

<	E	C	L	N	T	E	C	V	C	T	E	E		E	L	S	C	T	E	S	L	T	L
---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---

Rig:

Prod4 / Crane



Company: Esso Australia Ltd.

Well: W-37

Field: West Tuna

Rig: Prod4 / Crane

Country: Australia

Gamma Ray
Pressure / Temperature
Survey

Field: West Tuna
Location: Gippsland
Well: W-37
Company: Esso Australia Ltd.

LOCATION		State: Victoria	Max. Well Deviation 34 deg	Longitude 148 39'22" E	Latitude 038 19'36" S
Gippsland	Elev.: K.B. 38.9 m				
Basin	G.L. -61.9 m				
Bass Strait	D.F. 38.9 m				
Permanent Datum:	MSL				
Log Measured From:	DF				
Drilling Measured From:	DF				

Logging Date	11-Aug-2006				
Run Number	1				
Depth Driller	3382 m				
Schlumberger Depth	3249 m				
Bottom Log Interval	3249 m				
Top Log Interval	2700 m				
Casing Fluid Type	Production Fluids				
Salinity					
Density					
Fluid Level	2795 m				
BIT/CASING/TUBING STRING					
Bit Size	8.500 in				
From					
To					
Casing/Tubing Size	7.000 in				
Weight	26 lbm/ft				
Grade	L-80				
From	17.64 m				
To	3313 m				
Maximum Recorded Temperatures	259 degF				
Logger On Bottom	11-Aug-2006			10:20	
Unit Number	LEE001	Location	Prod4/AUSL		
Recorded By	G Wright , S Gilbert				
Witnessed By	G Rimmer				

Run 1

PVT DATA

Oil Density	
Water Salinity	
Gas Gravity	
Bo	
Bw	
1/Bg	
Bubble Point Pressure	
Bubble Point Temperature	
Solution GOR	
Maximum Deviation	34 deg
CEMENTING DATA	
Primary/Squeeze	Primary
Casing String No	
Lead Cement Type	
Volume	
Density	
Water Loss	
Additives	
Tail Cement Type	
Volume	
Density	
Water Loss	
Additives	
Expected Cement Top	
Logging Date	
Run Number	
Depth Driller	
Schlumberger Depth	
Bottom Log Interval	
Top Log Interval	
Casing Fluid Type	
Salinity	
Density	
Fluid Level	
BIT/CASING/TUBING STRING	
Bit Size	
From	
To	
Casing/Tubing Size	
Weight	
Grade	
From	
To	
Maximum Recorded Temperatures	
Logger On Bottom	
Unit Number	
Recorded By	
Witnessed By	

DEPTH SUMMARY LISTING

Date Created: 7-AUG-2006 12:52:54

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-H	Type:	CMTD-C	Type:	2-32ZT
Serial Number:	797	Serial Number:	1037	Serial Number:	26087
Calibration Date:	1-May-2006	Calibration Date:	7-Aug-2006	Length:	6900.06 M
Calibrator Serial Number:	1009	Calibrator Serial Number:	1174	Conveyance Method: Wireline Rig Type: Offshore_Fixed	
Calibration Cable Type:	2-32ZT	Calibration Gain:	1.10		
Wheel Correction 1:	-3	Calibration Offset:	325.00		
Wheel Correction 2:	-3				

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	Solar Log
Reference Log Run Number:	1
Reference Log Date:	1997
Subsequent Trip Down Log Correction:	

Depth Control Remarks

1. Correlated to Solar Log provided by client.
2. IDW used as primary depth control.
3. Z-Chart used as secondary depth control.
4.
5.
6.

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 OF 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.

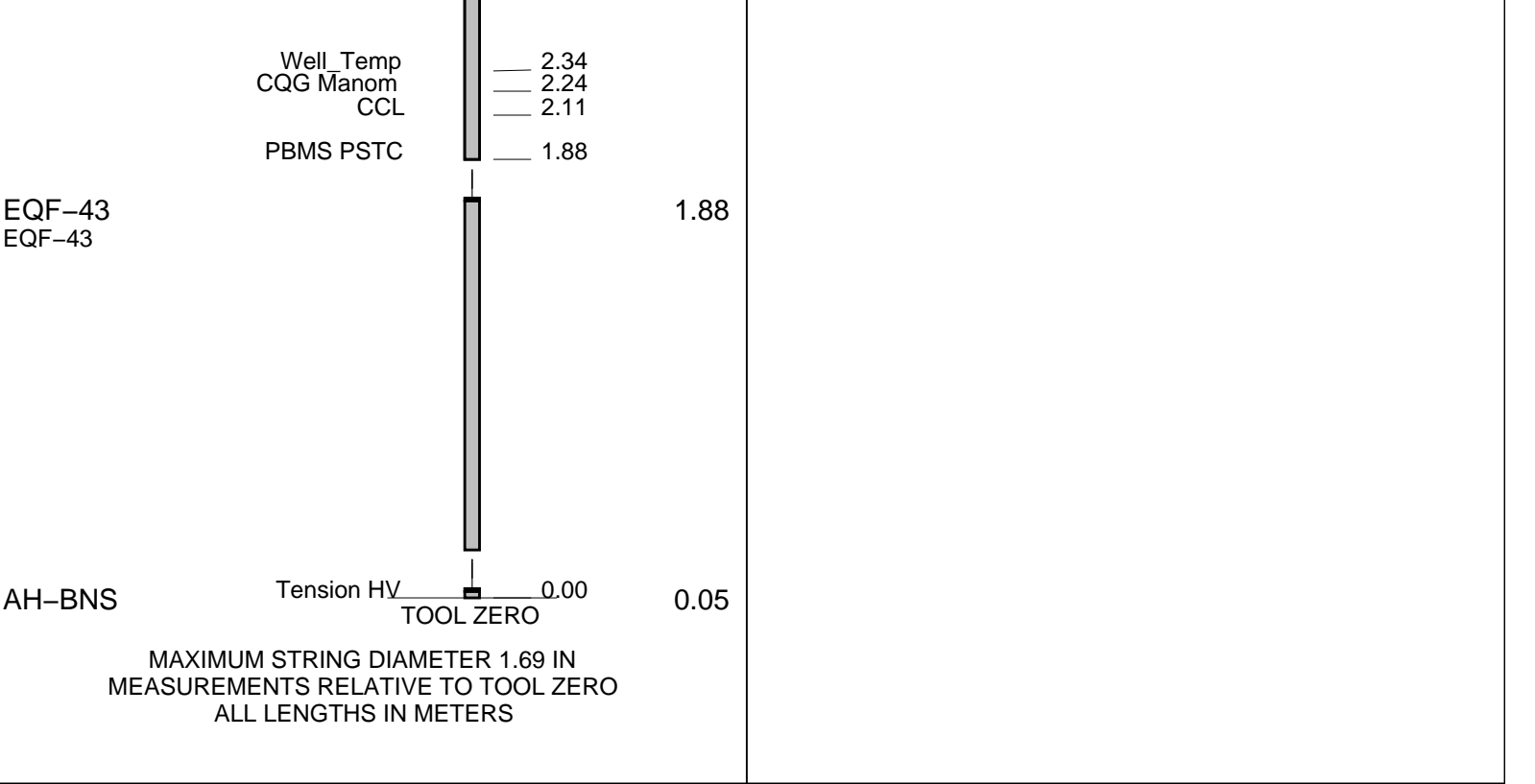
OTHER SERVICES1
OS1: none
OS2:
OS3:
OS4:
OS5:
REMARKS: RUN NUMBER 1
Log Correlated to ExxonMobil West Tuna W-37 Composite Log
Objectives: Conduct GR Survey over the interval 2700 m MDKB to 3300m MDKB and
Record Static/Flowing Pressure/Temperature Survey over selected Intervals .
Maximum Well Deviation : 34 deg @ 1075m MDKB .
SBHP: 2155 psia SBHT: 258 degf
FBHP: 1942 psia FBHT: 258 degf
Gamma Ray readings up to 2800 Gapi indicates NORM in the wellbore .
HUD: 3249m MDKB .

Schlumberger Crew : John Light , Kevin Kerr

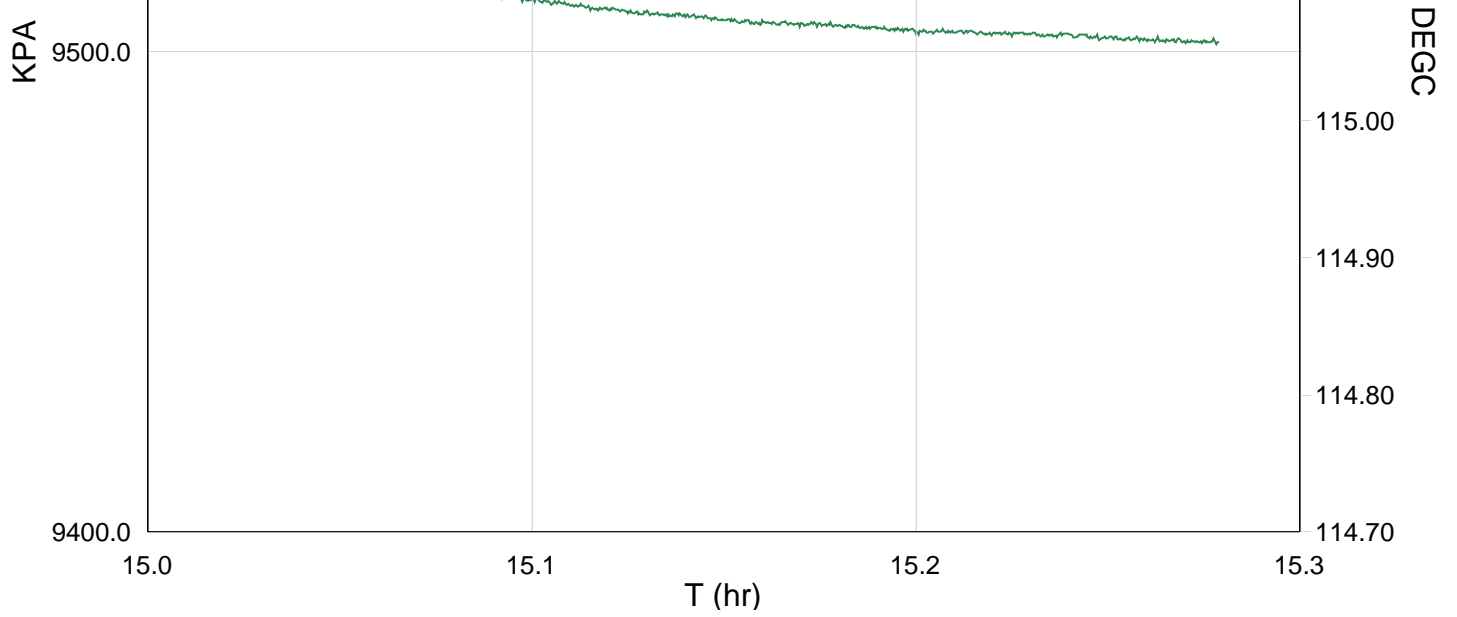
RUN 1					
SERVICE ORDER #:			AUSL06336234		
PROGRAM VERSION:			14C0-302		
FLUID LEVEL:			2795 m		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1		RUN 2	
SURFACE EQUIPMENT			
WITM-A 827 PSC_16MHZ 827			
DOWNHOLE EQUIPMENT			
AH-SWBS/B AH-SWBS/B 761	<div></div>	7.47	
AH-SWBS/B AH-SWBS/B 762	<div></div>	6.79	
AH-SWBS/B AH-SWBS/B 763	<div></div>	6.10	
AH-SWBS/B AH-SWBS/B 731	<div></div>	5.42	
MH-SBHA/A MH-SBHA/A 726	<div></div>	4.73	
PSPT-B PSC-A 827 PSPT-B 827 PSTC 827 PBMS-B 827 CQG_F_Mano 827 RTD_Thermometer 827 GR 33143 CCL 827 PBMS 827	<div><div>Detail MT TelStatus CTEM</div><div></div></div>	4.40	
	GR	3.27	



Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger Tubing	7.000 3.500	3.500 2.992	16.9 16.9		16.9 17.6	7.000 9.625	6.250 7.000	Casing String Liner Hanger
SSSV	3.500		449.0					
Gas Lift Mandrel	3.500		574.0					
Gas Lift Mandrel	3.500		1501.0		685.0	9.625	8.755	Casing Shoe
Gas Lift Mandrel	3.500		2080.0					

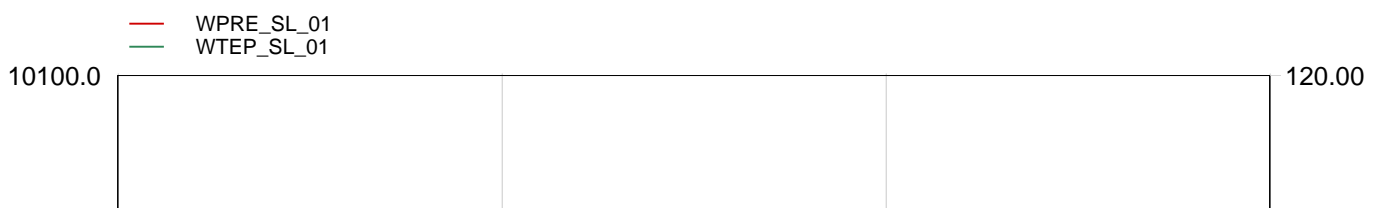


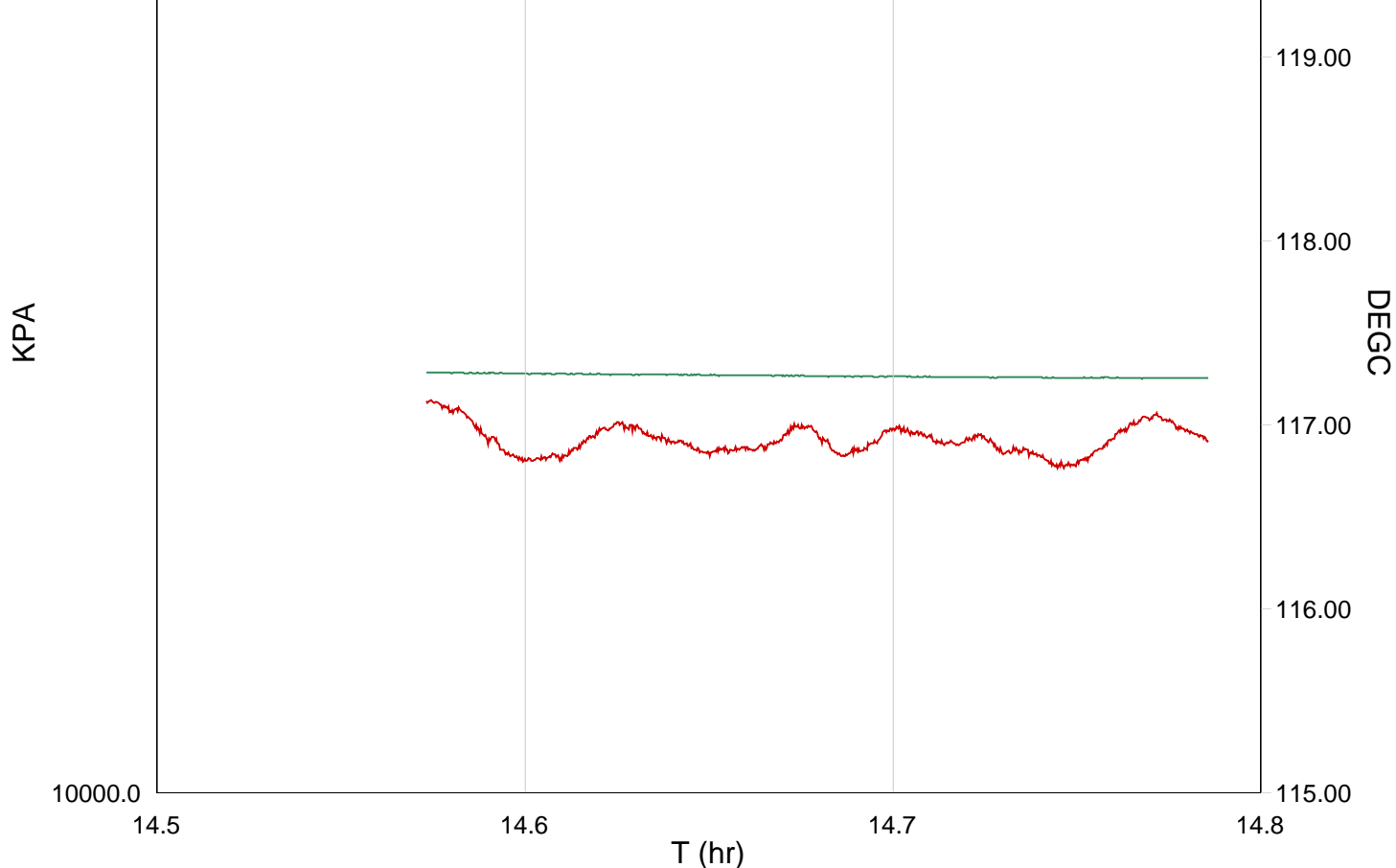
TIME	TOJ	WTEP_SL	WPRE_SL
27900.0000	15.0346	239.1941	1380.3592
27960.0000	15.0513	239.1847	1380.8238
28020.0000	15.0679	239.1765	1380.8600
28080.0000	15.0846	239.1647	1380.4710
28140.0000	15.1013	239.1603	1381.0133
28200.0000	15.1179	239.1472	1380.9548
28260.0000	15.1346	239.1385	1381.2280
28320.0000	15.1513	239.1330	1381.3466
28380.0000	15.1679	239.1263	1381.6454
28440.0000	15.1846	239.1225	1381.8058
28500.0000	15.2013	239.1170	1381.5842
28560.0000	15.2179	239.1134	1381.8023
28620.0000	15.2346	239.1122	1382.2888
28680.0000	15.2513	239.1082	1382.4747
28740.0000	15.2679	239.1044	1382.5371

Schlumberger

Flowing Station Log 2800m MDKB – 2430.2m TVDss

MAXIS Field Log

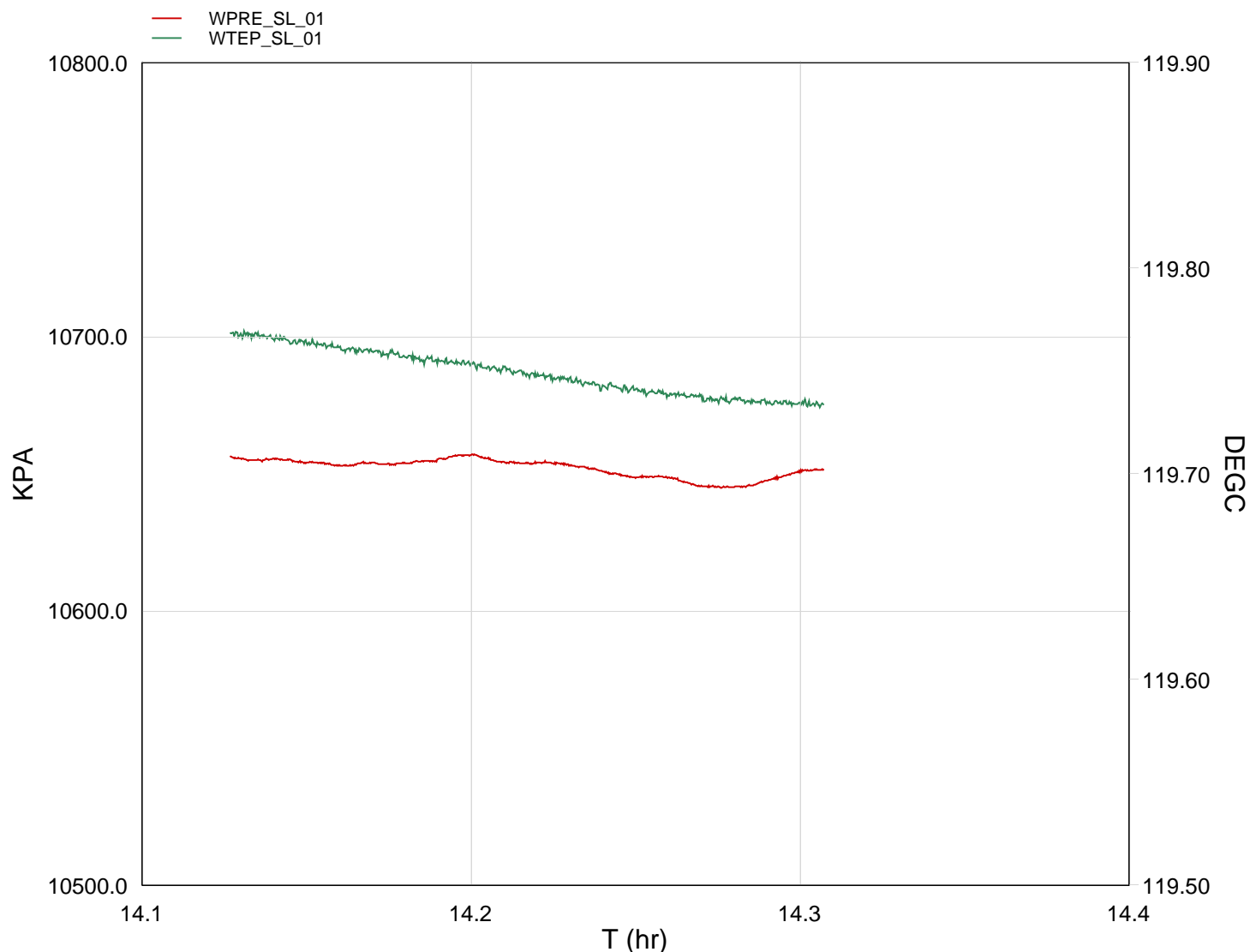




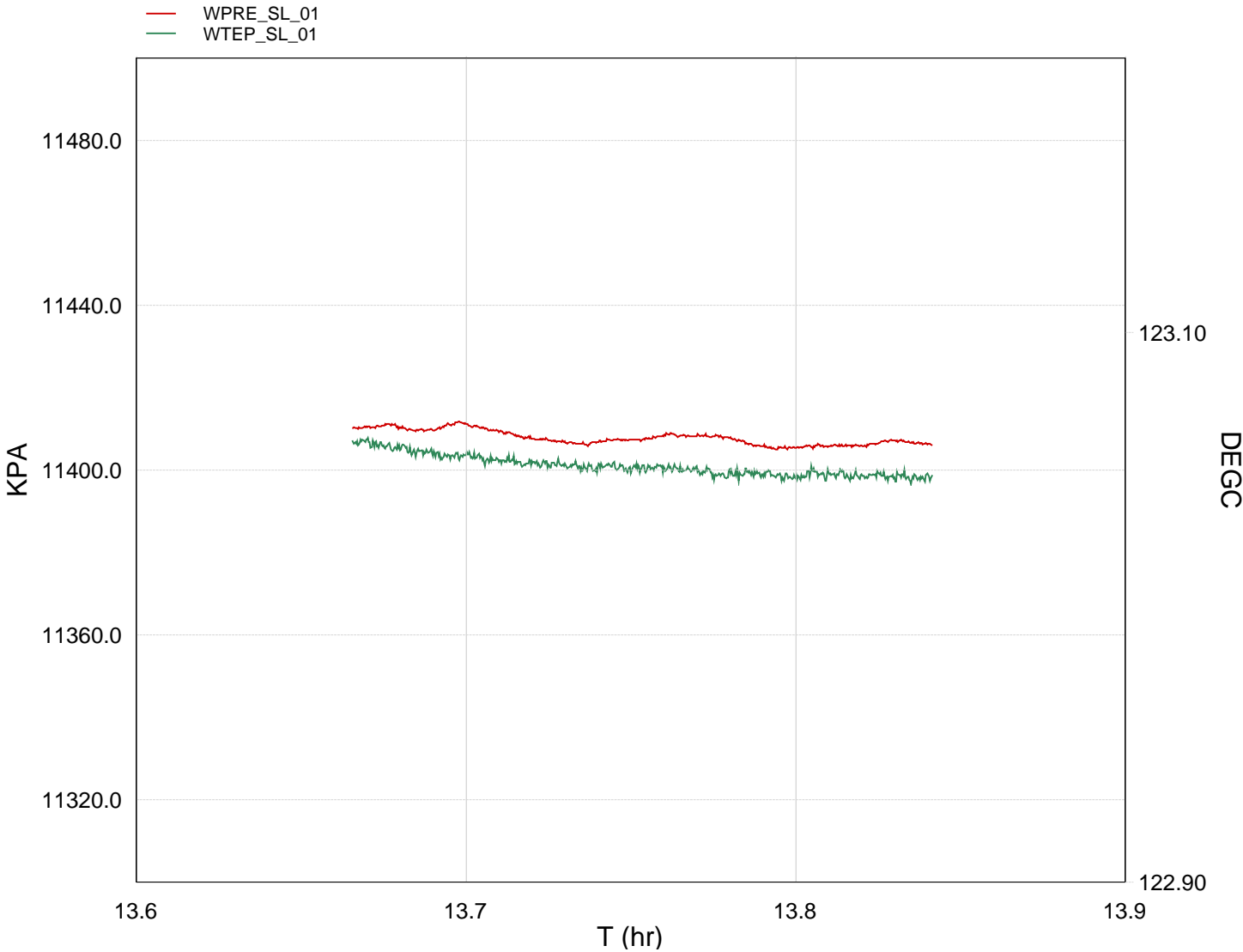
TIME	TOJ	WTEP_SL	WPRE_SL
26220.0000	14.5631	242.9686	1455.5242
26280.0000	14.5849	243.1082	1456.2876
26340.0000	14.6015	243.1000	1455.6311
26400.0000	14.6182	243.0980	1455.9855
26460.0000	14.6349	243.0924	1455.9841
26520.0000	14.6515	243.0904	1455.7653
26580.0000	14.6682	243.0823	1455.8899
26640.0000	14.6849	243.0740	1455.7279
26700.0000	14.7015	243.0764	1456.1398
26760.0000	14.7182	243.0680	1455.8693
26820.0000	14.7349	243.0668	1455.7437
26880.0000	14.7515	243.0616	1455.6341
26940.0000	14.7682	243.0584	1456.3132
27000.0000	14.7849	243.0545	1455.9802

Schlumberger

Flowing Station Log
2900m MDKB – 2525.6m TVDss

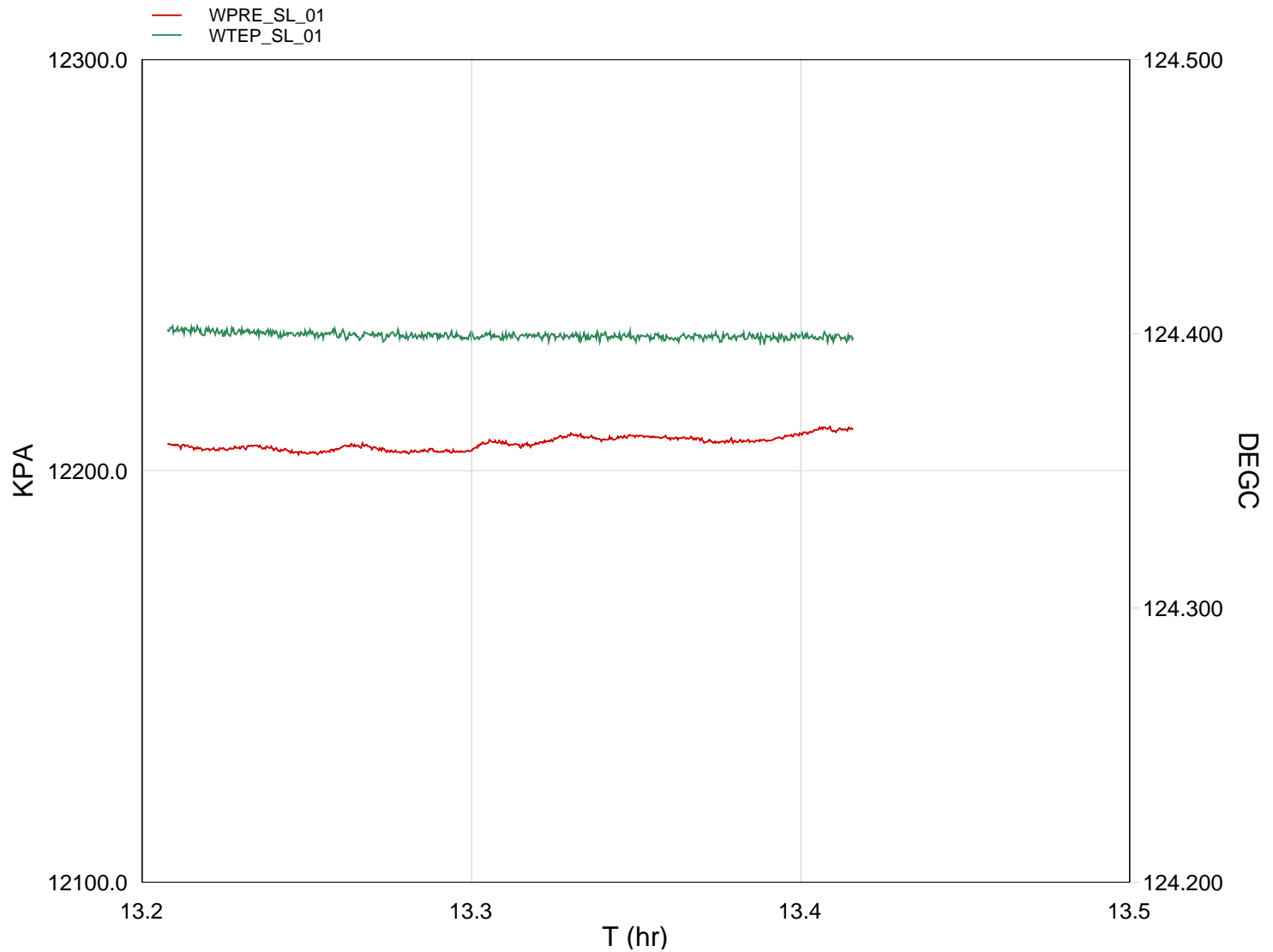


TIME	TOJ	WTEP_SL	WPRE_SL
24660.0000	14.1349	247.5819	1545.3828
24720.0000	14.1516	247.5772	1545.2806
24780.0000	14.1683	247.5693	1545.2340
24840.0000	14.1849	247.5599	1545.3224
24900.0000	14.2016	247.5515	1545.6615
24960.0000	14.2183	247.5479	1545.1952
25020.0000	14.2349	247.5403	1545.0100
25080.0000	14.2516	247.5320	1544.5014
25140.0000	14.2683	247.5290	1544.0604
25200.0000	14.2849	247.5224	1544.0353
25260.0000	14.3016	247.5232	1544.8691



TIME	TOJ	WTEP_SL	WPRE_SL
22980.0000	13.6684	253.5088	1654.9134
23040.0000	13.6850	253.5012	1654.8534
23100.0000	13.7017	253.4987	1654.9503
23160.0000	13.7184	253.4941	1654.5733
23220.0000	13.7350	253.4915	1654.3720
23280.0000	13.7517	253.4942	1654.5007
23340.0000	13.7684	253.4891	1654.6280
23400.0000	13.7850	253.4909	1654.3867
23460.0000	13.8017	253.4866	1654.2395
23520.0000	13.8184	253.4895	1654.3178
23580.0000	13.8350	253.4810	1654.3818

MAXIS Field Log



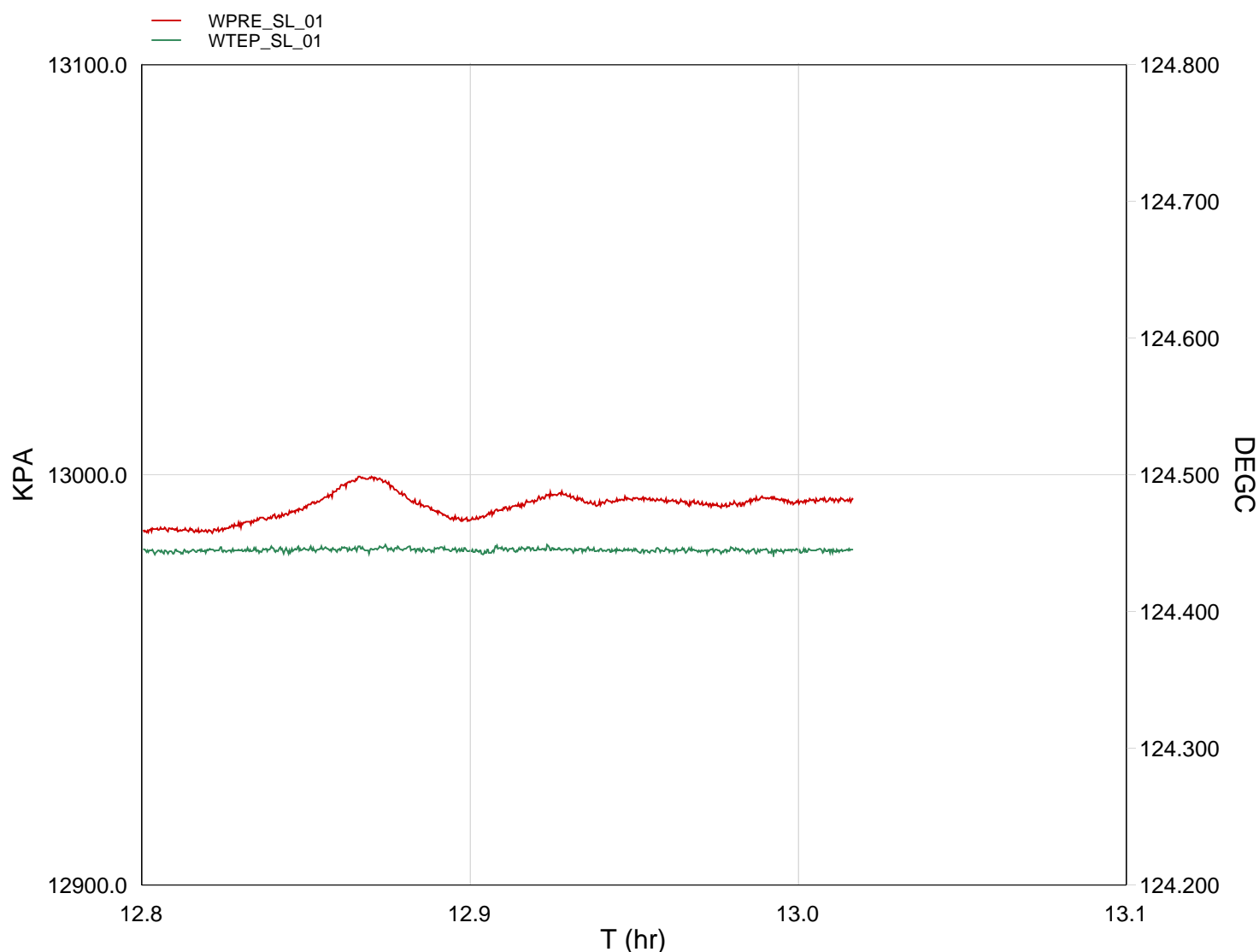
TIME	TOJ	WTEP_SL	WPRE_SL
21300.0000	13.1943	255.6944	1768.5826
21360.0000	13.2184	255.9194	1770.2007
21420.0000	13.2351	255.9223	1770.3596
21480.0000	13.2517	255.9208	1770.1223
21540.0000	13.2684	255.9202	1770.3758
21600.0000	13.2851	255.9204	1770.1569
21660.0000	13.3017	255.9180	1770.2985
21720.0000	13.3184	255.9187	1770.3580
21780.0000	13.3351	255.9182	1770.6536
21840.0000	13.3517	255.9189	1770.7108

21900.0000	13.3684	255.9190	1770.5647
21960.0000	13.3851	255.9182	1770.5066
22020.0000	13.4017	255.9184	1770.8077



Flowing Station Log
3200m MDKB – 2818.4m TVDss

MAXIS Field Log



TIME	TOJ	WTEP_SL	WPRE_SL
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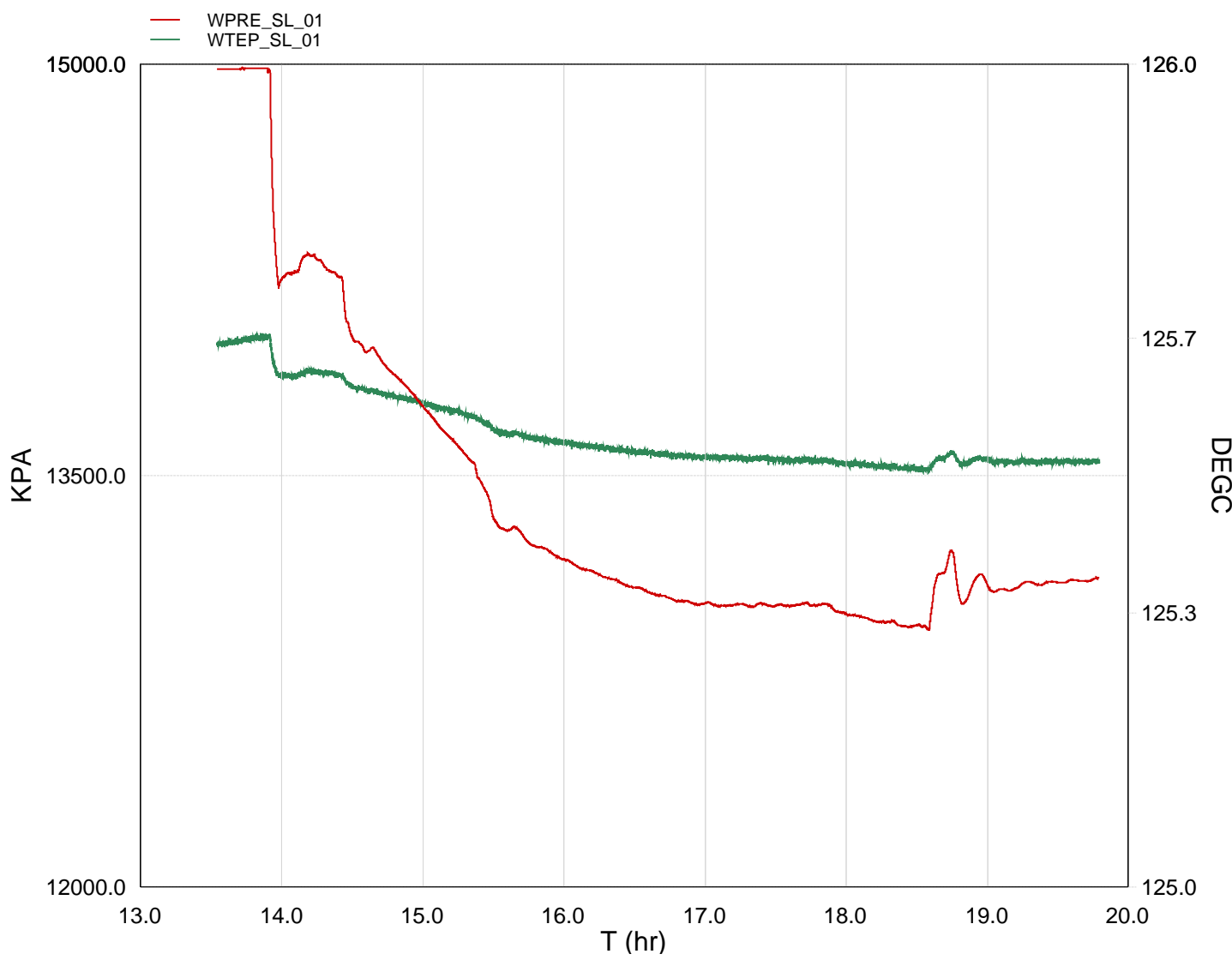
19860.0000	12.8019	255.9988	1883.4792
19920.0000	12.8185	255.9997	1883.5315
19980.0000	12.8352	256.0000	1883.9246

19980.0000	12.8352	256.0000	1883.9240
20040.0000	12.8519	256.0011	1884.5220
20100.0000	12.8685	256.0007	1885.3410
20160.0000	12.8852	255.9985	1884.4260
20220.0000	12.9019	256.0015	1883.9923
20280.0000	12.9185	256.0014	1884.5389
20340.0000	12.9352	256.0003	1884.5045
20400.0000	12.9519	255.9973	1884.6460
20460.0000	12.9685	256.0007	1884.5005
20520.0000	12.9852	255.9993	1884.5984
20580.0000	13.0019	256.0004	1884.5763



Flow The Well
Stop Depth – 3245m MDKB

MAXIS Field Log



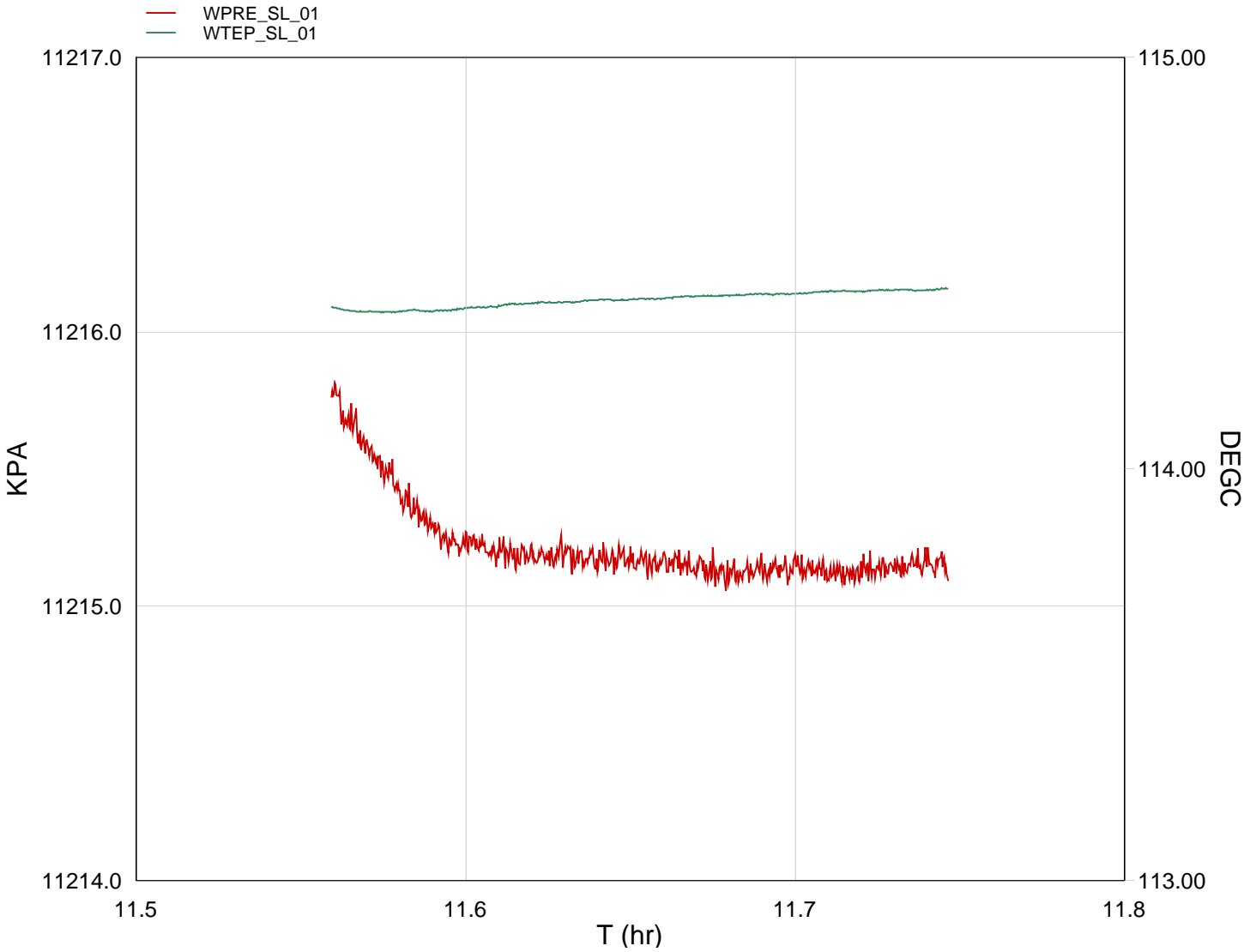
TIME	TOJ	WTEP_SL	WPRE_SL
4560.0000	8.5199	256.8784	2096.1714
4800.0000	8.6198	257.9345	2109.3959
5040.0000	8.6864	257.9732	2114.2382
5280.0000	8.7531	257.9629	2070.7574
5520.0000	8.8198	257.8979	1958.5467
5760.0000	8.8864	257.9200	1960.9461
6000.0000	8.9531	257.9174	1944.3952
6240.0000	9.0198	257.9198	1927.1547
6480.0000	9.0864	257.9047	1910.6790
6720.0000	9.1531	257.9115	1909.5750
6960.0000	9.2198	257.9240	1922.3084
7200.0000	9.2864	257.9289	1935.8600
7440.0000	9.3531	257.9353	1929.4965
7680.0000	9.4198	257.9386	1927.7792
7920.0000	9.4864	257.9390	1924.8608
8160.0000	9.5531	257.9430	1927.0432
8400.0000	9.6198	257.9543	1929.2440
8640.0000	9.6864	257.9630	1933.3329
8880.0000	9.7531	257.9591	1938.6251
9120.0000	9.8198	257.9681	1942.2907
9360.0000	9.8864	257.9764	1944.9990
9600.0000	9.9531	257.9857	1954.2913
9840.0000	10.0198	257.9900	1958.8662
10080.0000	10.0864	257.9907	1954.5719
10320.0000	10.1531	257.9918	1953.1510
10560.0000	10.2198	257.9859	1947.0924
10800.0000	10.2864	257.9950	1949.1909
11040.0000	10.3531	257.9970	1950.2021
11280.0000	10.4198	257.9955	1948.8666
11520.0000	10.4864	257.9990	1949.7046
11760.0000	10.5531	258.0021	1951.7692
12000.0000	10.6198	258.0127	1961.4481
12240.0000	10.6864	258.0162	1962.2625
12480.0000	10.7531	258.0116	1958.5115
12720.0000	10.8198	258.0111	1955.8103
12960.0000	10.8864	258.0163	1957.6325
13200.0000	10.9531	258.0078	1952.9112
13440.0000	11.0198	258.0058	1948.2730
13680.0000	11.0864	258.0068	1948.3006
13920.0000	11.1531	258.0111	1952.2184
14160.0000	11.2198	258.0084	1946.1538
14400.0000	11.2864	258.0047	1943.6389
14640.0000	11.3531	258.0030	1940.9442
14880.0000	11.4198	258.0010	1942.4897
15120.0000	11.4864	258.0023	1939.0256
15360.0000	11.5531	258.0077	1944.3670
15600.0000	11.6198	258.0070	1942.8016
15840.0000	11.6864	258.0076	1942.3670
16080.0000	11.7531	258.0017	1942.1912
16320.0000	11.8198	258.0027	1942.1209
16560.0000	11.8864	258.0038	1942.4886
16800.0000	11.9531	258.0049	1942.4116
17040.0000	12.0198	258.0060	1942.4614
17280.0000	12.0864	258.0057	1942.7889
17520.0000	12.1531	258.0049	1942.3374
17760.0000	12.2198	258.0041	1942.4012
18000.0000	12.2864	258.0081	1942.4864

18240.0000	12.3531	258.0053	1942.5519
18480.0000	12.4198	258.0127	1942.1415
18720.0000	12.4864	258.0084	1943.3747
18960.0000	12.5531	258.0112	1944.1857
19200.0000	12.6198	258.0075	1942.9341



Static Station Log
2700m MDKB – 2335.9m TVDss

MAXIS Field Log

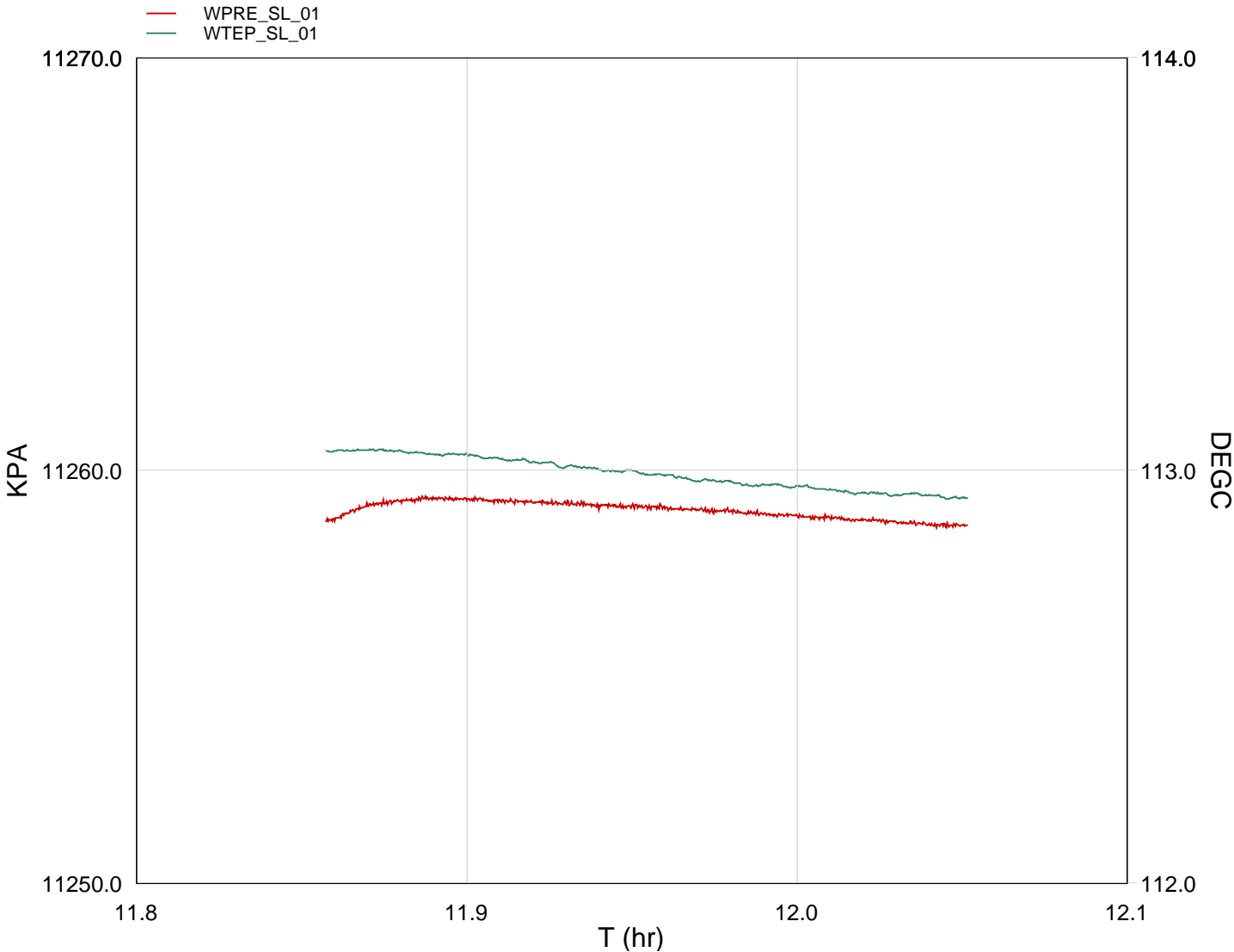


10200.0000	11.5671	237.8876	1626.6868
10260.0000	11.5838	237.8958	1626.6461
10320.0000	11.6004	237.9045	1626.6314
10380.0000	11.6171	237.9207	1626.6296
10440.0000	11.6338	237.9308	1626.6249
10500.0000	11.6504	237.9411	1626.6212
10560.0000	11.6671	237.9556	1626.6169
10620.0000	11.6838	237.9609	1626.6128
10680.0000	11.7004	237.9664	1626.6187
10740.0000	11.7171	237.9770	1626.6133
10800.0000	11.7338	237.9852	1626.6159



Static Station Log
2745m MDKB – 2378.2m TVDss

MAXIS Field Log

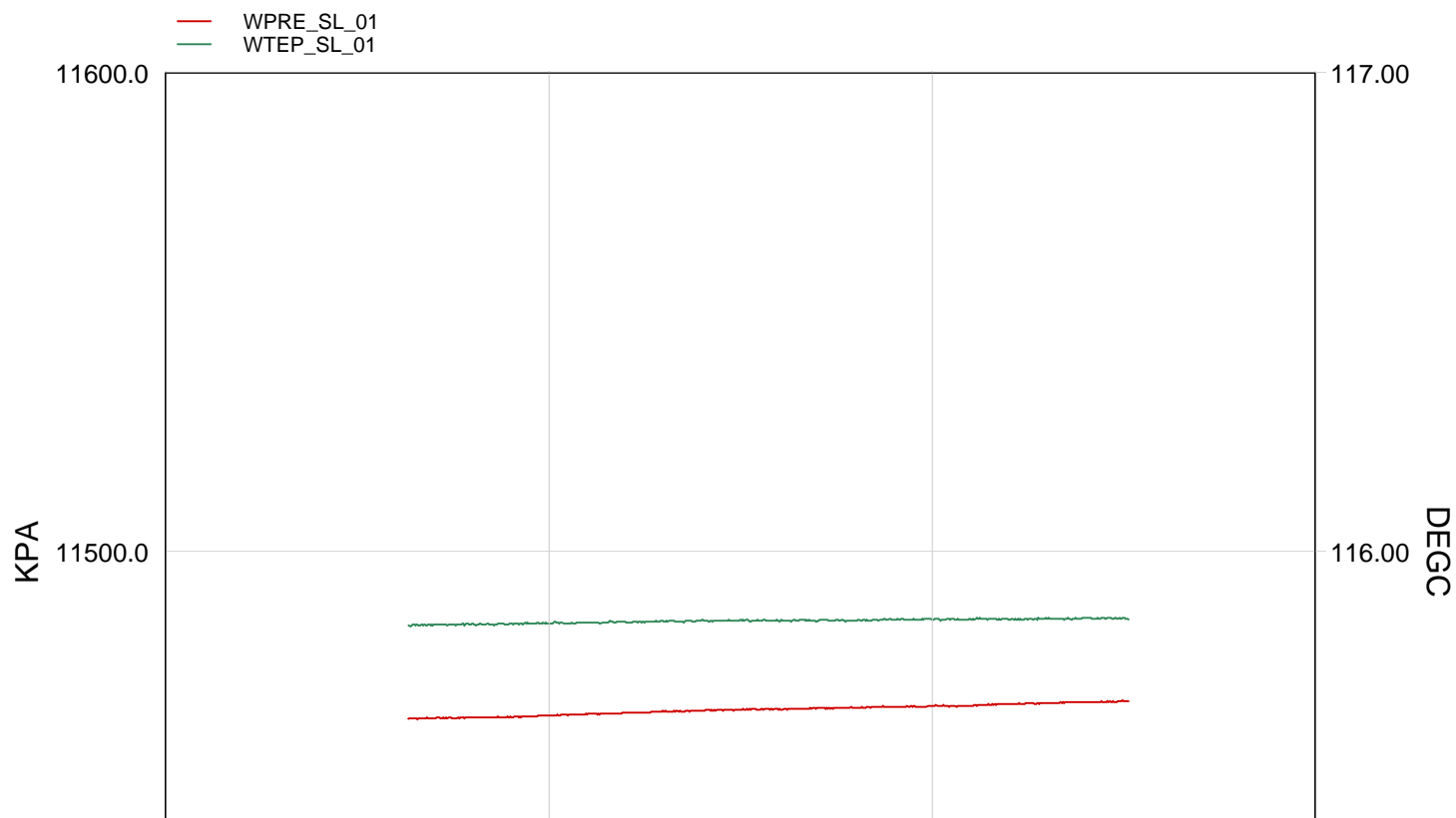


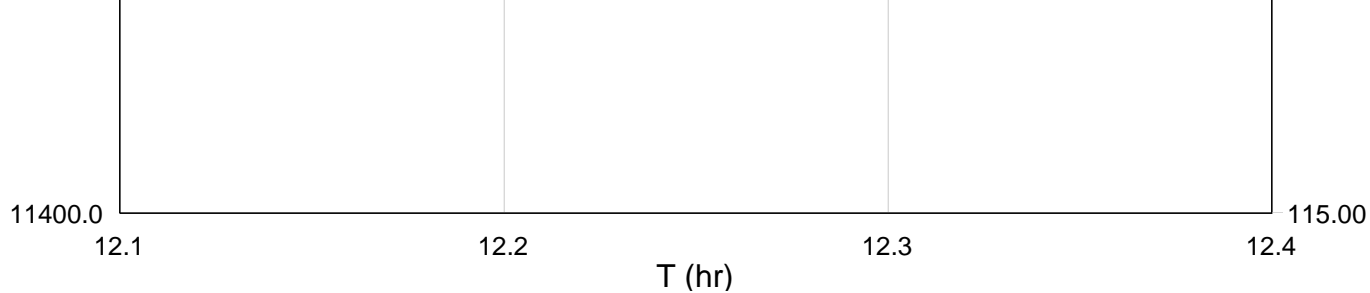
TIME	TOJ	WTEP_SL	WPRE_SL
11220.0000	11.8314	235.0417	1629.3840
11280.0000	11.8671	235.4915	1632.9900
11340.0000	11.8837	235.4780	1633.0201
11400.0000	11.9004	235.4674	1633.0260
11460.0000	11.9171	235.4515	1633.0165
11520.0000	11.9337	235.4153	1633.0100
11580.0000	11.9504	235.4004	1633.0032
11640.0000	11.9671	235.3651	1632.9876
11700.0000	11.9837	235.3383	1632.9748
11760.0000	12.0004	235.3331	1632.9612
11820.0000	12.0171	235.3012	1632.9509
11880.0000	12.0337	235.3004	1632.9393
11940.0000	12.0504	235.2828	1632.9358

Schlumberger

Static Station Log
2825m MDKB – 2453.9m TVDss

MAXIS Field Log



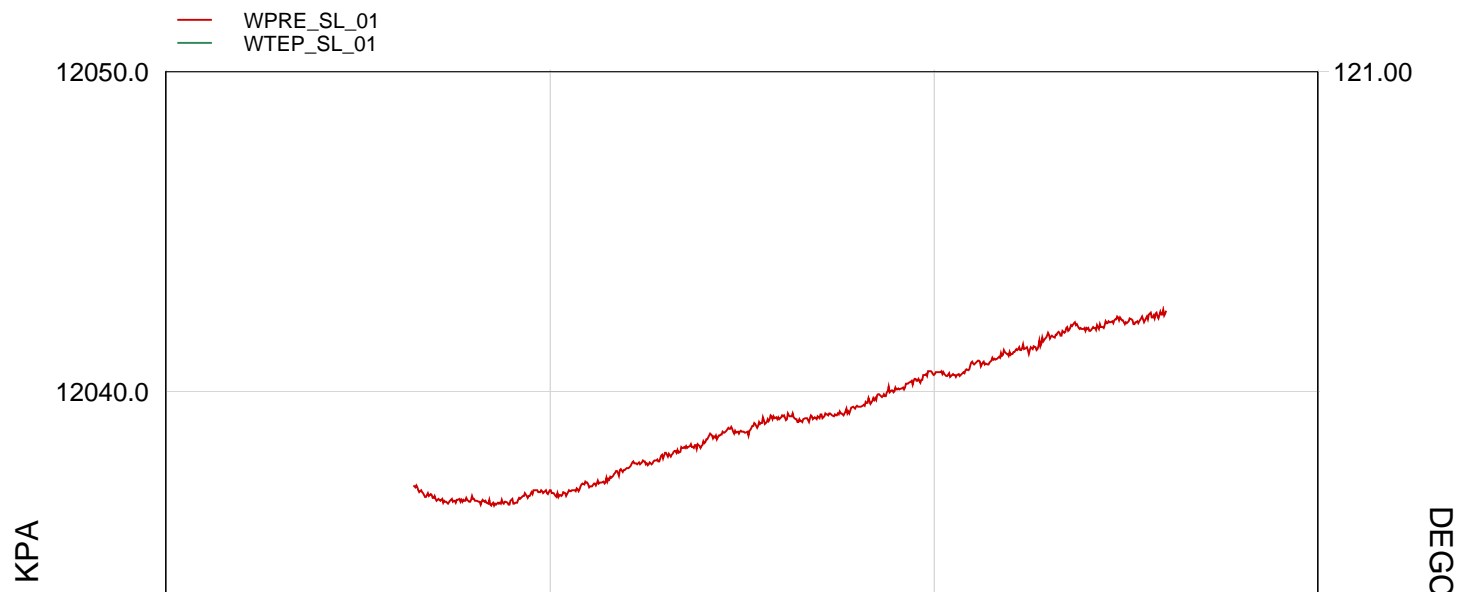


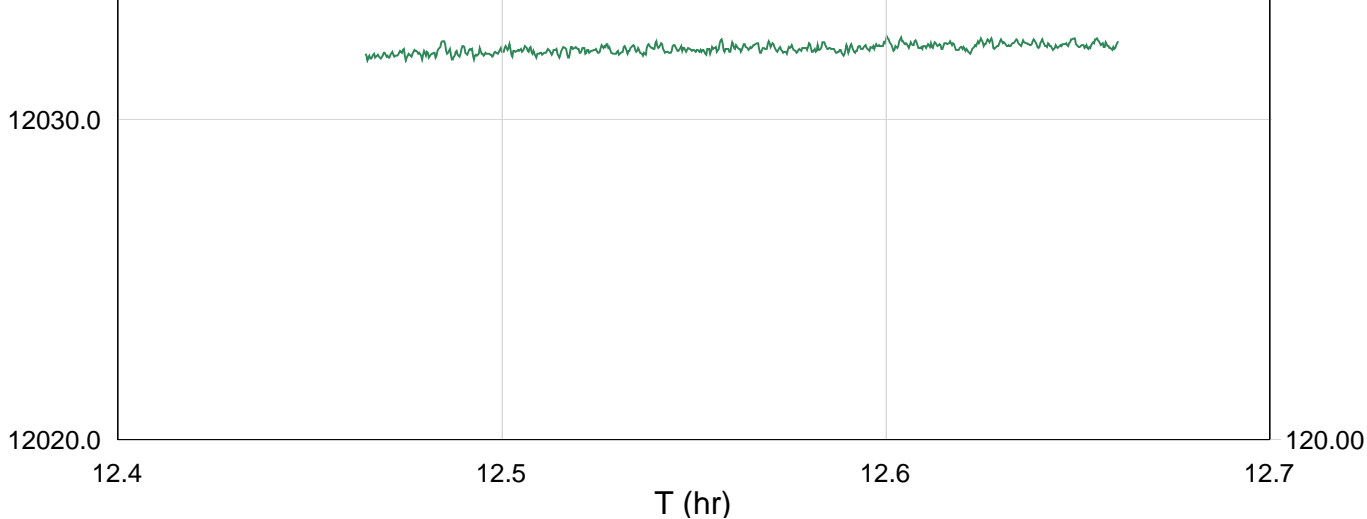
TIME	TOJ	WTEP_SL	WPRE_SL
12360.0000	12.1669	240.5250	1662.8843
12420.0000	12.1835	240.5263	1662.9254
12480.0000	12.2002	240.5294	1662.9732
12540.0000	12.2169	240.5354	1663.0360
12600.0000	12.2335	240.5376	1663.1100
12660.0000	12.2502	240.5444	1663.1567
12720.0000	12.2669	240.5418	1663.1843
12780.0000	12.2835	240.5423	1663.2279
12840.0000	12.3002	240.5455	1663.2672
12900.0000	12.3169	240.5445	1663.3071
12960.0000	12.3335	240.5480	1663.3643
13020.0000	12.3502	240.5516	1663.4008

Schlumberger

Static Station Log
2905m MDKB – 2530.4m TVDss

MAXIS Field Log





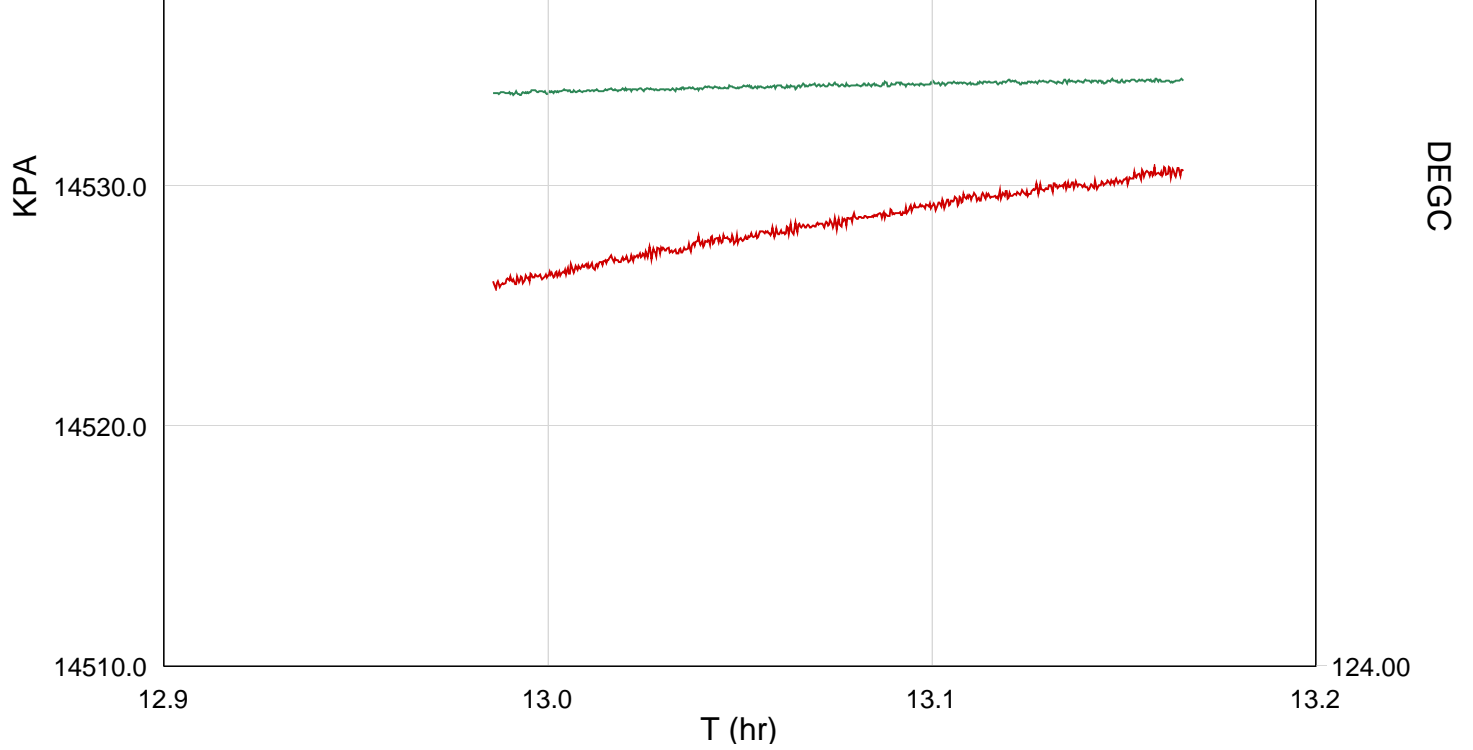
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13500.0000	12.4834	248.7306	1745.7577
13560.0000	12.5001	248.7279	1745.8068
13620.0000	12.5168	248.7297	1745.8843
13680.0000	12.5334	248.7308	1745.9837
13740.0000	12.5501	248.7301	1746.0735
13800.0000	12.5668	248.7402	1746.1332
13860.0000	12.5834	248.7397	1746.2069
13920.0000	12.6001	248.7515	1746.3298
13980.0000	12.6168	248.7457	1746.4077
14040.0000	12.6334	248.7448	1746.5159
14100.0000	12.6501	248.7378	1746.5661

Schlumberger

Static Station Log
3200m MDKB – 2818.4 m TVDss

MAXIS Field Log





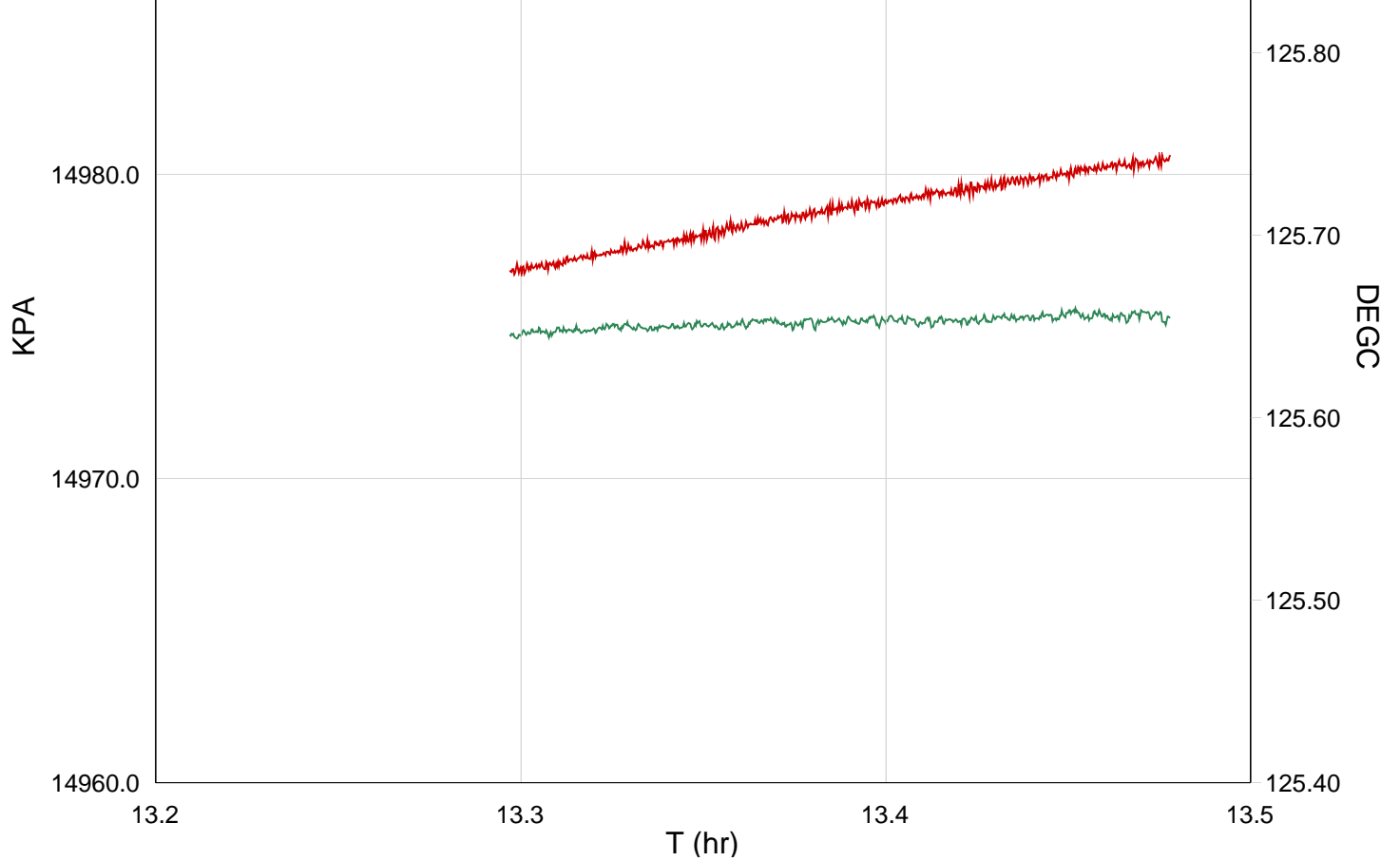
TIME	TOJ	WTEP_SL	WPRE_SL
15300.0000	12.9784	256.1455	2105.6120
15360.0000	13.0001	256.2743	2106.8590
15420.0000	13.0167	256.2809	2106.9620
15480.0000	13.0334	256.2798	2107.0087
15540.0000	13.0501	256.2854	2107.0814
15600.0000	13.0667	256.2905	2107.1578
15660.0000	13.0834	256.2895	2107.2051
15720.0000	13.1001	256.2942	2107.2761
15780.0000	13.1167	256.2955	2107.3296
15840.0000	13.1334	256.2938	2107.4024
15900.0000	13.1501	256.2942	2107.4391
15960.0000	13.1667	256.3004	2107.5115

Schlumberger

Static Station Log
3245m MDKB – 2861.6m TVDss

MAXIS Field Log





TIME	TOJ	WTEP_SL	WPRE_SL
16440.0000	13.2999	258.1611	2172.2211
16500.0000	13.3166	258.1634	2172.2713
16560.0000	13.3333	258.1691	2172.3185
16620.0000	13.3499	258.1704	2172.3987
16680.0000	13.3666	258.1762	2172.4300
16740.0000	13.3833	258.1741	2172.4806
16800.0000	13.3997	258.1753	2172.5360
16860.0000	13.4163	258.1760	2172.5685
16920.0000	13.4330	258.1792	2172.6172
16980.0000	13.4497	258.1831	2172.6730
17040.0000	13.4663	258.1753	2172.7072

Schlumberger

Gamma Ray
Survey

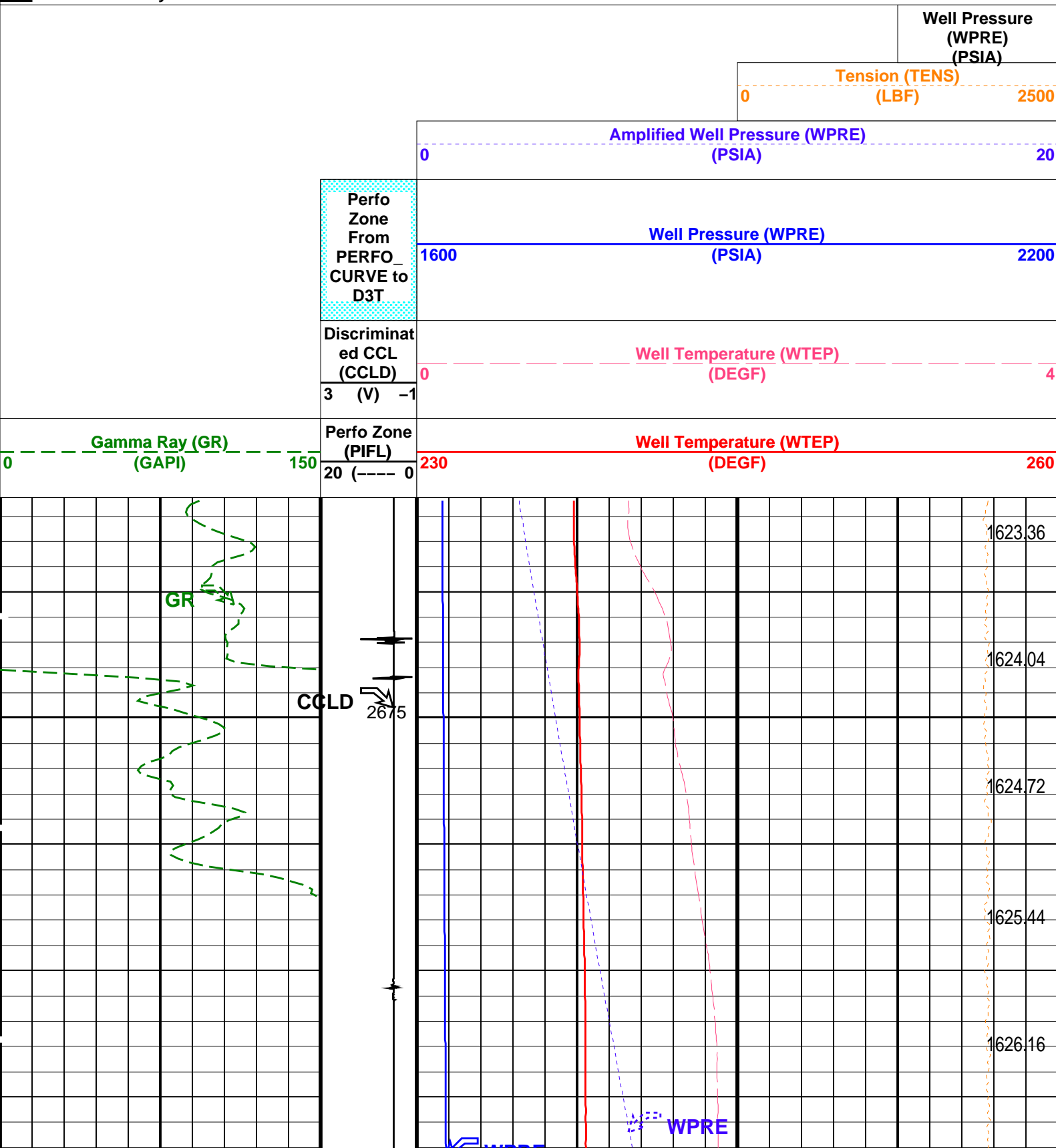
MAXIS Field Log

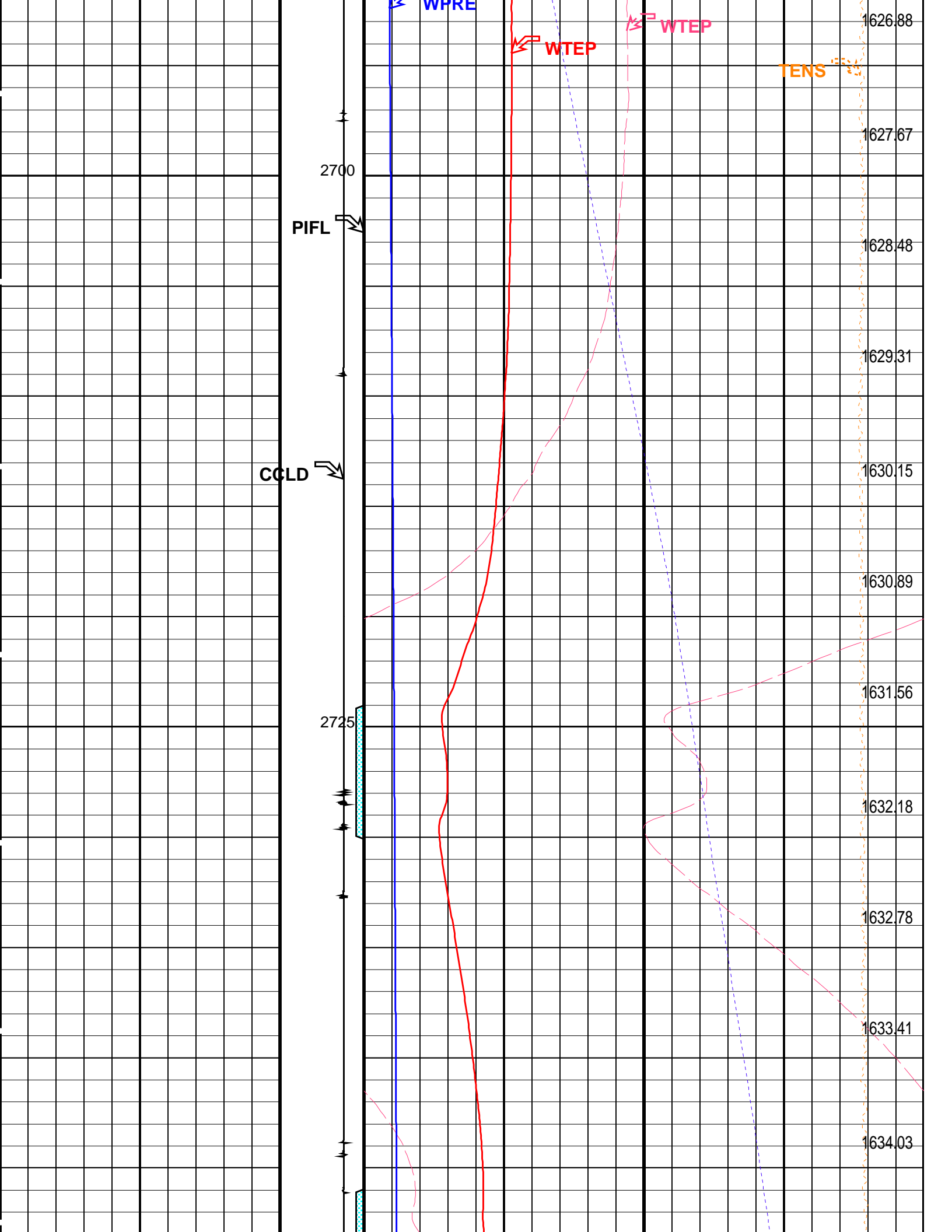
OP System Version: 14C0-302
MCM

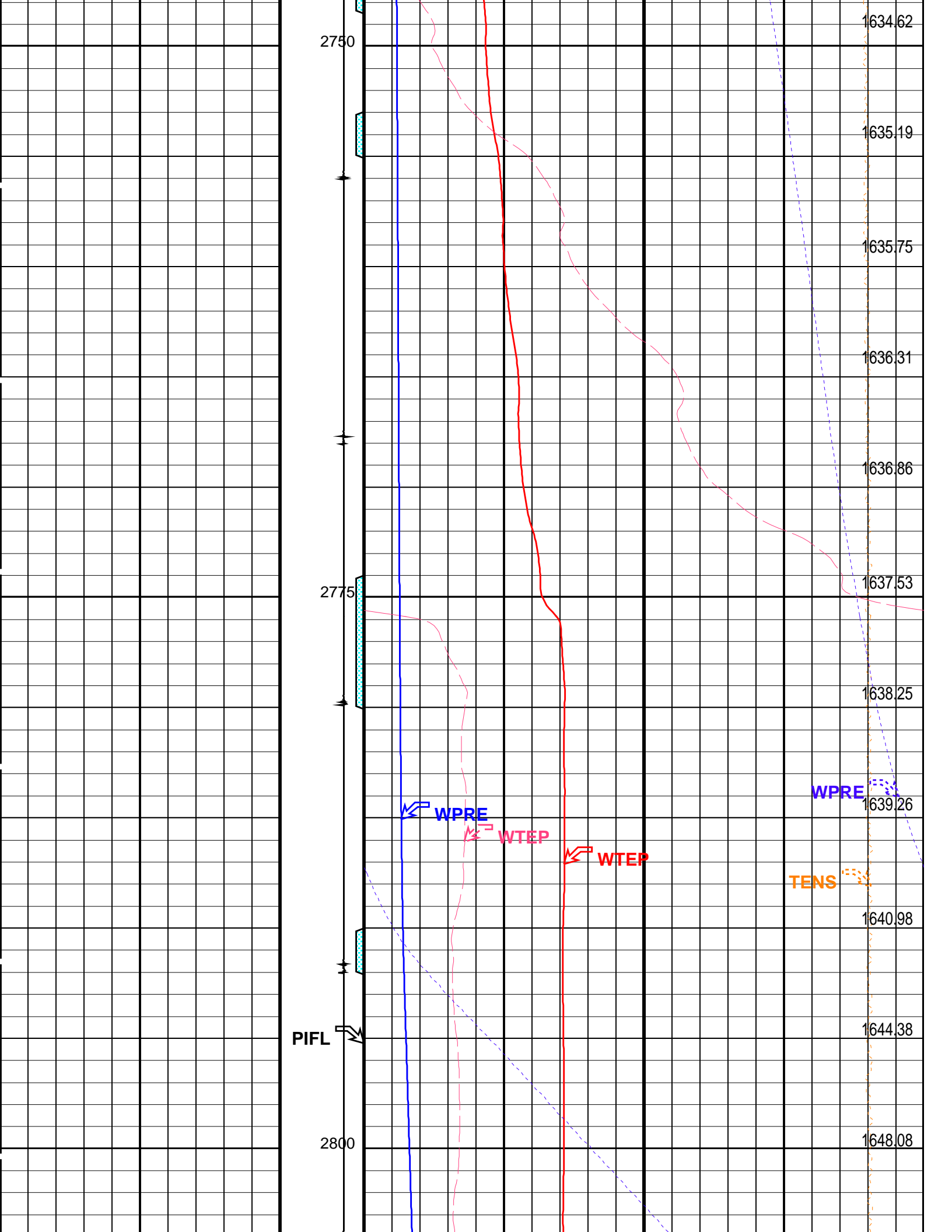
PSPT-B 14C0-302

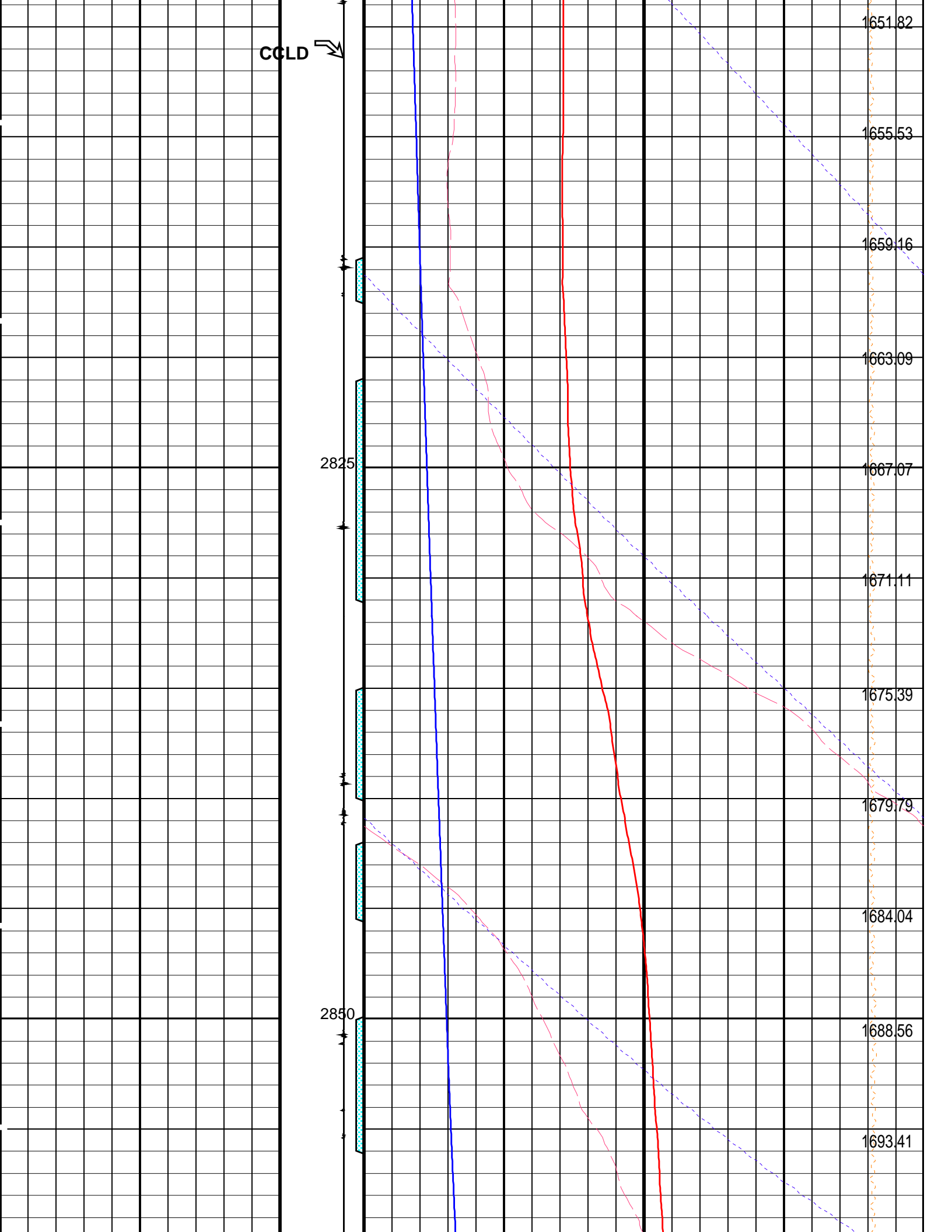
PIP SUMMARY

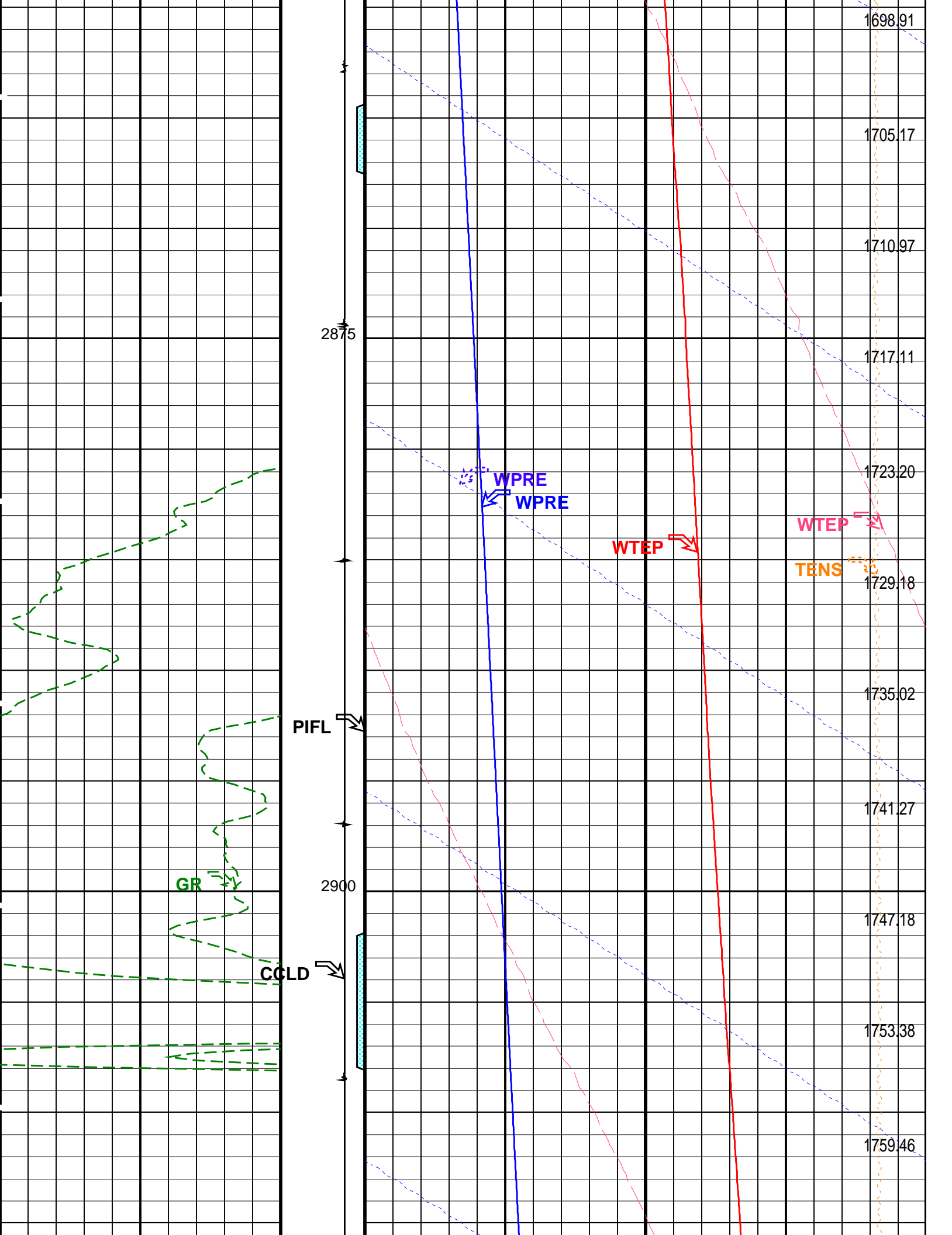
Time Mark Every 60 S

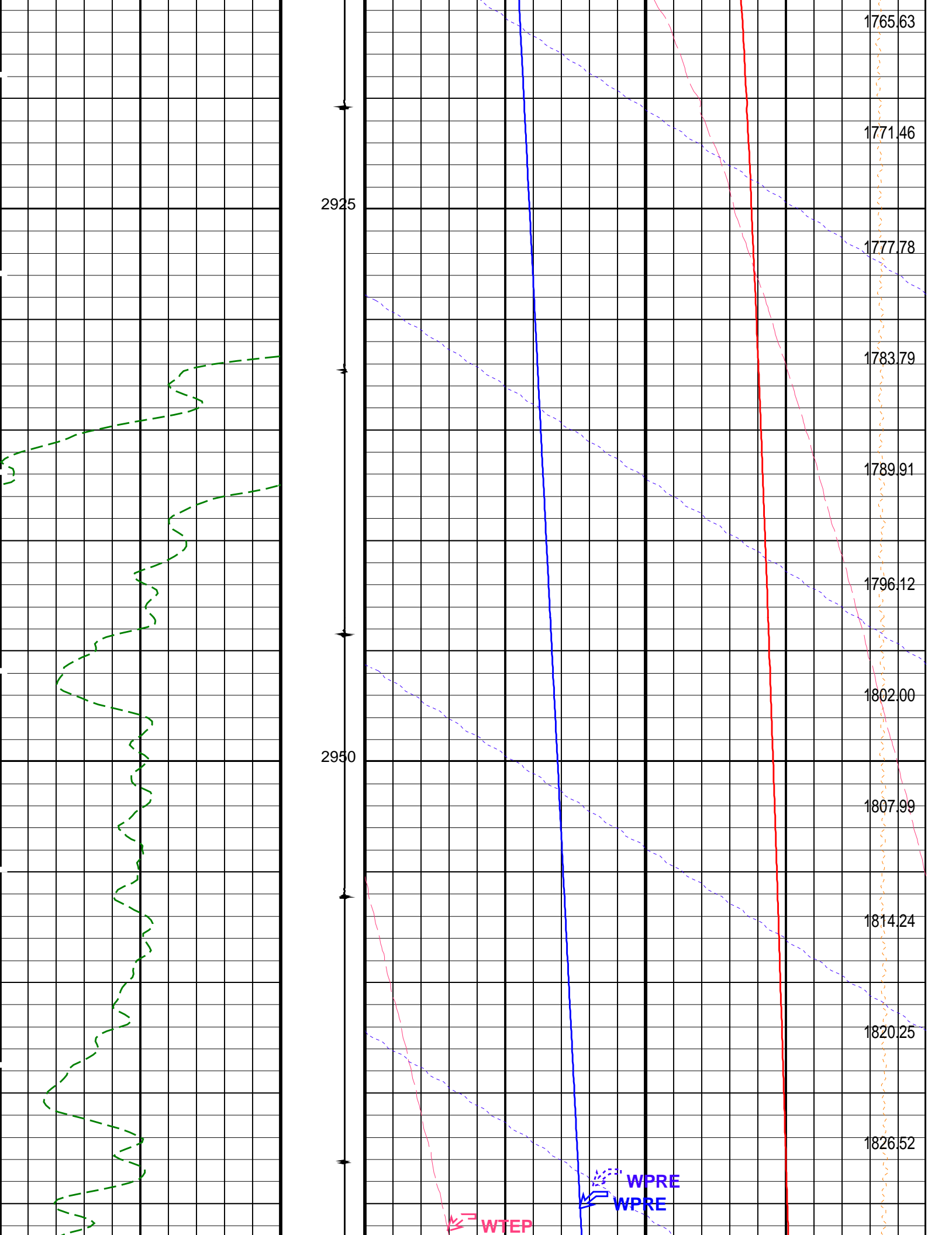


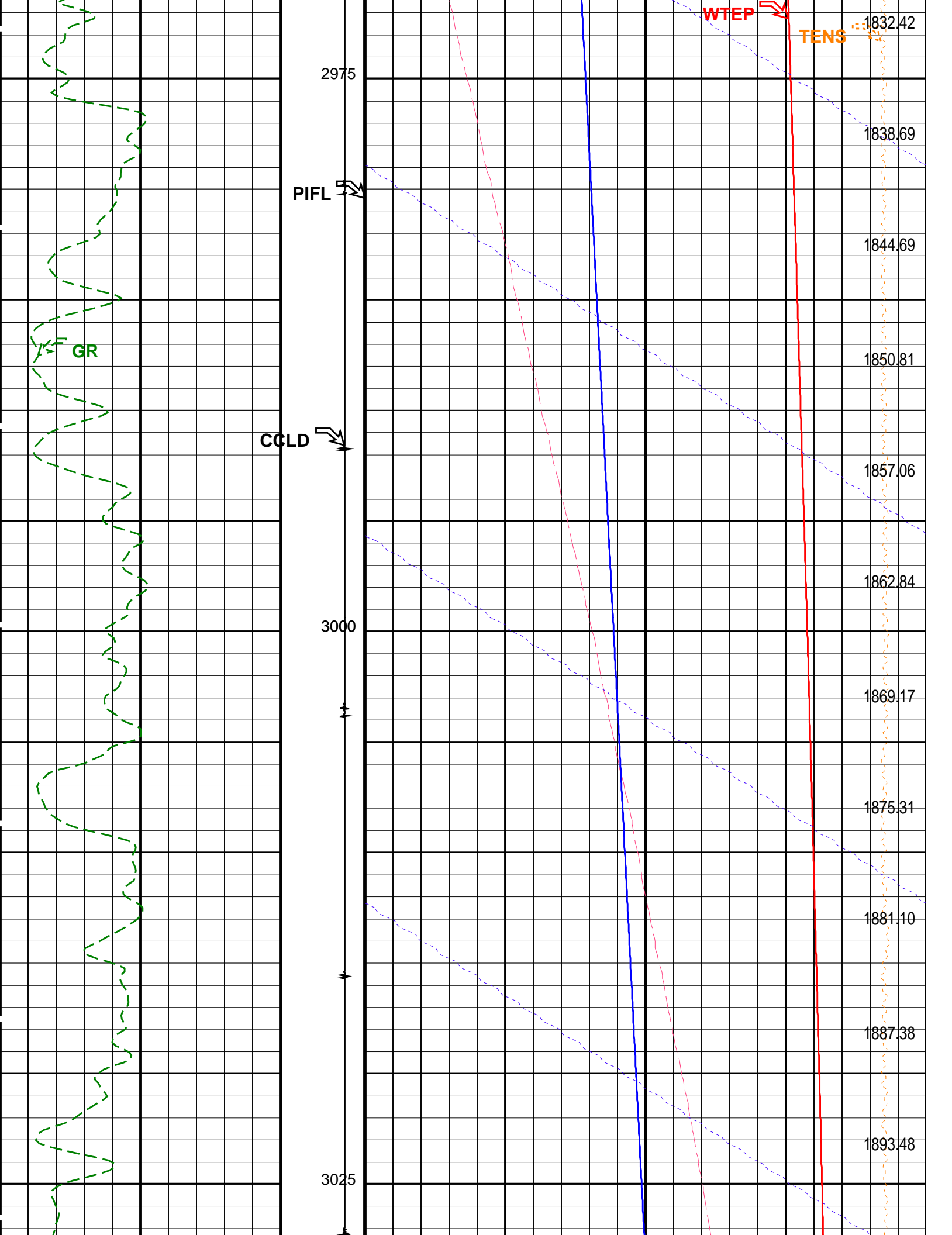


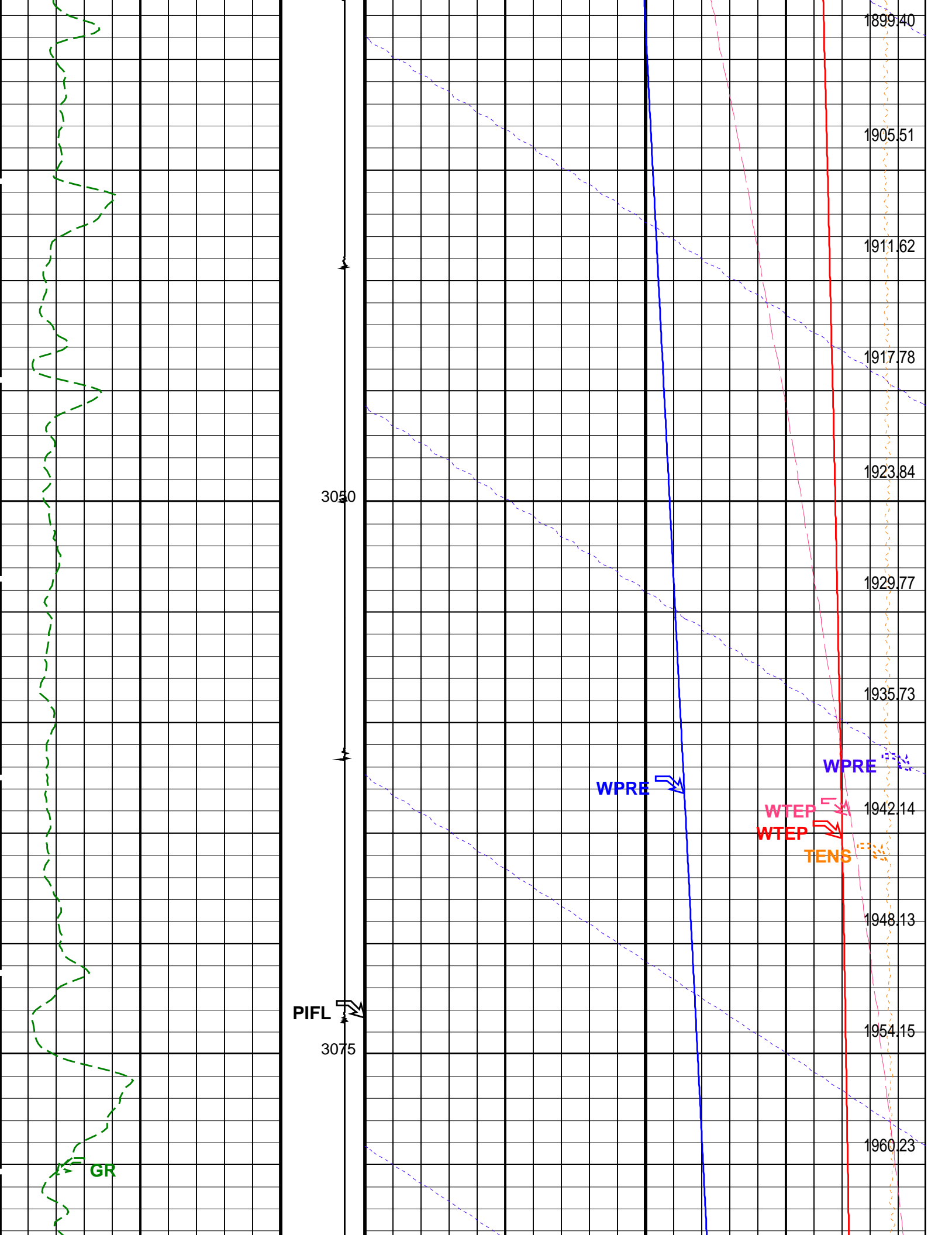


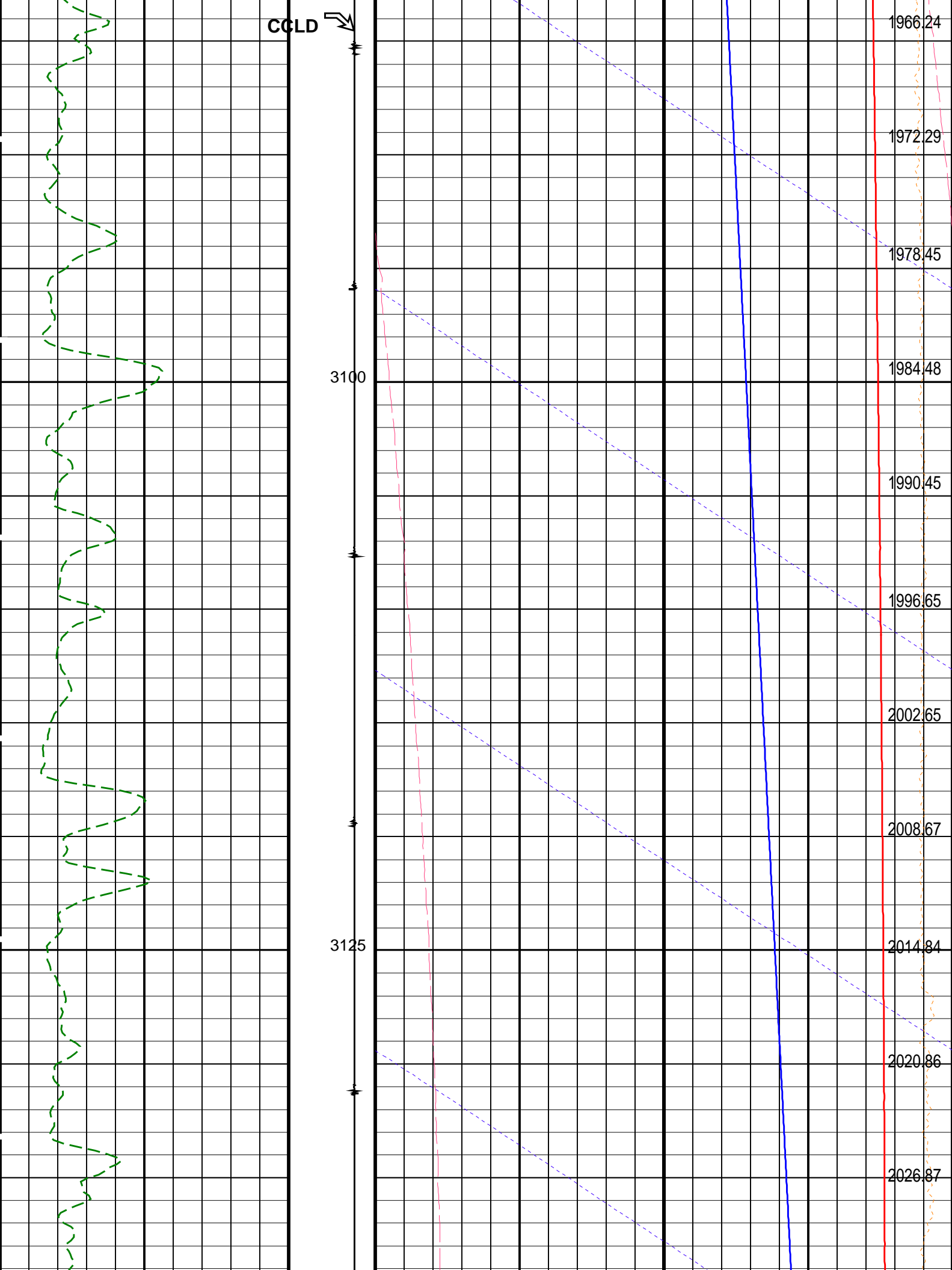


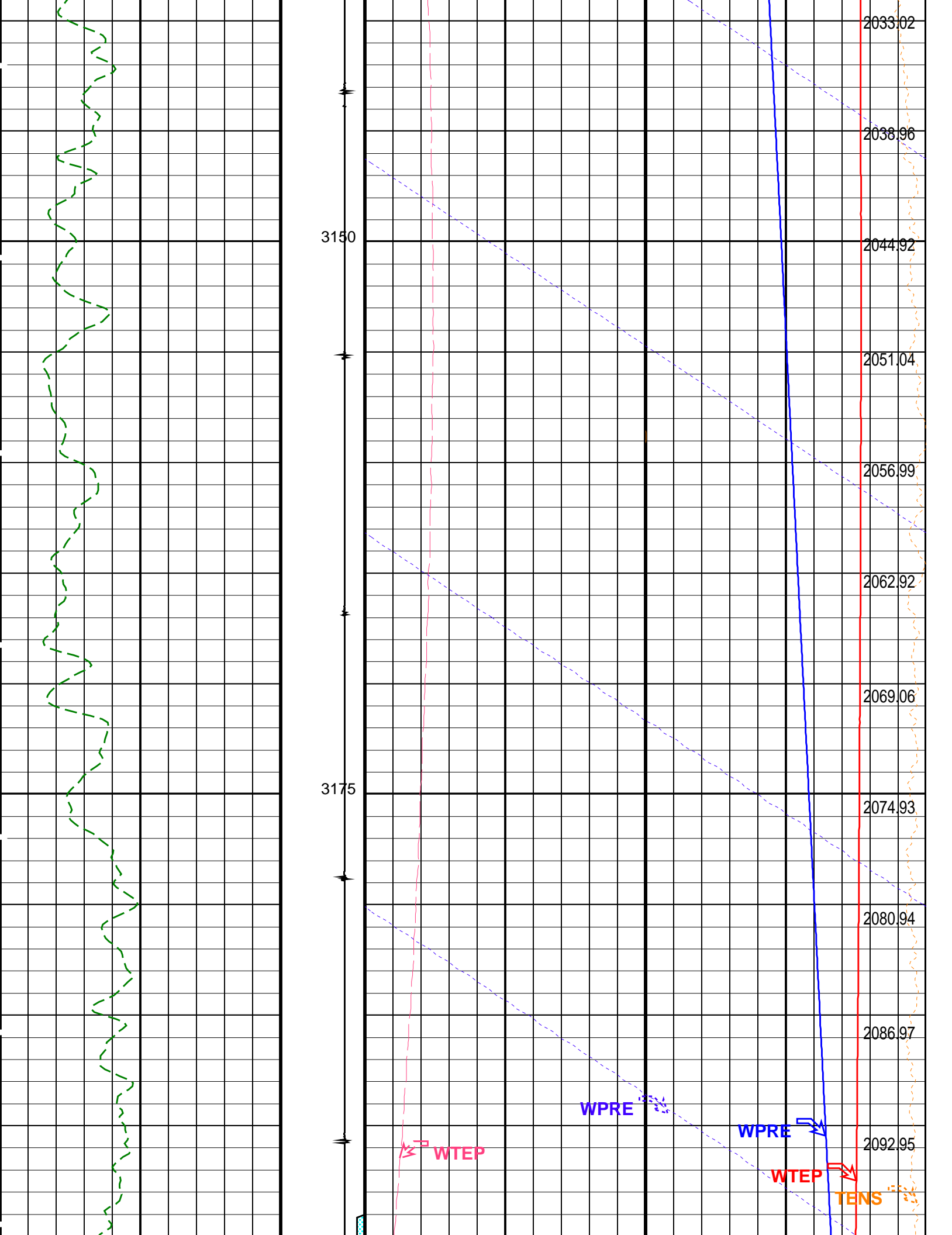


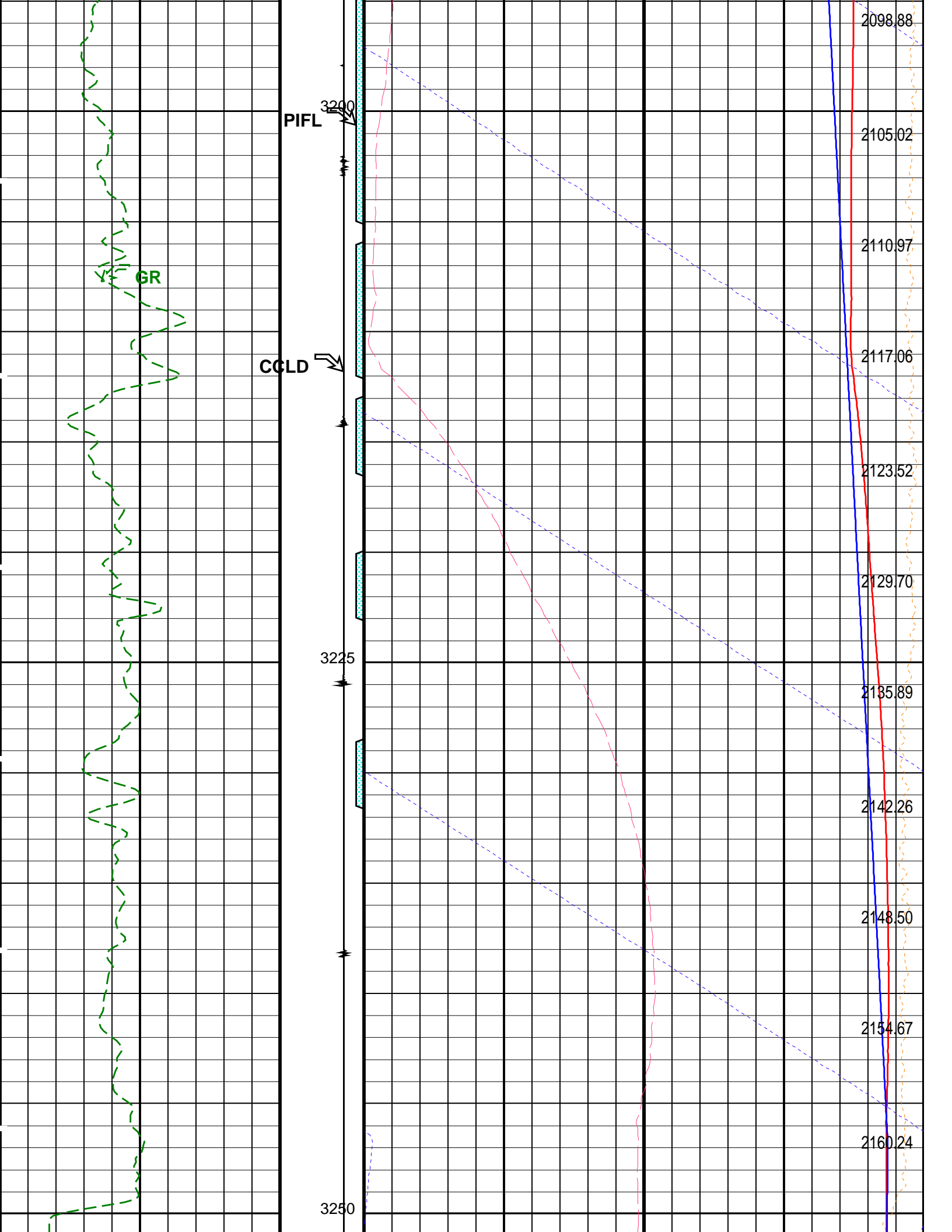












[illegible]

OP System Version: 14C0-302 MCM	
PSPT-B	14C0-302

Parameters		
DLIS Name	Description	Value
System and Miscellaneous		
DO	Depth Offset for Playback	-2.4 M
PP	Playback Processing	NORMAL

System and Miscellaneous				
DO	Depth Offset for Playback	-2.4	M	
PP	Playback Processing	NORMAL		

Input DLIS Files						
DEFAULT	PSP_006LUP	FN:5	PRODUCER	11-Aug-2006 10:13	3255.3 M	2668.2 M
Output DLIS Files						
DEFAULT	PSP_007PUP	FN:6	PRODUCER	11-Aug-2006 11:30		

EFAULT PSP_007PUP FN:6 PRODUCER 11-Aug-2006 11:30

Schlumberger

Well: **W-37**
Field: **West Tuna**
Rig: **Prod4 / Crane**
Country: **Australia**

Gamma Ray Pressure / Temperature Survey