

Company: URS

Well: COP 324 #4

Field: COP 324

County: Clearfield Country: USA

Correlation Run

GR-CCL

1:200

LAND

Elev.: K.B. 2111.00 ft

G.L. 2094.00 ft

D.F. 2109.00 ft

Permanent Datum: GROUND LEVEL Elev.: 2094.00 ft

Log Measured From: Kelly Bushing 17.00 ft above Perm. Datum

Drilling Measured From: Kelly Bushing

State: PA

Max. Well Deviation 5.4 deg

Longitude 78 19' 57.2" W

Latitude 41 09' 57.2" N

PVT DATA	Oil Density	Run 1	Run 2	Run 3
	Water Salinity			
	Gas Gravity			
	Bo			
	Bw			
	1/Bg			
	Bubble Point Pressure			
	Bubble Point Temperature			
	Solution GOR			
	Maximum Deviation	5.4 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	6725 ft		
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				

County: Clearfield

Field: COP 324

Location: LAND

Well: COP 324 #4

Company: URS

LOCATION

Logging Date		11-Jul-2013				
Run Number		1				
Depth Driller		7334 ft				
Schlumberger Depth		7334 ft				
Bottom Log Interval		7300 ft				
Top Log Interval		6970 ft				
Casing Fluid Type		Water				
Salinity						
Density		8.25 lbm/gal				
Fluid Level		2250 ft				
BIT/CASING/TUBING STRING						
Bit Size		7.825 in				
From		1723.41 ft				
To		7579 ft				
Casing/Tubing Size		5.500 in				
Weight		17 lbm/ft				
Grade		N80				
From		0 ft				
To		7574 ft				
Maximum Recorded Temperatures		153 degF	153	1536		
Logger On Bottom		Time 11-Jul-2013		16:40		
Unit Number		Location 3129	SHV			
Recorded By		G. Baldovin				
Witnessed By		Lowell Warden				

## 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: Z-Trac

OS2:

OS3:

OS4:

OS5:

## RFMA

REMARKS: RUN NUMBER 1

TOC: 6725 ft

OTHER SERVICES2

OS1:

OS2:

OS3:

OS4:

OS5:

## RFMA

REMARKS: RUN NUMBER 2

RUN 1

SERVICE ORDER #:

PROGRAM VERSION:

FLUID LEVEL:

19C0-187

2250 ft

LOGGED INTERVAL

START

**STOP**

RUN 2

SERVICE ORDER #:

PROGRAM VERSION:

FLUID LEVEL:

LOGGED INTERVAL

START

STOP

EQUIPMENT	DESCRIPTION

RUN 1

RUN 2

## SURFACE EQUIPMENT

WITM-A  
PSC\_16MHZ

## DOWNHOLE EQUIPMENT

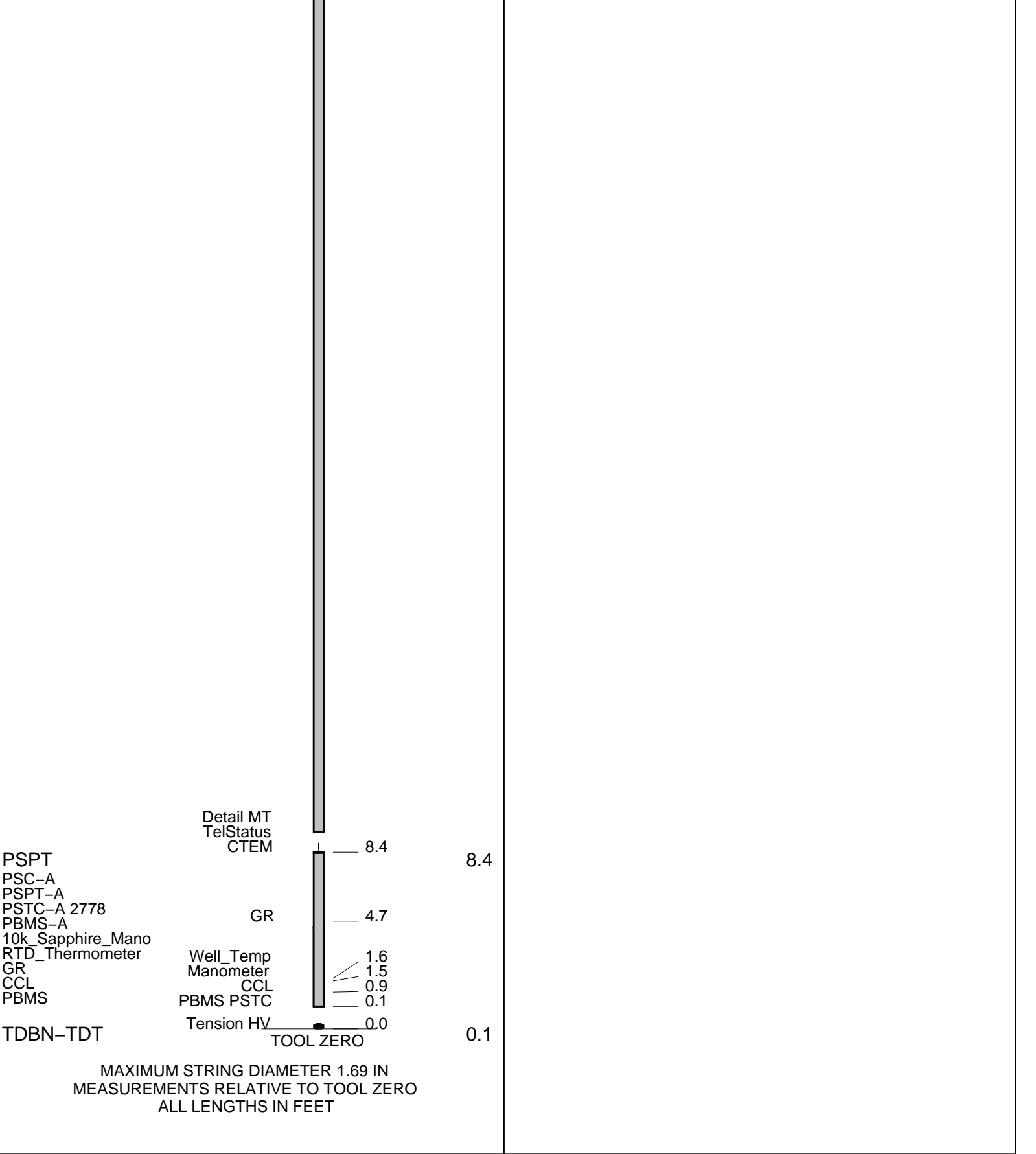
MH-22		57.4
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MH-22

AH-38		55.9
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Tracer	Value
AH-Z Trac	55.6

AH-Z Trac





Correlation Log  
1:200

MAXIS Field Log

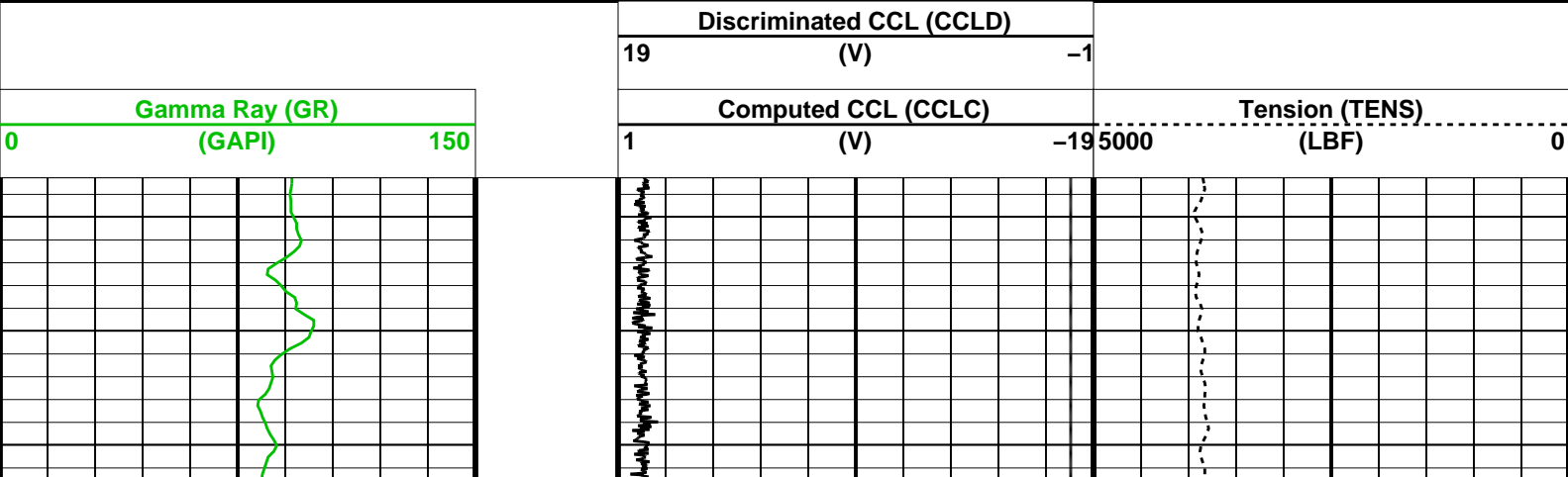
Company: URS Well: COP 324 #4

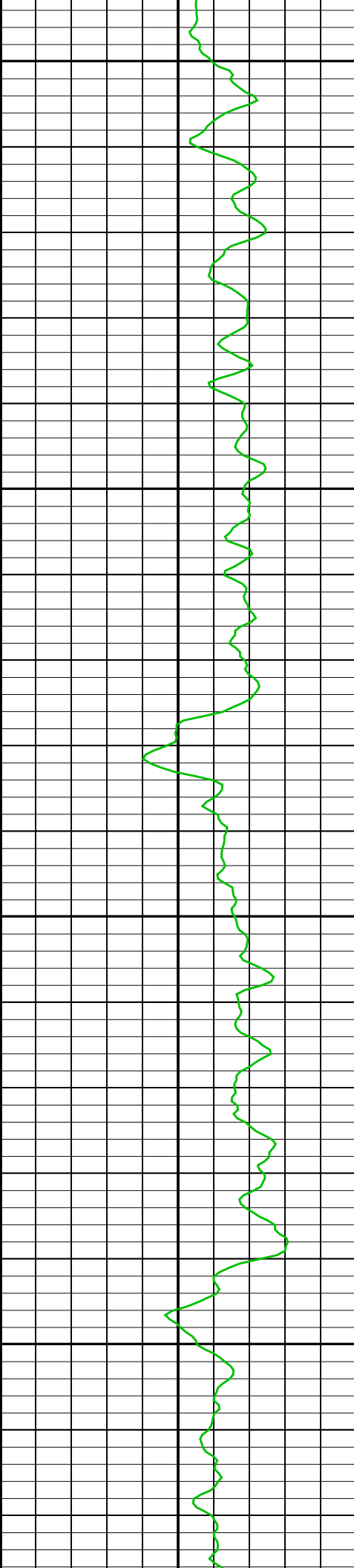
Output DLIS Files

DEFAULT	PSP_016LUP	FN:25	PRODUCER	11-Jul-2013 16:48	7300.5 FT	6966.1 FT
CLIENT	PSP_016LUC	FN:26	CUSTOMER	11-Jul-2013 16:48	7300.5 FT	6966.1 FT

OP System Version: 19C0-187

PSPT unofficial



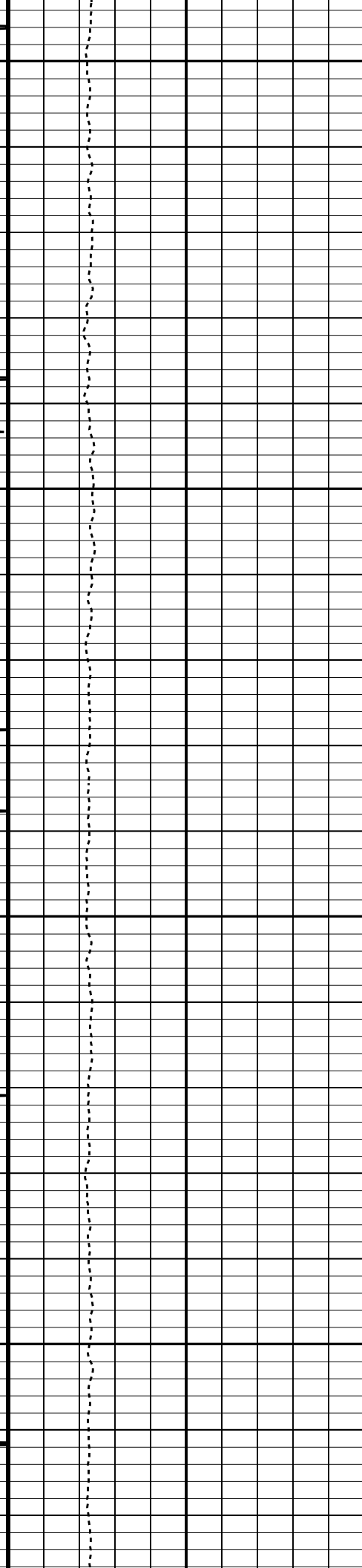
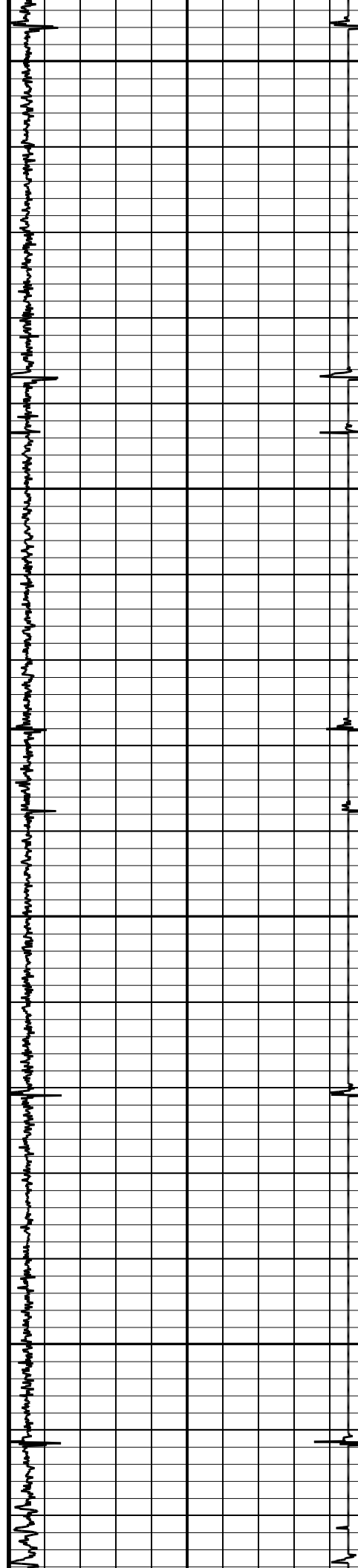


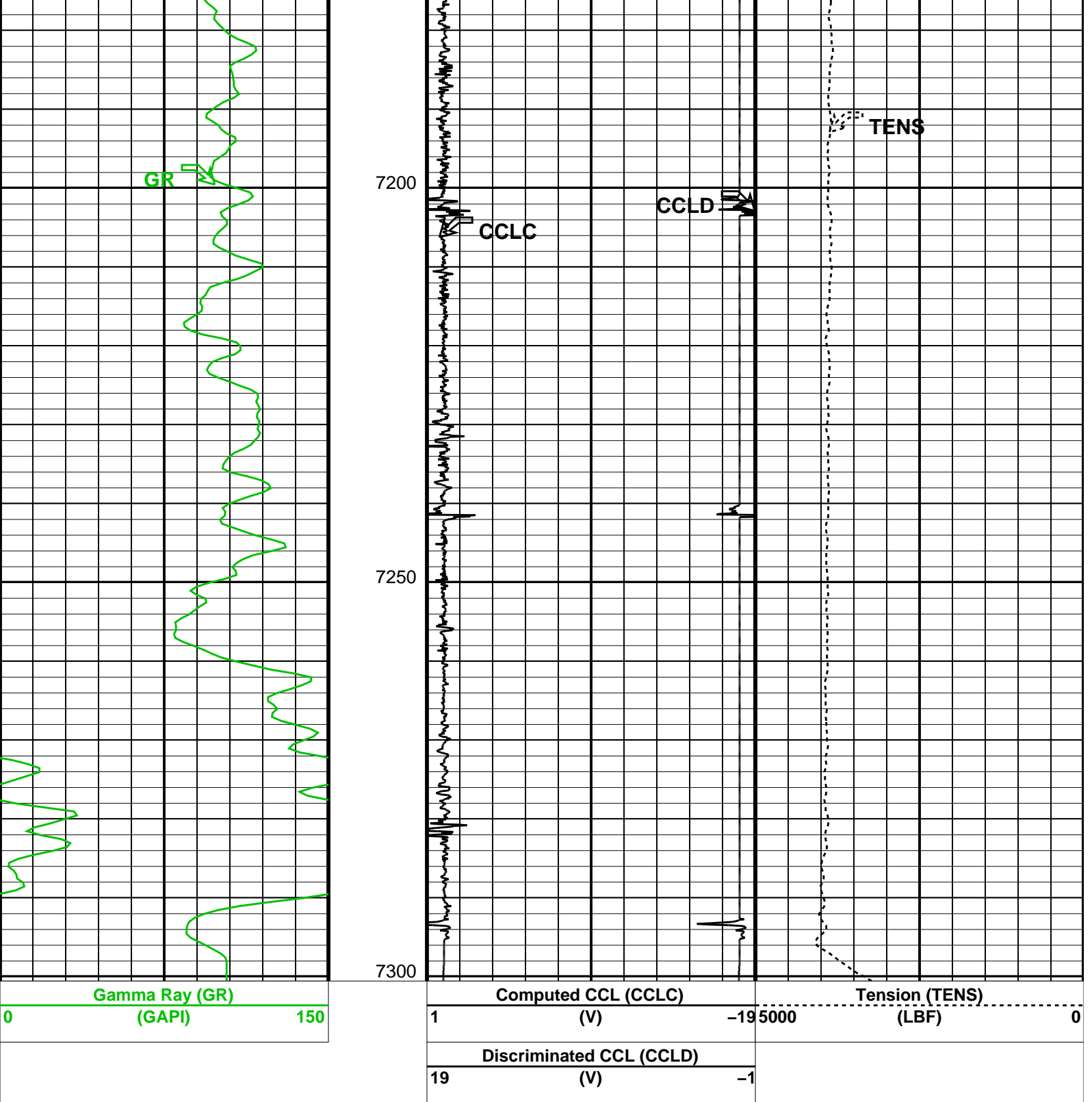
7000

7050

7100

7150





Format: CORRELATION		Vertical Scale: 6" per 100'		Graphics File Created: 11-Jul-2013 16:48	
OP System Version: 19C0-187					
PSPT	unofficial				
Output DLIS Files					
DEFAULT	PSP_016LUP	FN:25	PRODUCER	11-Jul-2013 16:48	
CLIENT	PSP_016LUC	FN:26	CUSTOMER	11-Jul-2013 16:48	

## MAXIS Field Log

Client:	Tool:	PSP
Field:	Sub Type:	PBMS
Well:	Sensor:	Clock Model
Run date:		

## PBMS Digitalization Clock

Sonde Serial NB

Sensor Serial NB 2778

Calib Date ddmmyy 140607

Matrix Size 16

Coeff CRC 0C6D

## Clock Coeff

	Temp**0	Temp**1	Temp**2
Temp**0	-.657081471519E+03	+.999952798498E+01	-.348106636307E+00
	Temp**3	Temp**4	Temp**5
Temp**0	+.292133490712E-02	-.410197777170E-05	0.0

Client:	Tool:	PSP
Field:	Sub Type:	PBMS
Well:	Sensor:	Sapphire
Run date:		

## PBMS Sapphire 10kPsi Gauge

Sonde Serial NB

Sensor Serial NB 2778

Calib Date ddmmyy 140607

Matrix Size 66

Coeff CRC A8E7

## COEFFICIENTS FOR SAPPHIRE PBMS-A.2778 S/N:

Pres Coeff

	Tt**0	Tt**1	Tt**2
Tp**0	−.228496738001E+04	+.142022941096E+04	−.789131478256E+03
Tp**1	−.817322244947E+03	+.171410489937E+04	−.307085051533E+03
Tp**2	+.363537879730E+02	−.107705370767E+02	−.126301827738E+01
Tp**3	−.390254977260E+01	+.121052841329E+01	0.0
Tp**4	0.0	0.0	0.0
Tp**5	0.0	0.0	0.0
	Tt**3	Tt**4	Tt**5
Tp**0	+.140991644707E+03	−.926236843647E+01	0.0
Tp**1	+.452504600344E+02	−.275286789455E+01	0.0
Tp**2	0.0	0.0	0.0
Tp**3	0.0	0.0	0.0
Tp**4	0.0	0.0	0.0
Tp**5	0.0	0.0	0.0

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB :  
Sensor Serial NB 2778  
Calib Date ddmmyy 140607  
Matrix Size 66  
Coeff CRC 51C6

Temp Coeff

	Tp**0	Tp**1	Tp**2
Tt**0	−.397886717618E+03	−.487511159977E+01	−.122880174697E+01
Tt**1	+.162909098084E+03	+.573255760881E+01	+.697649393470E+00
Tt**2	−.160462810837E+02	−.194148427207E+01	−.139872188791E+00
Tt**3	+.176811551429E+01	+.219482541764E+00	0.0
Tt**4	0.0	0.0	0.0
Tt**5	0.0	0.0	0.0
	Tp**3	Tp**4	Tp**5
Tt**0	−.352034448718E+00	+.514953905461E−01	0.0
Tt**1	+.140900808897E+00	−.186263567072E−01	0.0
Tt**2	0.0	0.0	0.0
Tt**3	0.0	0.0	0.0
Tt**4	0.0	0.0	0.0
Tt**5	0.0	0.0	0.0



Client:

Field:

Well:

Run date:

Tool:

Sub Type:

Sensor:

PSP

PBMS

GR

PBMS Gamma Ray

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

RESISTORS FOR GR SENSOR N.34141,TOOL PBMS-AA2778. SENSOR S/N:

34141

100504

12

FE95

GR HV Rt

	Rt**0	Rt**1
Rt**0	+.200000000000e+04	+.178000000000e+04

Client:

Field:

Well:

Run date:

Tool:

Sub Type:

Sensor:

PSP

PBMS

WellTemp RTD

PBMS RTD Well Thermometer

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR RTD THERMOMETER PBMS-A.2778 S/N:

2778

140607

16

4F82

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	-.328841373142E+04	+.332020802117E+04	-.130253734691E+04

	Tt**3	Tt**4	Tt**5
Tt**0	+.234006627086E+03	-.156590106464E+02	0.0

Company: URS

Schlumberger

Well: COP 324 #4  
Field: COP 324  
County: Clearfield  
Country: USA

Correlation Run  
GR-CCL  
1:200