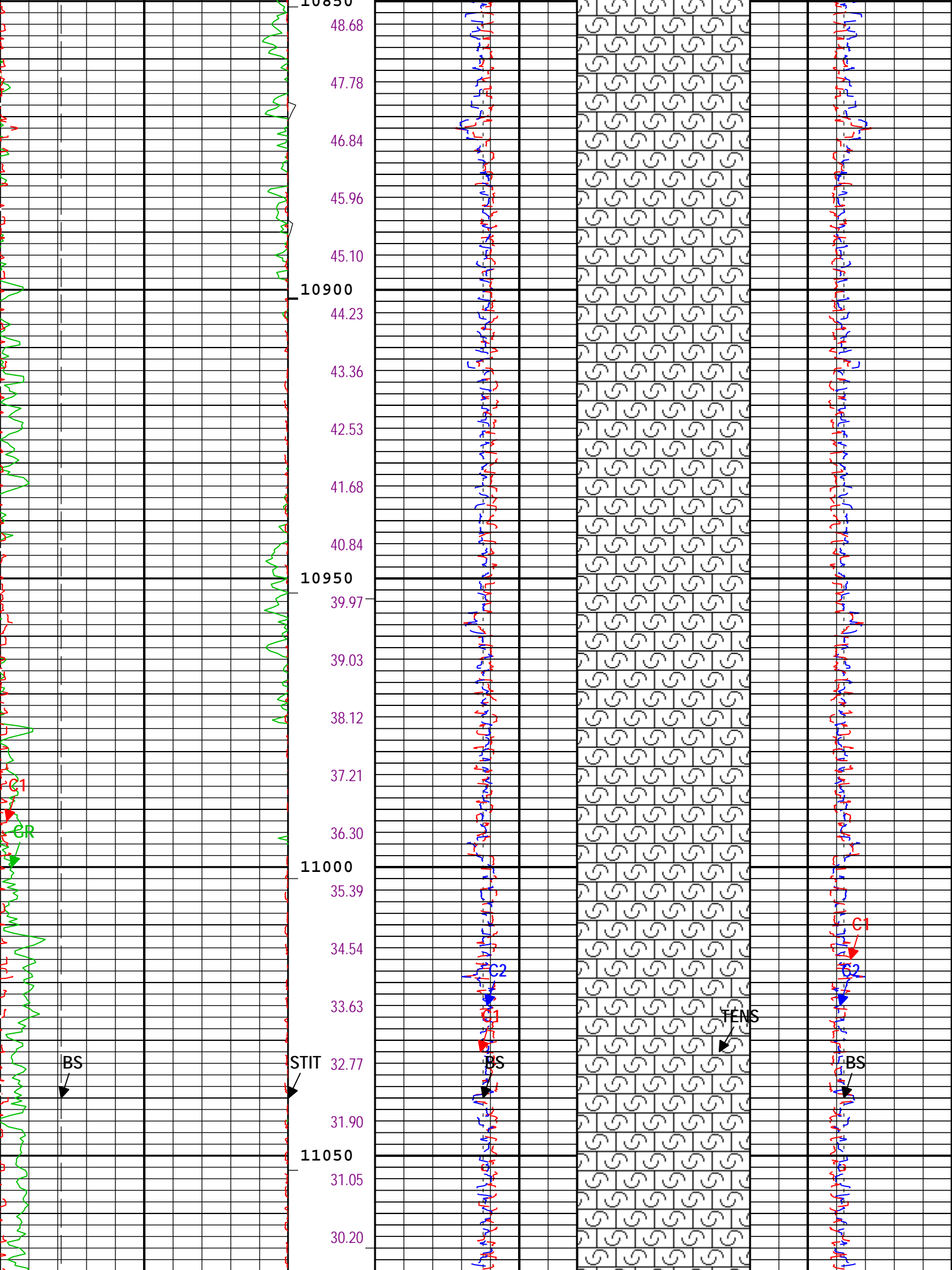


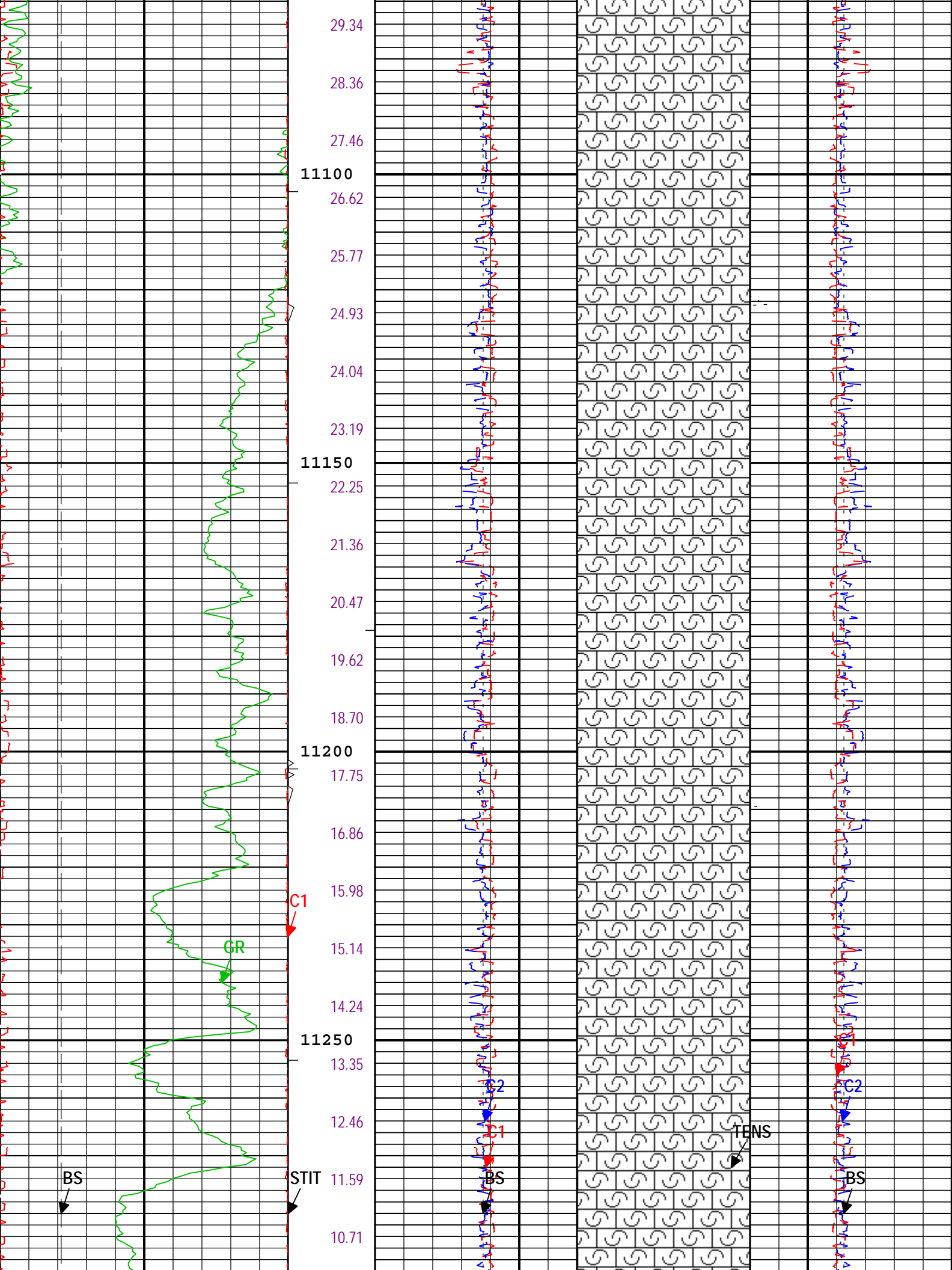


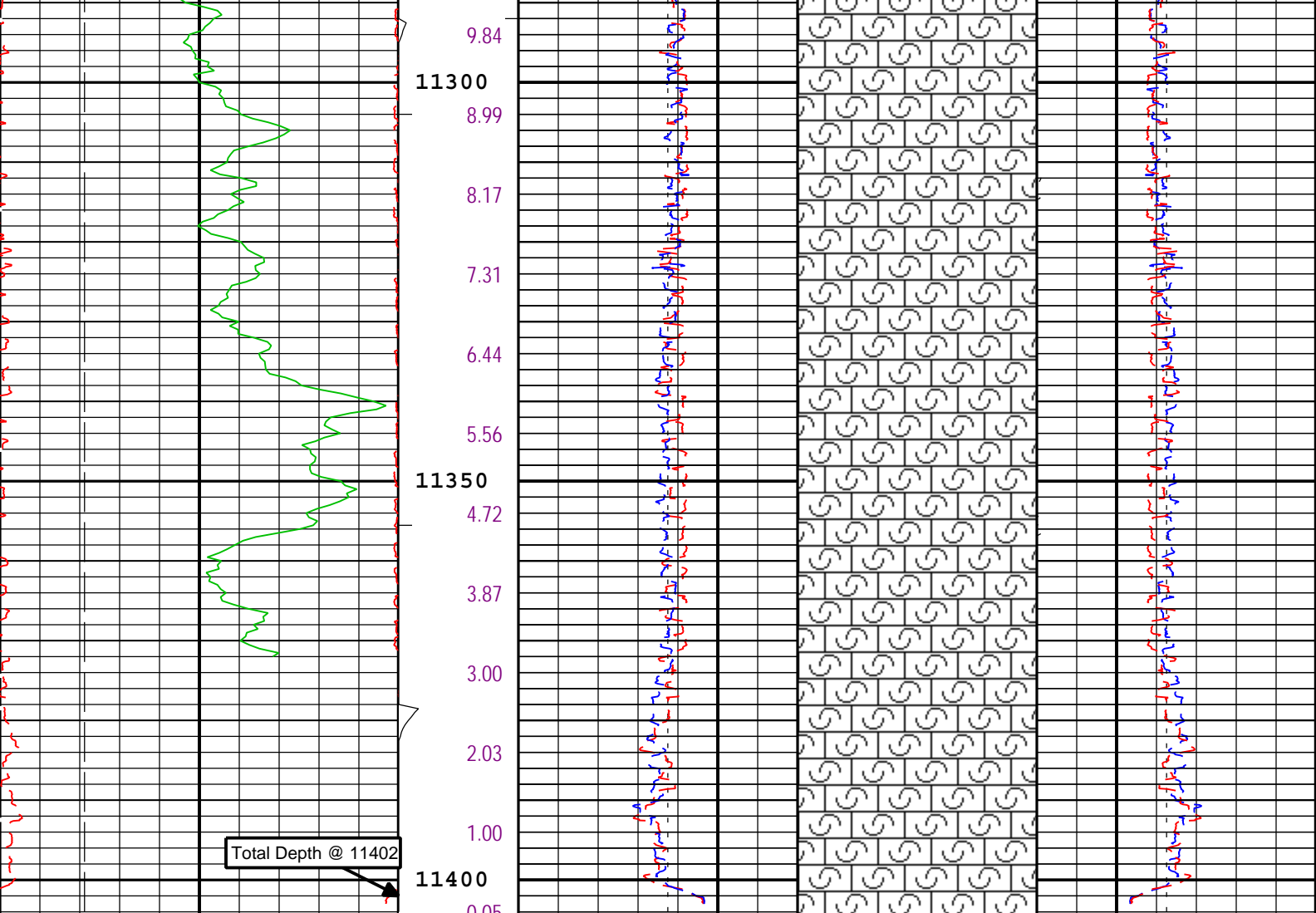












Bit Size (BS)		Stuck Tool Indicator, Total (STIT)		Future Casing (Outer) Diameter (FCD)	
4	in	14		-2	in
Gamma Ray (GR) SGT-N		0	ft	8	
gAPI		150		Future Casing (Outer) Diameter (FCD)	
Caliper 1 (C1) FBST-E		Integrated Cement Volume (ICV) ft3		8	in
6	in	16		-2	
Bit Size (BS)		Bit Size (BS)		Bit Size (BS)	
8	in	3	3	in	8
Caliper 1 (C1) FBST-E		Cable Tension (TENS)		Cable Tension (TENS)	
8	in	3	5000	lbf	0
Caliper 2 (C2) FBST-E		Caliper 2 (C2) FBST-E		Caliper 2 (C2) FBST-E	
8	in	3	3	in	8
Caliper 1 (C1) FBST-E		Caliper 1 (C1) FBST-E		Caliper 1 (C1) FBST-E	
3	in	8		8	

—|ICV - Integrated Cement Volume every 10.00 (ft3)  
—|IHV - Integrated Hole Volume every 10.00 (ft3)  
TIME\_1900 - Time Marked every 60.00 (s)  
—|ICV - Integrated Cement Volume every 100.00 (ft3)  
—|IHV - Integrated Hole Volume every 100.00 (ft3)

Description: Format: Log ( Noble East Caliper ) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 31-Dec-2012 05:03:14

## Channel Processing Parameters

Parameter	Description	Tool	Value	Unit
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	Depth Zoned	in
C1_SHIFT	C1 Caliper Supplementary Offset	FBST-E	-0.8	in
C2_SHIFT	C2 Caliper Supplementary Offset	FBST-E	-0.85	in
CBLO	Casing Bottom (Logger)	WLSESSION	7514	ft
CDEN	Cement Density	SGT-N	2	g/cm3
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9.6	lbm/gal
FCD	Future Casing (Outer) Diameter	WLSESSION	4.5	in
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	C1	
TD	Total Measured Depth	Borehole	11402	ft

## Depth Zone Parameters

Parameter	Value	Start ( ft )	Stop ( ft )
BS	8.75	7412.5	7519
BS	6.125	7519	11404.5

All depth are actual.

## Tool Control Parameters

Parameter	Description	Tool	Value	Unit
AMIP	Adaptive Mode Initial Phase	FBST-E	0	deg
APM	Acquisition Phase Mode	FBST-E	WBM - Adaptive Phase Control	
EMXGMOD	EMEX and Gain Modes	FBST-E	Time Zoned	
FLM	Logging Mode	FBST-E	Full Image Mode	
GAIN_FBST	Electronic Gain Value in Manual Mode	FBST-E	12 dB	
GARM_A	Electronic Gain Value for Arm A	FBST-E	12 dB	
GARM_B	Electronic Gain Value for Arm B	FBST-E	12 dB	
GARM_C	Electronic Gain Value for Arm C	FBST-E	12 dB	
GARM_D	Electronic Gain Value for Arm D	FBST-E	12 dB	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h
MPSC	Manual Phase Shift Compensation	FBST-E	0	deg
XVOL	EMEX Voltage	FBST-E	0	V

## Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
EMXGMOD	EMEX= Auto and Gain= Auto	31-Dec-2012 01:02:33	31-Dec-2012 04:25:10	11404.43	7568.07
EMXGMOD	EMEX= Manual and Gain= Manual	31-Dec-2012 04:25:10	31-Dec-2012 04:32:20	7568.07	7461.16

All depth are at tool zero.

Company:	Carrizo Oil & Gas Inc	Schlumberger
Well:	WEP 4-28-11-3-64	
Field:	Wildcat	
County:	Adams	

State:	Colorado
Cement Volume	
Caliper	