

Company: Esso Australia Pty Ltd.

Well: W-21a
Field: West Kingfish
Rig: Prod4

Country: Australia

SBHP FBHP Survey		LOCATION	
		Gippsland	Elev.: K.B. 33.43 m
		Basin	G.L. -74 m
		Bass Strait	D.F. 33.43 m
		Permanent Datum: _____	M.S.L. _____
Log Measured From: _____		K.B. _____	Elev.: 0 m
Drilling Measured From: _____		K.B. _____	33.4 m above Perm. Datum
State: Victoria	Max. Well Deviation 43 deg	Longitude 148 6'15.1"E	Latitude 038 35'40.7"S
Logging Date			
Run Number	One		
Depth Driller	2420 m		
Schlumberger Depth	2416.5 m		
Bottom Log Interval	2416.5 m		
Top Log Interval	500 m		
Casing Fluid Type	Production Fluids		
Salinity			
Density			
Fluid Level			
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	13.1 m		
To	2557.9 m		
Maximum Recorded Temperatures			
Logger On Bottom	Time		14:00
Unit Number	Location	Prod4	
Recorded By	G Wright.		
Witnessed By	B White.		

	Run 1
Oil Density	
Water Salinity	
Gas Gravity	
Bo	
Bw	
1/Bg	
Bubble Point Pressure	
Bubble Point Temperature	
Solution GOR	
Maximum Deviation	43 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	Time
Unit Number	Location
Recorded By	
Witnessed By	

DEPTH SUMMARY LISTING

Date Created: 3-APR-2008 8:36:45

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-EB	Type:	PSDS/OSDS	Type:	2-32ZT
Serial Number:	6373	Serial Number:	325357	Serial Number:	27244
Calibration Date:	04-Jan-07	Calibration Date:	03-Apr-2008	Length:	6409.94 M
Calibrator Serial Number:	9	Calibrator Serial Number:	1174	Conveyance Method: Wireline Rig Type: Rigless	
Calibration Cable Type:	2-32ZT	Calibration Gain:	0.91		
Wheel Correction 1:	-2	Calibration Offset:	341.00		
Wheel Correction 2:	-4				

Depth Control Parameters

Log Sequence: Subsequent Log In the Well

Depth Control Remarks

1. IDW-EB 6373 used as the primary depth control.
2. Z-Chart used as back-up system.

DISCLAIMER

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OTHER SERVICES1

OS1: None

REMARKS: RUN NUMBER 1

Log correlated to West Kingfish composite dated 22-Aug-2008.

Maximum well deviation = 43 degree's at 649m MDKB.

Static and flowing bottom hole pressure,temperature data aquired during this survey.

Static stations at the following depths :

500m MDKB: 982 psia,122 degf.

1000m MDKB: 1038 psia,141 degf.

1500m MDKB: 1099 psia,167 degf.

1500m MDKB: 1099 psia,167 degf.
2000m MDKB: 1198 psia,211 degf.
2419m MDKB: 1499 psia,224 degf.
One flowing station at 2419m MDKB. 1304 psia,225 degf.
Crew: J Annear,P Lawrence,A McLellan.

<div> <div>RUN 1</div> <div> <div>SERVICE ORDER #:</div> <div>PROGRAM VERSION:</div> <div>FLUID LEVEL:</div> </div> <div> <div>AusI08509104</div> <div>15C0-309</div> </div> </div>					
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

SURFACE EQUIPMENT

WITM-A 827
PSC_16MHZ 806

DOWNHOLE EQUIPMENT

SWBS-B 786

6.79

SWBS-B 785

6.10

SWBS-B 787

5.36

SWHS-A 759

Detail MT

TelStatus

CTEM

4.68

PSC-A 806

PSPT-B 827

PSTC 827

PBMS-B 827

CQG_F Mano 827

RTD Thermometer 827

GR 827

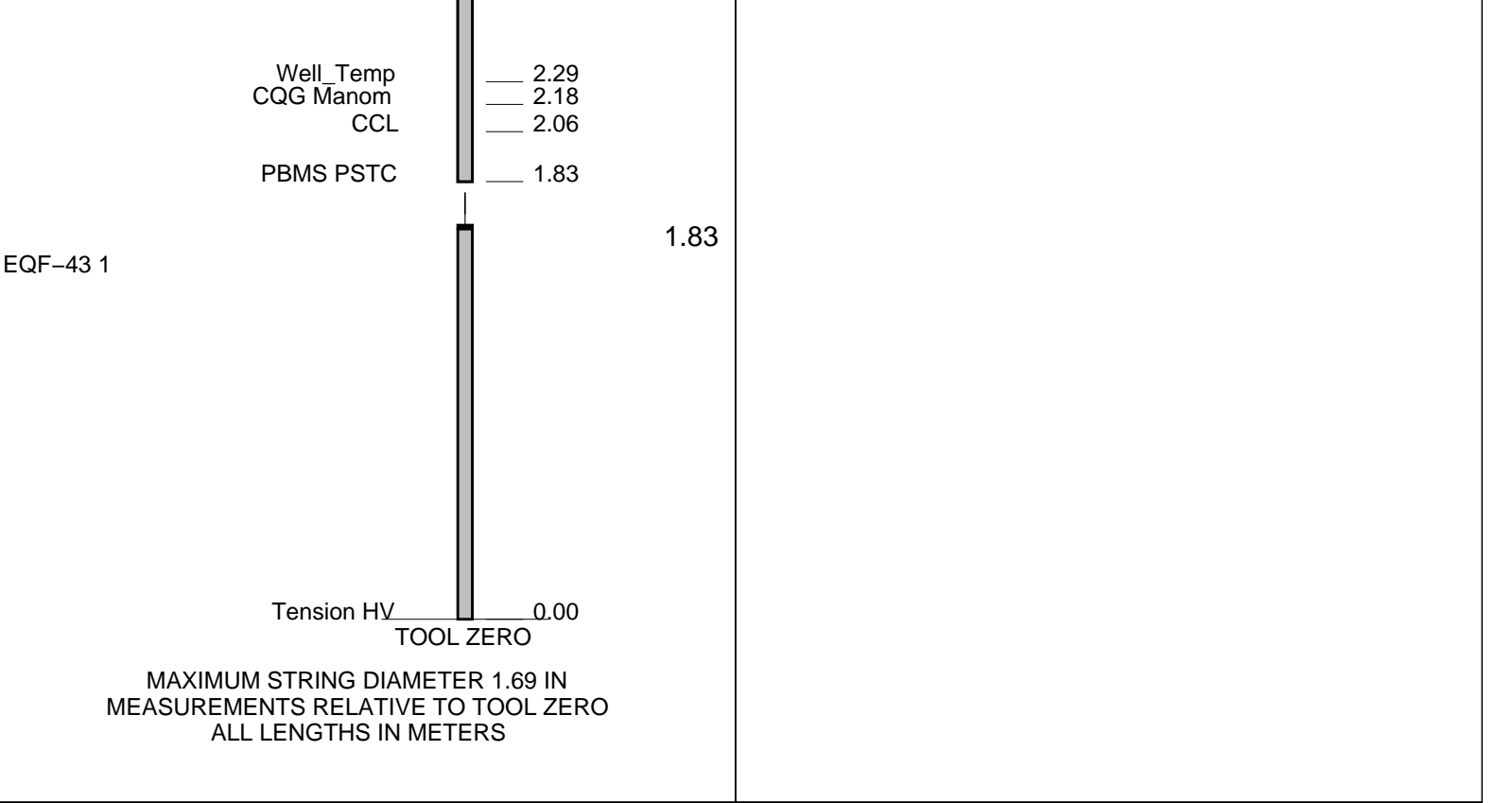
CCL 827

PBMS 827

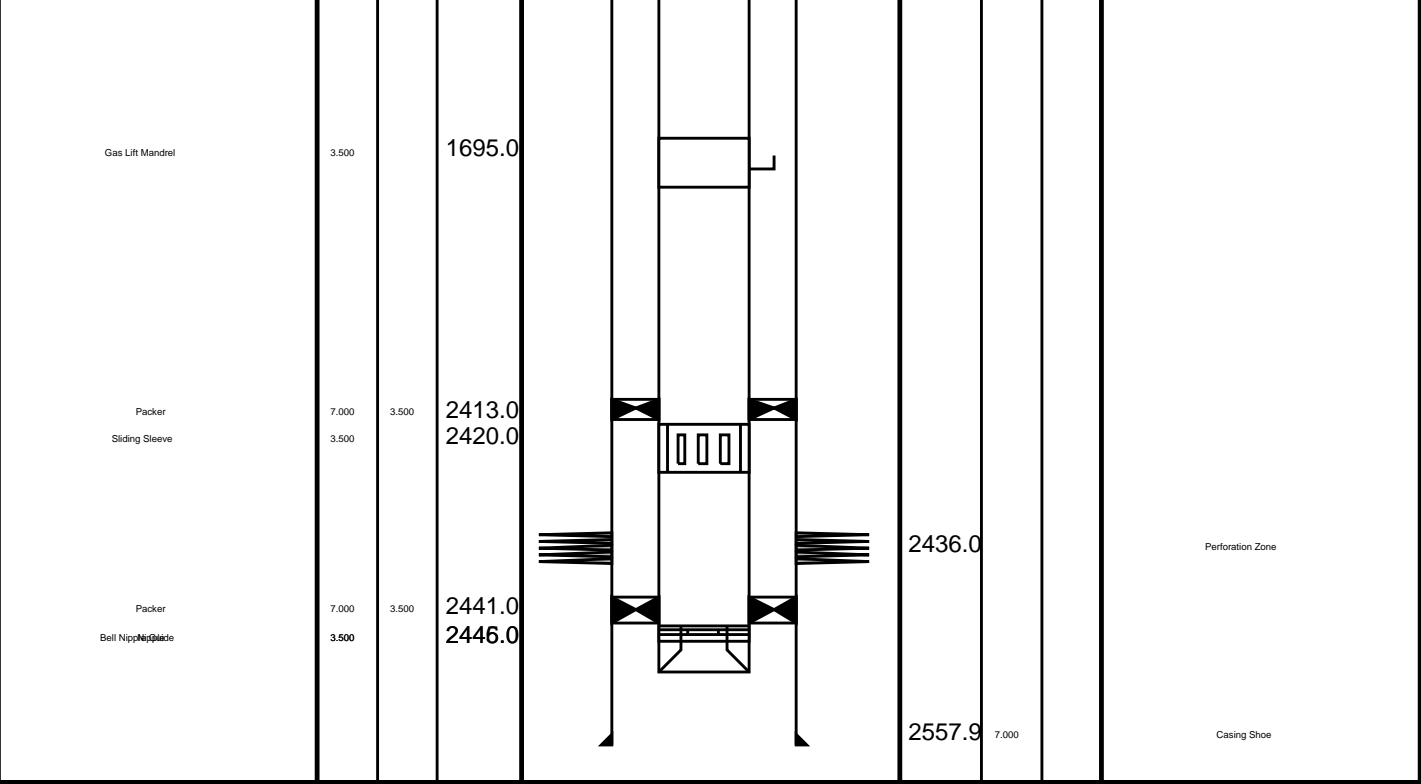
4.35

GR

3.22



Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Tubing Hanger	3.500 7.000	3.500	11.7 10.6		13.1 13.1	7.000 10.750	7.000	Casing String Liner Hanger
Shutin Valve	3.500		455.0					
Gas Lift Mandrel	3.500		866.0		655.9	10.750		Casing Shoe
Gas Lift Mandrel	3.500		1384.0					



Job Event Summary

MAXIS Field Log

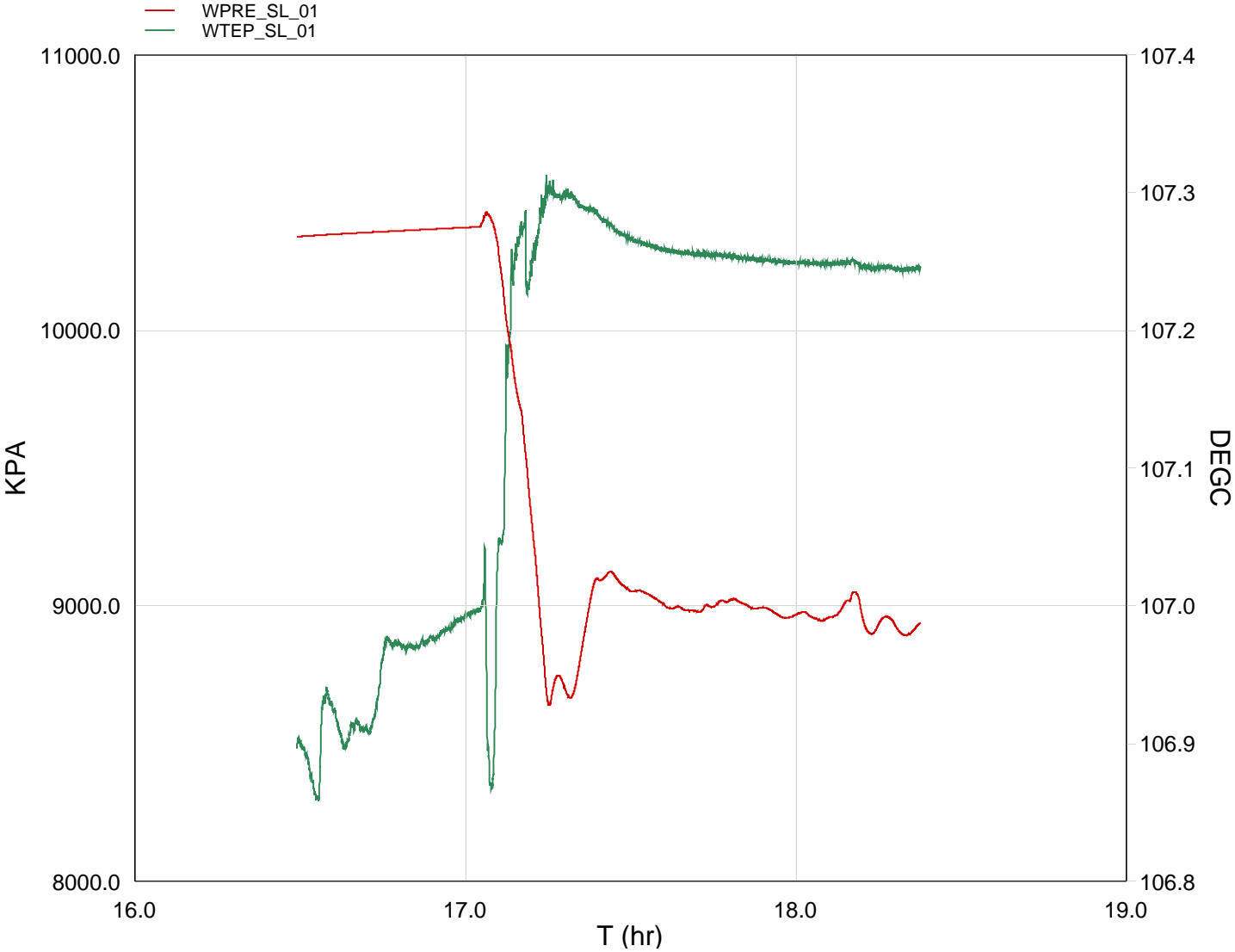
Schlumberger Job Event Summary

Time	Elapsed Time	Depth (M)	File
Log Pass (down)	7-Apr-2008 13:21 000:18	-4.9 - 469.8	PSP_005LDP
Log Pass (up)	7-Apr-2008 13:39 000:03	469.8 - 446.4	PSP_006LUP
Station Log	7-Apr-2008 13:46 000:20	502.2 - 3.1	PSP_007LTP
Log Pass (down)	7-Apr-2008 14:12 000:48	507.2 - 1406.0	PSP_008LDP
Station Log	7-Apr-2008 14:27 000:16	1002.2 - 2.5	PSP_009LTP
Log Pass (up)	7-Apr-2008 15:00 000:07	1405.9 - 1366.0	PSP_010LUP
Station Log	7-Apr-2008 15:10 000:18	1502.2 - 2.7	PSP_011LTP
Station Log	7-Apr-2008 15:38 000:15	2002.3 - 2.0	PSP_012LTP
Log Pass (down)	7-Apr-2008 15:55 000:10	2045.2 - 2437.8	PSP_013LDP
Log Pass (up)	7-Apr-2008 16:06 000:03	2427.4 - 2382.2	PSP_014LUP
Station Log	7-Apr-2008 16:11 000:17	2418.8 - 2.5	PSP_015LTP
Station Log	7-Apr-2008 16:28 001:54	2418.8 - 17.3	PSP_016LTP



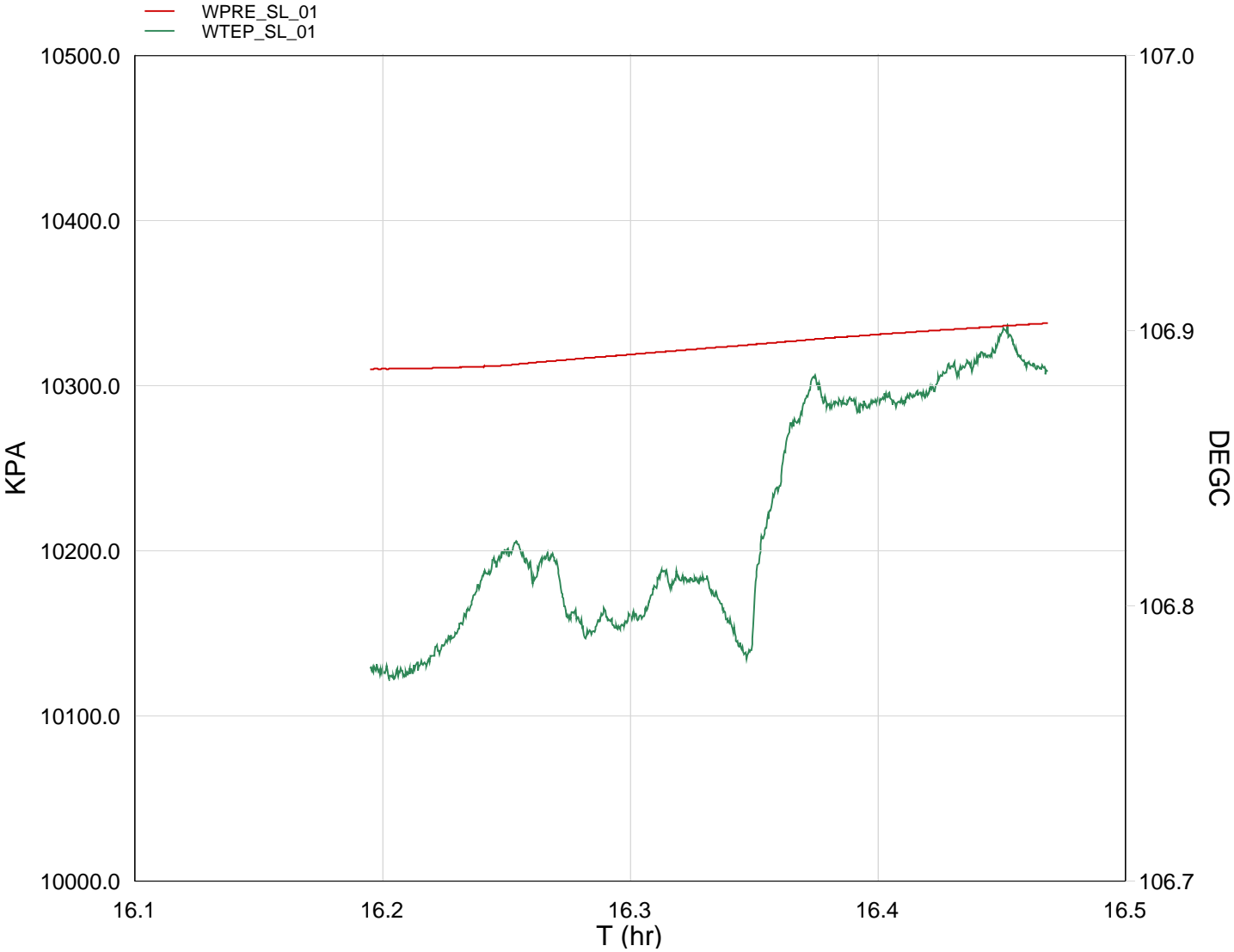
Flowing Station
2416.5m MDKB

MAXIS Field Log



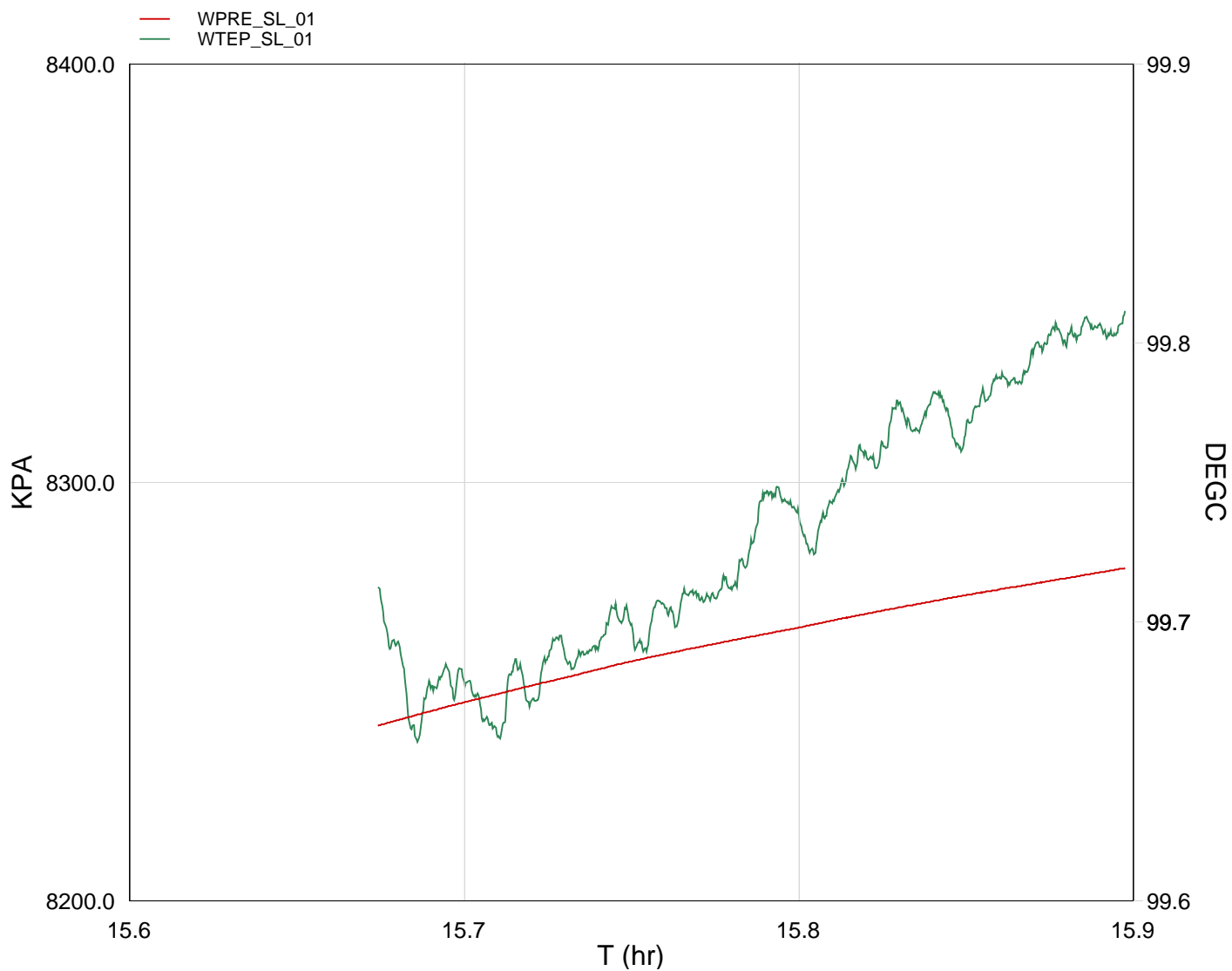
TIME	TOJ	DEGF	PSIA
11280.0000	16.4499	223.8825	1496.1166
11400.0000	16.5150	224.4072	1500.0390
11520.0000	16.5483	224.3473	1500.4178
11640.0000	16.5817	224.4868	1500.7844
11760.0000	16.6150	224.4395	1501.1154
11880.0000	16.6483	224.4314	1501.4302

12000.0000	16.6817	224.4386	1501.7415
12120.0000	16.7150	224.4419	1502.0388
12240.0000	16.7483	224.5291	1502.3476
12360.0000	16.7817	224.5493	1502.6396
12480.0000	16.8150	224.5477	1502.9564
12600.0000	16.8483	224.5464	1503.2615
12720.0000	16.8817	224.5523	1503.5535
12840.0000	16.9150	224.5606	1503.8424
12960.0000	16.9483	224.5687	1504.1285
13080.0000	16.9817	224.5837	1504.4119
13200.0000	17.0150	224.5891	1504.6902
13320.0000	17.0483	224.5980	1506.5445
13440.0000	17.0817	224.3675	1507.3843
13560.0000	17.1150	224.6951	1470.6836
13680.0000	17.1483	225.0459	1425.9238
13800.0000	17.1817	225.1165	1385.7315
13920.0000	17.2150	225.0703	1323.7234
14040.0000	17.2483	225.1485	1255.7090
14160.0000	17.2817	225.1344	1268.7190
14280.0000	17.3150	225.1351	1256.9441
14400.0000	17.3483	225.1203	1278.3249
14520.0000	17.3817	225.1178	1311.6694
14640.0000	17.4150	225.1027	1319.5444
14760.0000	17.4483	225.0918	1322.0704
14880.0000	17.4817	225.0833	1315.4276
15000.0000	17.5150	225.0747	1313.2130
15120.0000	17.5483	225.0699	1311.8902
15240.0000	17.5817	225.0677	1308.2798
15360.0000	17.6150	225.0648	1304.2682
15480.0000	17.6483	225.0603	1304.9109
15600.0000	17.6817	225.0601	1302.8973
15720.0000	17.7150	225.0610	1302.7366
15840.0000	17.7483	225.0573	1304.6213
15960.0000	17.7817	225.0576	1307.9712
16080.0000	17.8150	225.0578	1309.0843
16200.0000	17.8483	225.0523	1305.9548
16320.0000	17.8817	225.0532	1304.0933
16440.0000	17.9150	225.0506	1303.8654
16560.0000	17.9483	225.0516	1300.2893
16680.0000	17.9817	225.0502	1299.4974
16800.0000	18.0150	225.0496	1301.9020
16920.0000	18.0483	225.0472	1299.5497
17040.0000	18.0817	225.0458	1297.2619
17160.0000	18.1150	225.0477	1300.1150
17280.0000	18.1483	225.0459	1306.9242
17400.0000	18.1817	225.0512	1312.3991
17520.0000	18.2150	225.0425	1292.6788
17640.0000	18.2483	225.0431	1294.8503
17760.0000	18.2817	225.0431	1299.3151
17880.0000	18.3150	225.0398	1291.5160
18000.0000	18.3483	225.0390	1291.0486

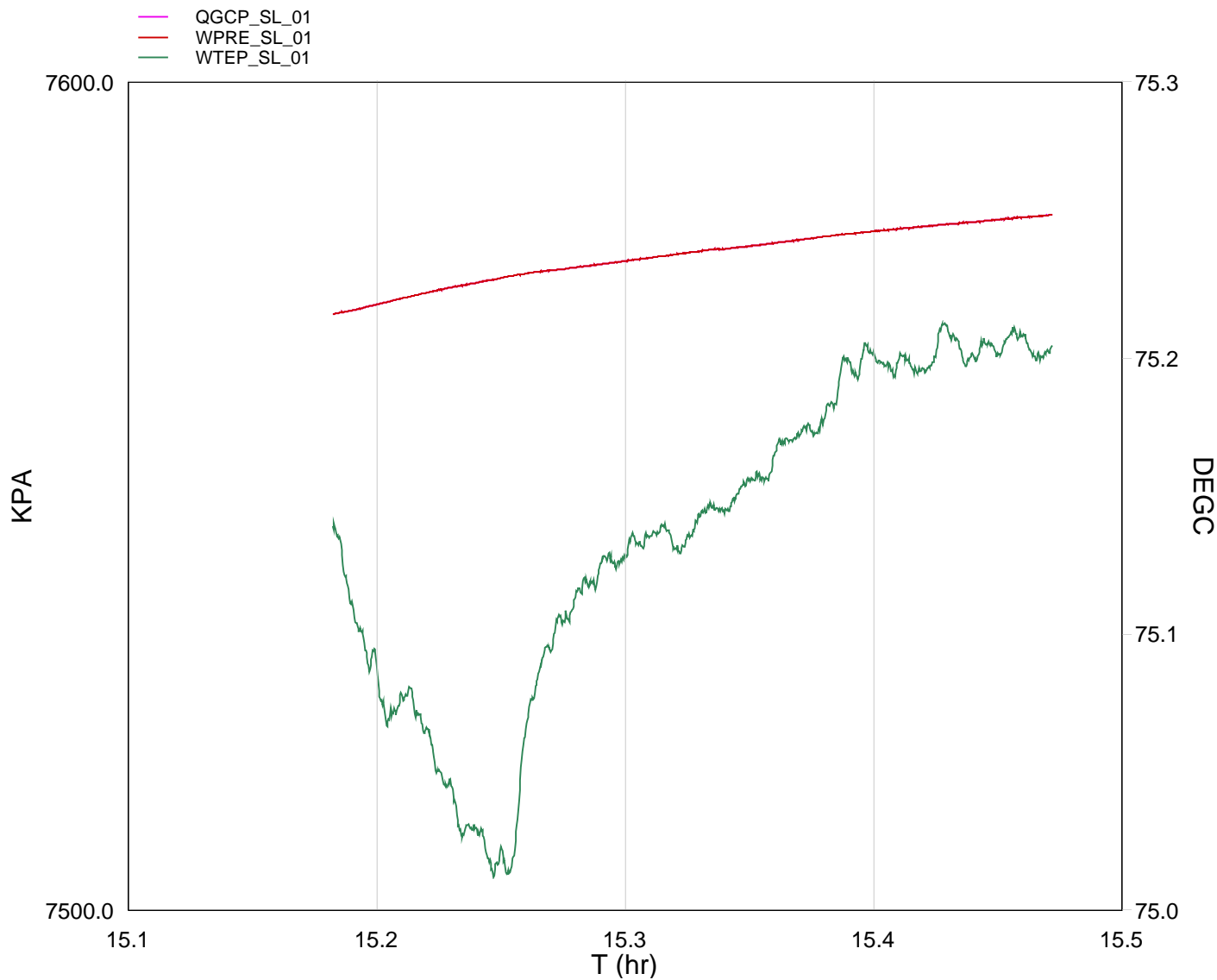


TIME	TOJ	DEGF	PSIA
10200.0000	16.1185	223.1406	1488.3036
10320.0000	16.2149	224.2012	1495.4247
10440.0000	16.2482	224.2738	1495.6708
10560.0000	16.2816	224.2201	1496.3150
10680.0000	16.3149	224.2615	1496.9089
10800.0000	16.3482	224.2105	1497.4938
10920.0000	16.3816	224.3707	1498.1076
11040.0000	16.4149	224.3772	1498.6226
11160.0000	16.4482	224.4102	1499.1053

MAXIS Field Log



TIME	TOJ	DEGF	PSIA
8400.0000	15.6815	211.4333	1195.6179
8520.0000	15.7148	211.4326	1196.6197
8640.0000	15.7481	211.4689	1197.5660
8760.0000	15.7815	211.4849	1198.3711
8880.0000	15.8148	211.5603	1199.1347
9000.0000	15.8481	211.5721	1199.8668
9120.0000	15.8815	211.6489	1200.5239

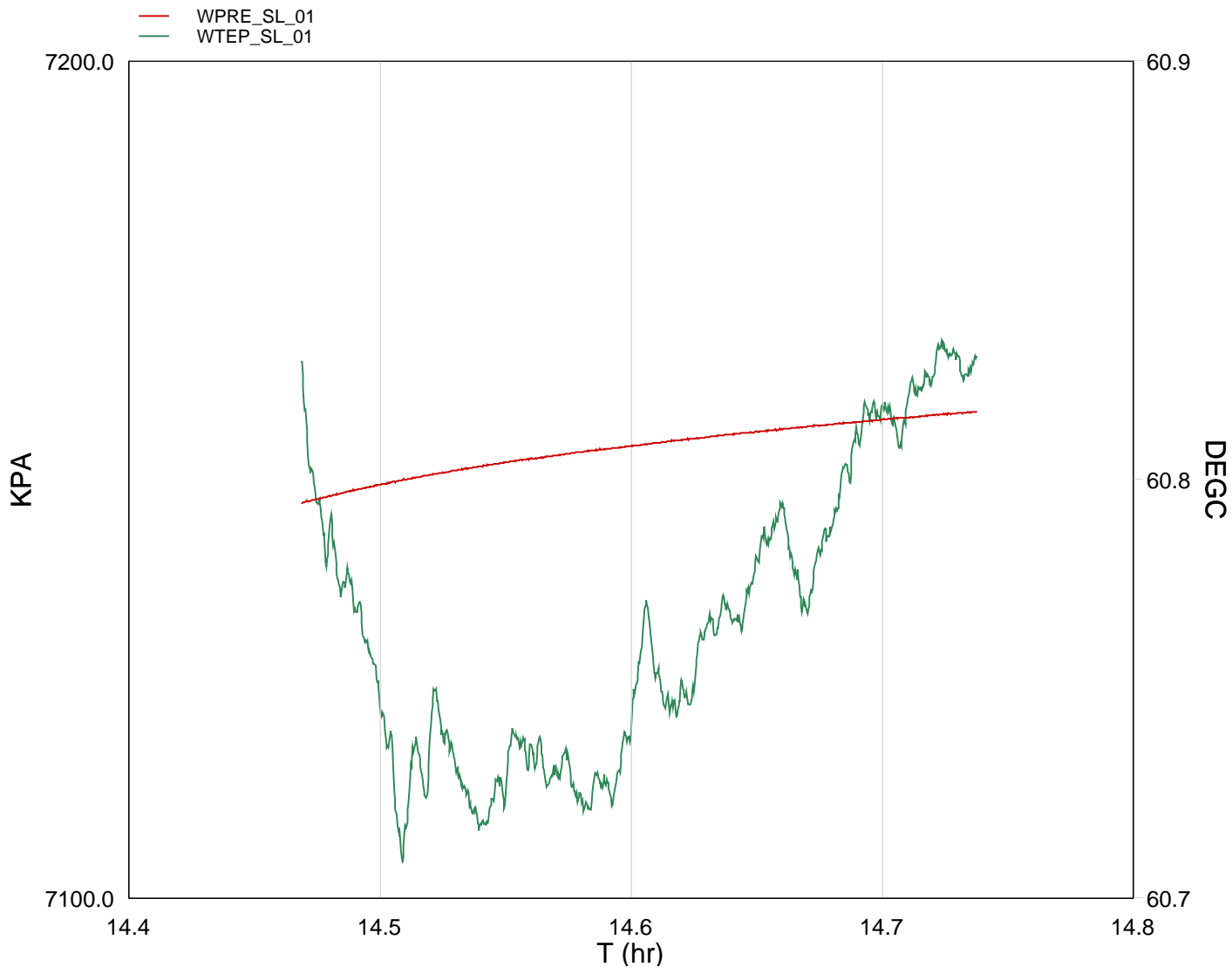


TIME	TOJ	DEGF	PSIA
6600.0000	15.1754	167.1751	1097.7328
6720.0000	15.2147	167.1371	1098.5480
6840.0000	15.2481	167.0310	1098.8404
6960.0000	15.2814	167.2098	1099.0553
7080.0000	15.3147	167.2518	1099.2382
7200.0000	15.3481	167.2785	1099.4067
7320.0000	15.3814	167.3302	1099.5873
7440.0000	15.4147	167.3568	1099.7345
7560.0000	15.4481	167.3685	1099.8742



Static Station
1000m MDKB

MAXIS Field Log

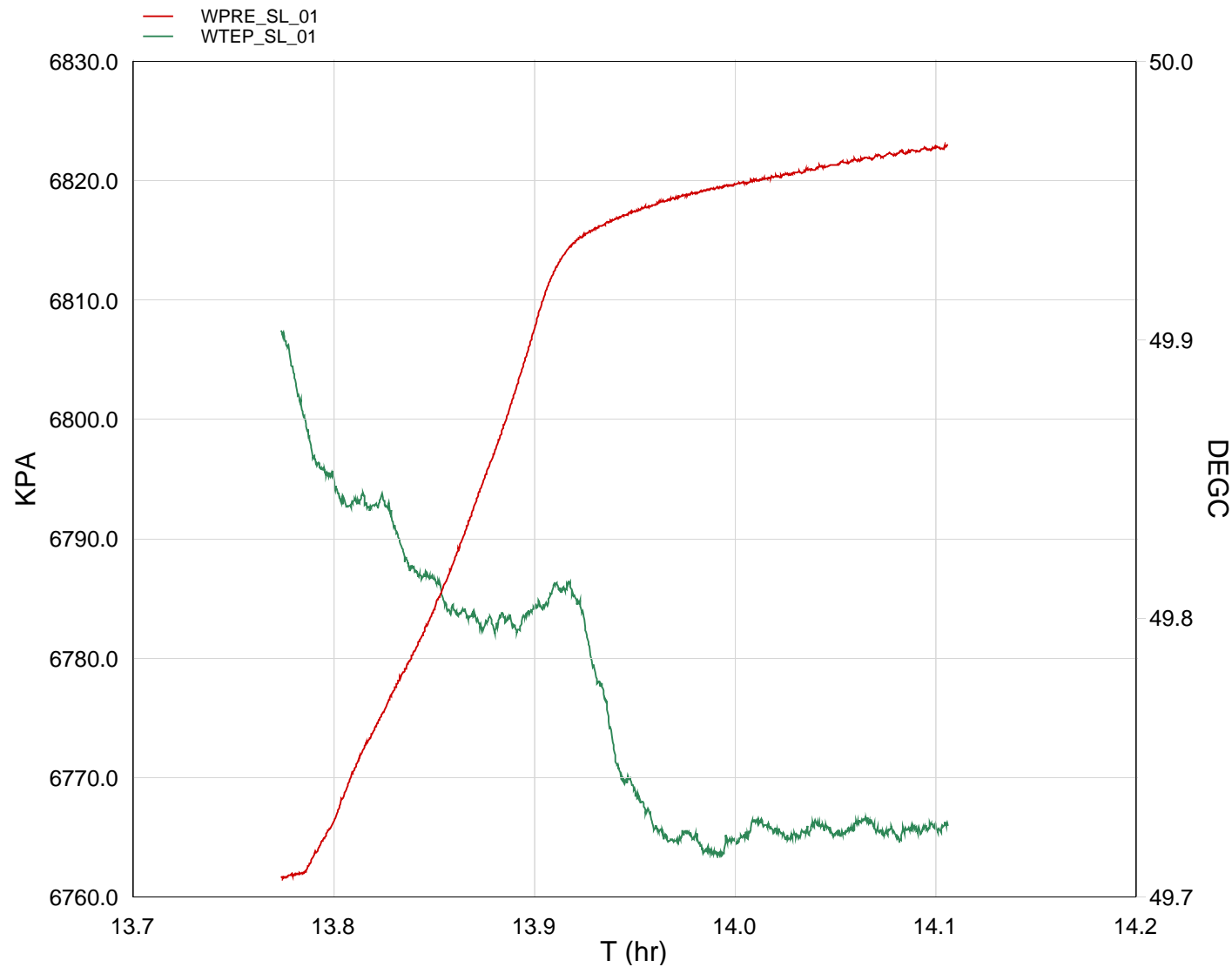


TIME	TOJ	DEGF	PSIA
4080.0000	14.4813	141.4123	1036.7522
4200.0000	14.5147	141.3274	1037.0586
4320.0000	14.5480	141.3118	1037.3043
4440.0000	14.5813	141.2983	1037.5081
4560.0000	14.6147	141.3475	1037.6805
4680.0000	14.6480	141.3956	1037.8394
4800.0000	14.6813	141.4264	1037.9865



Static Station
500m MDKB

MAXIS Field Log



TIME	TOJ	DEGF	PSIA
1560.0000	13.7814	121.7902	980.7393
1680.0000	13.8147	121.7212	982.2454
1800.0000	13.8481	121.6656	983.8350
1920.0000	13.8814	121.6371	985.9379
2040.0000	13.9147	121.6585	988.2516

2040.0000	13.9147	121.6383	988.2340
2160.0000	13.9481	121.5353	988.7724
2280.0000	13.9814	121.4979	989.0081
2400.0000	14.0147	121.5062	989.1814
2520.0000	14.0481	121.5018	989.3497
2640.0000	14.0814	121.4980	989.4906

Company: **Esso Australia Pty Ltd.**

Schlumberger

Well: **W-21a**

Field: **West Kingfish**

Rig: **Prod4**

Country: **Australia**

SBHP

FBHP

Survey