

# BAKER HUGHES

## TEMPERATURE LOG

Baker Atlas

FILE NO:

COMPANY

SIERRA GEOTHERMAL POWER, INC.

API NO:

WELL

ALUM 25-29

27-008-80074

FIELD

ALUM

STATE NEVADA

Ver. 3.87

LOCATION:

SITE: 2235.18' FSL & 938.11' FWL

TIGHT HOLE

SEC 29

TWP 1N

RGE 28.5 E

OTHER SERVICES

HOIL

ZOL/CN

XMAC

STAR/CBIL

PERMANENT DATUM

G.L.

ELEVATION

4803.57 FT

LOG MEASURED FROM

K.B.

18.0 FT

ABOVE P.D.

DRILL MEAS. FROM

K.B.

ELEVATIONS:

KB 4919.57 FT

DF

OL 4803.57 FT

DATE	25-NOV-2008	25-NOV-2008
RUN	2	2
TRIP	1	4
SERVICE ORDER	575896	575896
DEPTH DRILLER	3314 FT	3314 FT
DEPTH LOGGER	3313 FT	3312 FT
BOTTOM LOGGED INTERVAL	3311 FT	3310 FT
TOP LOGGED INTERVAL	380 FT	680 FT
CASING DRILLER	10.75 IN	10.75 IN
CASING LOGGER	2280 FT	2280 FT
BIT SIZE	9.875 IN	9.875 IN
TYPE OF FLUID IN HOLE	LSND	LSND
DENSITY	8.8 LB/G	8.8 LB/G
VISCOSITY	40 S	40 S
PH	9.7	9.7
FLUID LOSS	6 G3	6 G3
SOURCE OF SAMPLE	FLOWLINE	FLOWLINE
RM AT MEAS. TEMP.	0.885 CHM	0.885 CHM
RM AT MEAS. TEMP.	0.826 CHM	0.826 CHM
RM AT MEAS. TEMP.	0.8754 DEGF	0.8754 DEGF
RM AT MEAS. TEMP.	1.018 CHM	1.018 CHM
RM AT MEAS. TEMP.	0.88.90 DEGF	0.88.90 DEGF
SOURCE OF RMF	MEASURED	MEASURED
RM AT BHT	0.278 CHM	0.268 CHM
RM AT BHT	0.232 DEGF	0.238 DEGF
TIME SINCE CIRCULATION	9.75 HOURS	21.75 HOURS
MAX. RECORDED TEMP.	232 DEGF	238 DEGF
EQUIP. NO.	IN-4232	IN-4232
LOCATION	FALLON, NV	FALLON, NV
RECORDED BY	C. PEAVEY	C. PEAVEY
WITNESSED BY	J. HANBLIN	J. HANBLIN

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

### REMARKS

- RUN 2 TRIP 1 : TEMP1 WAS RECORDED ON 1ST TRIP IN THE HOLE: 9.75 HOURS SINCE CIRCULATION
- A MAXIMUM READING THERMOMETER WAS RUN AS WELL AND THE MAXIMUM TEMPERATURE IT REACHED WAS: 232 DEGF
- THANK YOU FOR CHOOSING BAKER ATLAS!
- CREW: R. DANKLEFSSEN AND J. HAYCOCK
- RIG: ENSIGN 581
- RUN 2 TRIP 4 : TEMP4 WAS RECORDED ON 2ND TEMP LOG (4TH TRIP IN WELL): 21.75 HOURS SINCE CIRCULATION
- A MAXIMUM READING THERMOMETER WAS RUN AS WELL AND THE MAXIMUM TEMPERATURE IT REACHED WAS: 238 DEGF
- THANK YOU FOR CHOOSING BAKER ATLAS!
- CREW: R. DANKLEFSSEN AND J. HAYCOCK
- RIG: ENSIGN 581

EQUIPMENT DATA					
RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	1	SNVL	3944KD	10163944	FREE
2	1	TIRM	3981XA	10217216	FREE
2	1	WTS	3514KB	10200359	FREE
2	1	DSL	1329XA	10203000	FREE
2	4	SNVL	3944KD	10163944	FREE
2	4	TIRM	3981XA	10217216	FREE
2	4	WTS	3514KB	10200359	FREE
2	4	DSL	1329XA	10203000	FREE

## MAIN LOG 2"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008  
Updates: 1,43

Thu Nov 26 07:07:42 2009

Perplf /main/62

Cplot

Pdf\_Cpp /main/16

Fileview 5.42

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/575996/k771101.prm  
LOGGING MODE: DEPTH DIRECTION: DOWN  
TOP DEPTH: 398.381 ft BOTTOM DEPTH: 3318.000 ft

#### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TENSION	FILTER ( )	medium (1)		TOP	BOTTOM
GR	FILTER ( )	medium (1)		''	''

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/575996/k771111.prm  
LOGGING MODE: DEPTH DIRECTION: DOWN  
TOP DEPTH: 678.498 ft BOTTOM DEPTH: 3318.500 ft

#### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TENSION	FILTER ( )	medium (1)		TOP	BOTTOM
GR	FILTER ( )	medium (1)		''	''

### CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:GR	GR	Nov 24 23:56:10 2009	GAMMA RAY
F1:TEMP1	TEMP1	Nov 24 23:56:10 2009	TEMPERATURE OUTSIDE FLASK
F1:TEN	TEN	Nov 24 23:56:10 2009	DIFFERENTIAL TENSION

### CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
GR	2.50	TEMP1	16.25	TEMP4	16.25	TEN	0.00

Presentation : cput:/data/575996/TEMP\_TEMP\_1\_4.pdf [2"/100' Scale]  
Plot Interval : 680 - 3314.75 Feet

Data File 1 : F1: cput:/data/575996/8\_TEMP\_1.xdf  
Created On : Nov 24 23:56:10 2009  
Company : SIERRA GEOTHERMAL POWER, INC.  
W.H. : 41854 PC - 00

Well : ALUM 25-29  
Field : ALUM  
File Interval : 382.5 - 3316 Feet  
Oct : k7711

Data File 2 : F2 : c:\p1\data\575886\8\_TEMP\_2.xdf  
Created On : Nov 25 12:11:56 2008  
Company : SIERRA GEOTHERMAL POWER, INC.  
Well : ALUM 25-29  
Field : ALUM  
File Interval : 684.25 - 3318.5 Feet  
Oct : k7711

# GR BACKUP

GAMMA RAY [gr]

0 200

GR

FEET

700

800

900

1000

# TOOL STICKING

DIFF. TENSION [tan]

4750 -250

100

TEMP1 [temp1]

300

(degF)

100

TEMP1 [temp4]

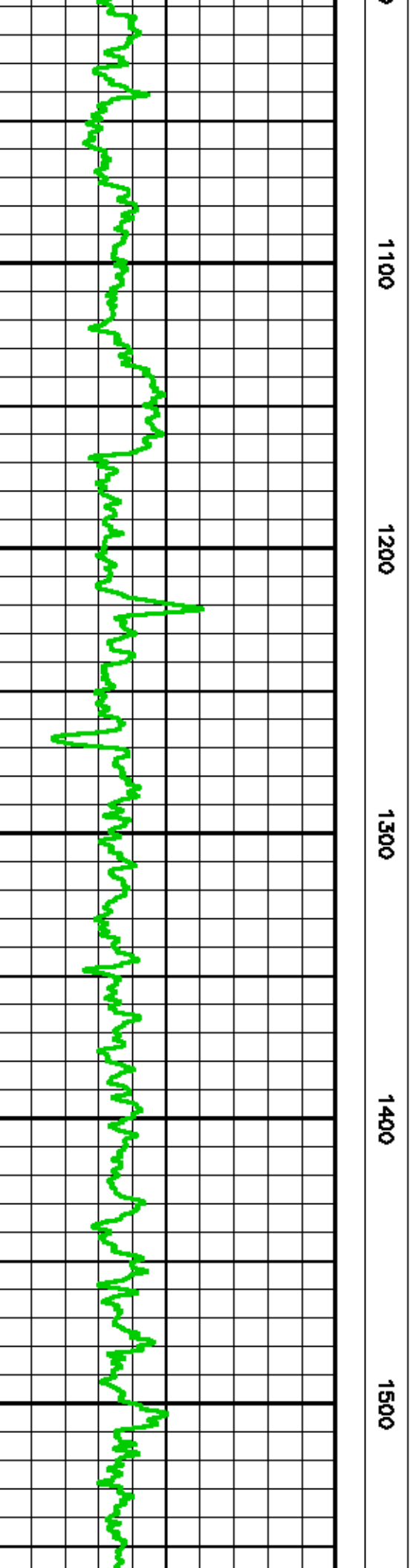
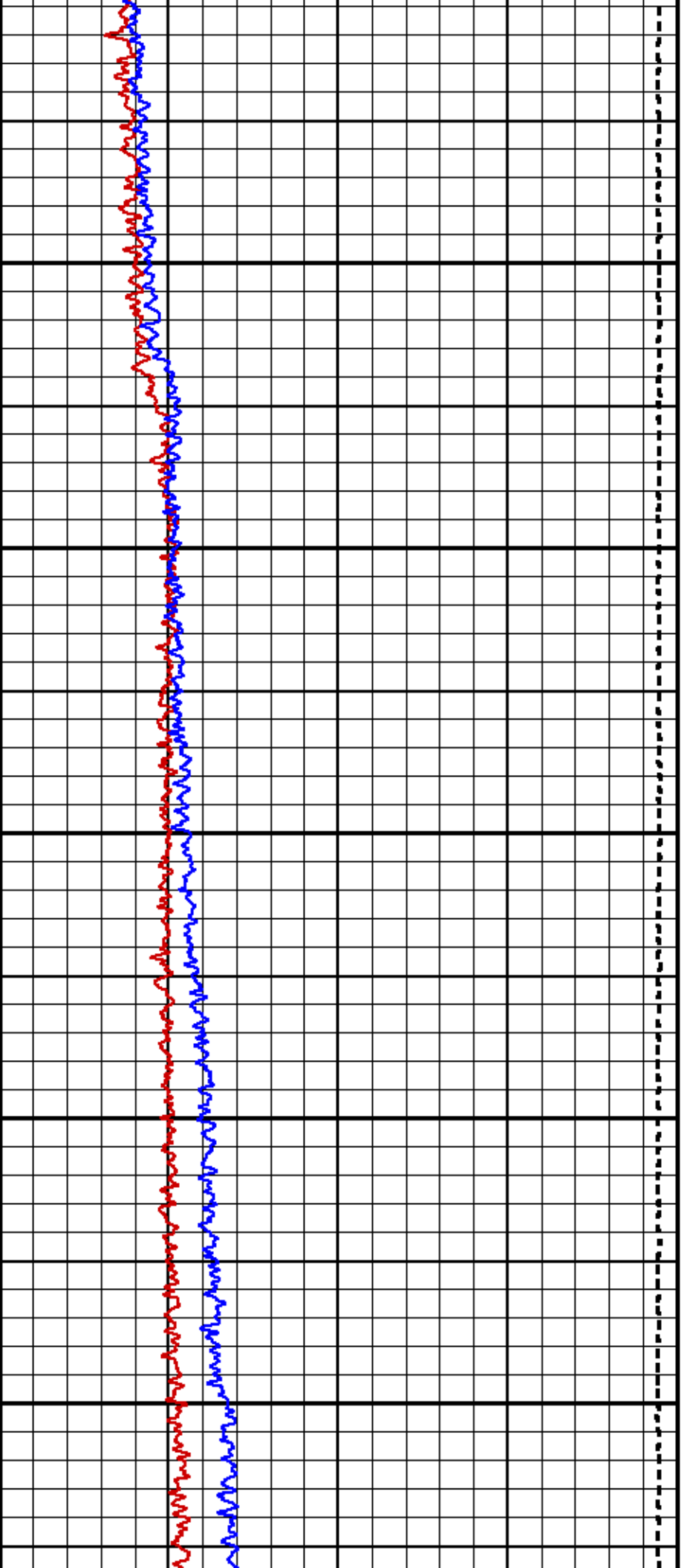
300

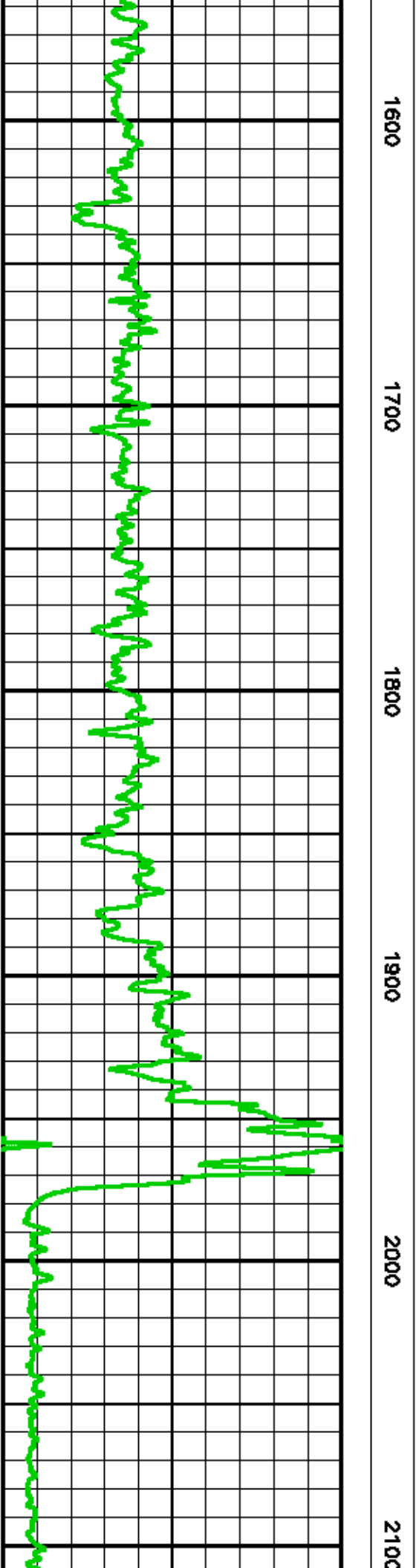
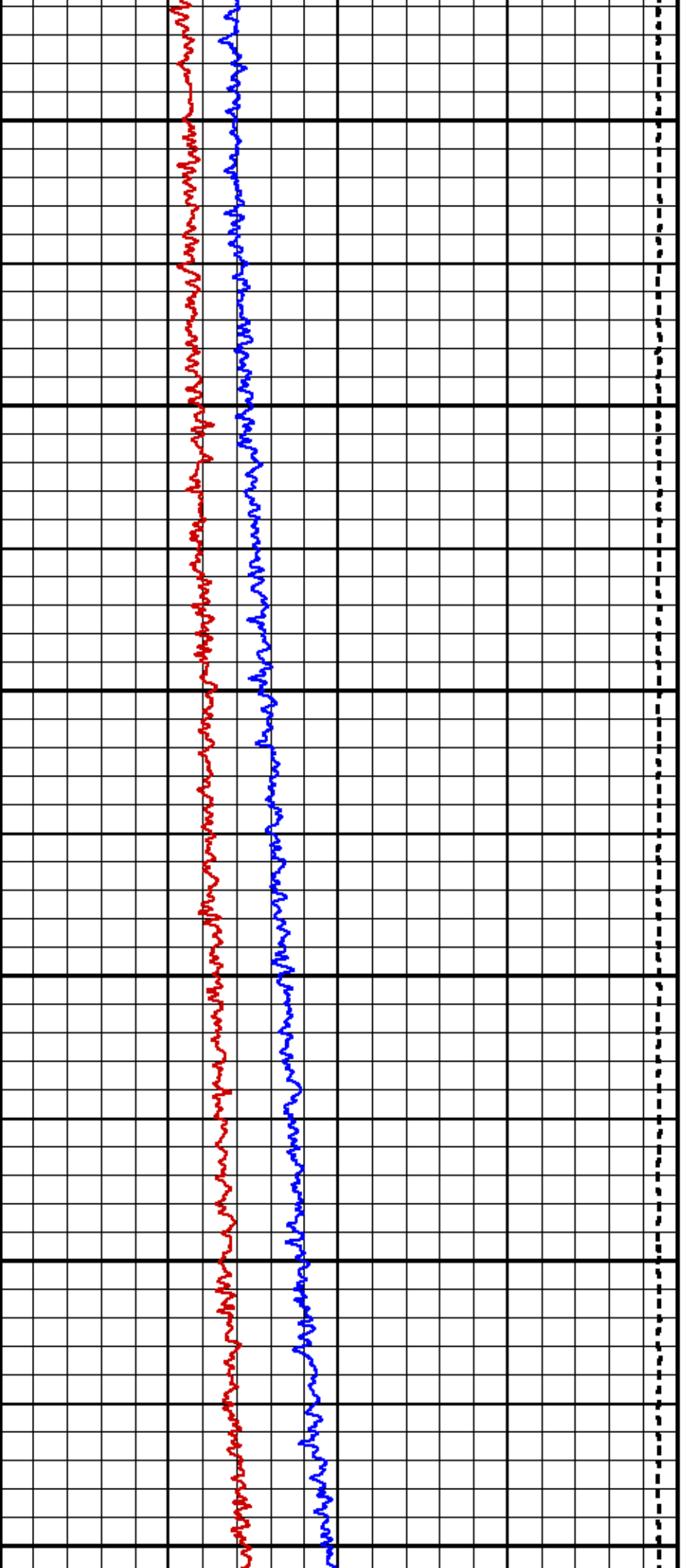
(degF)

TEMP1

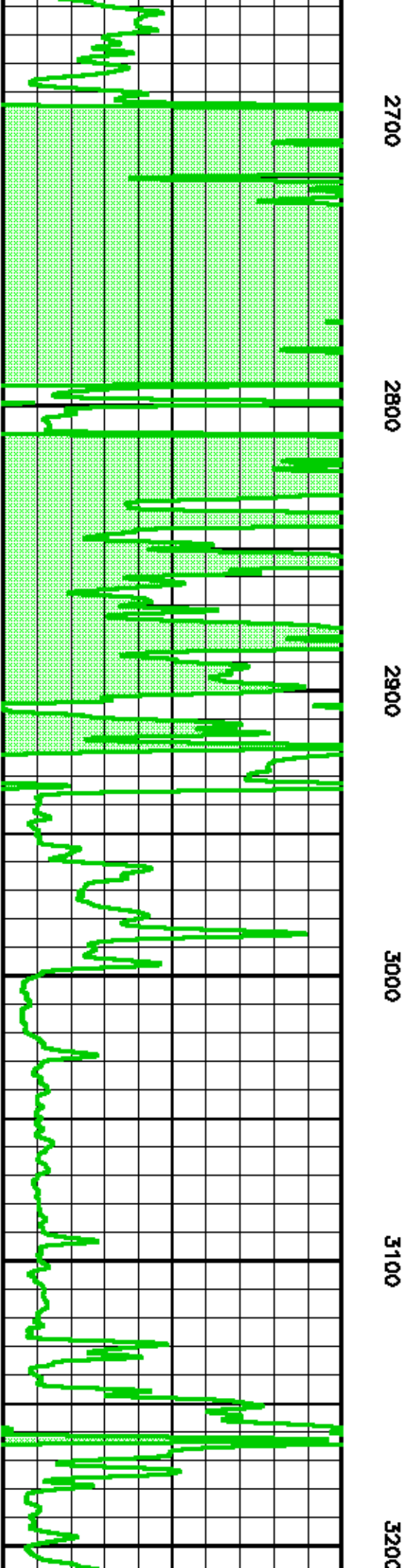
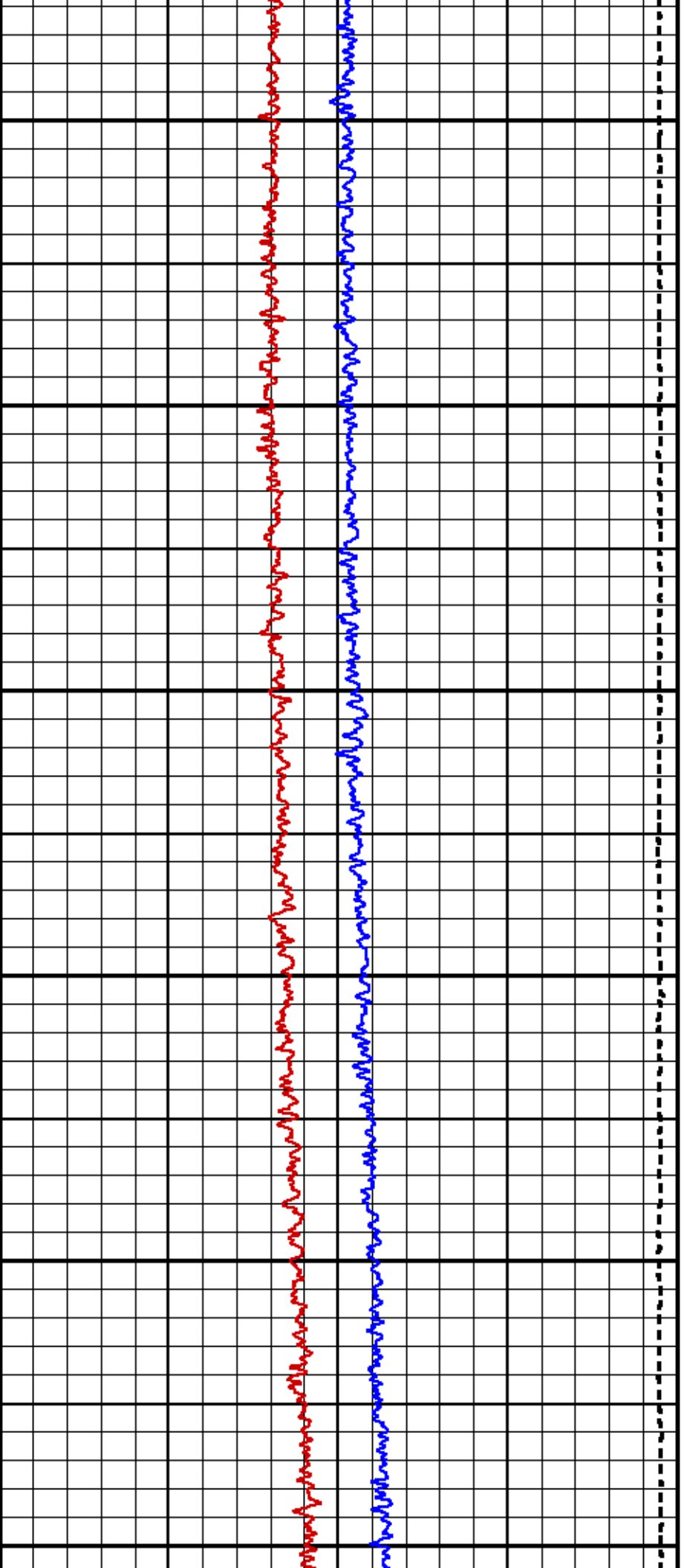
TEMP4

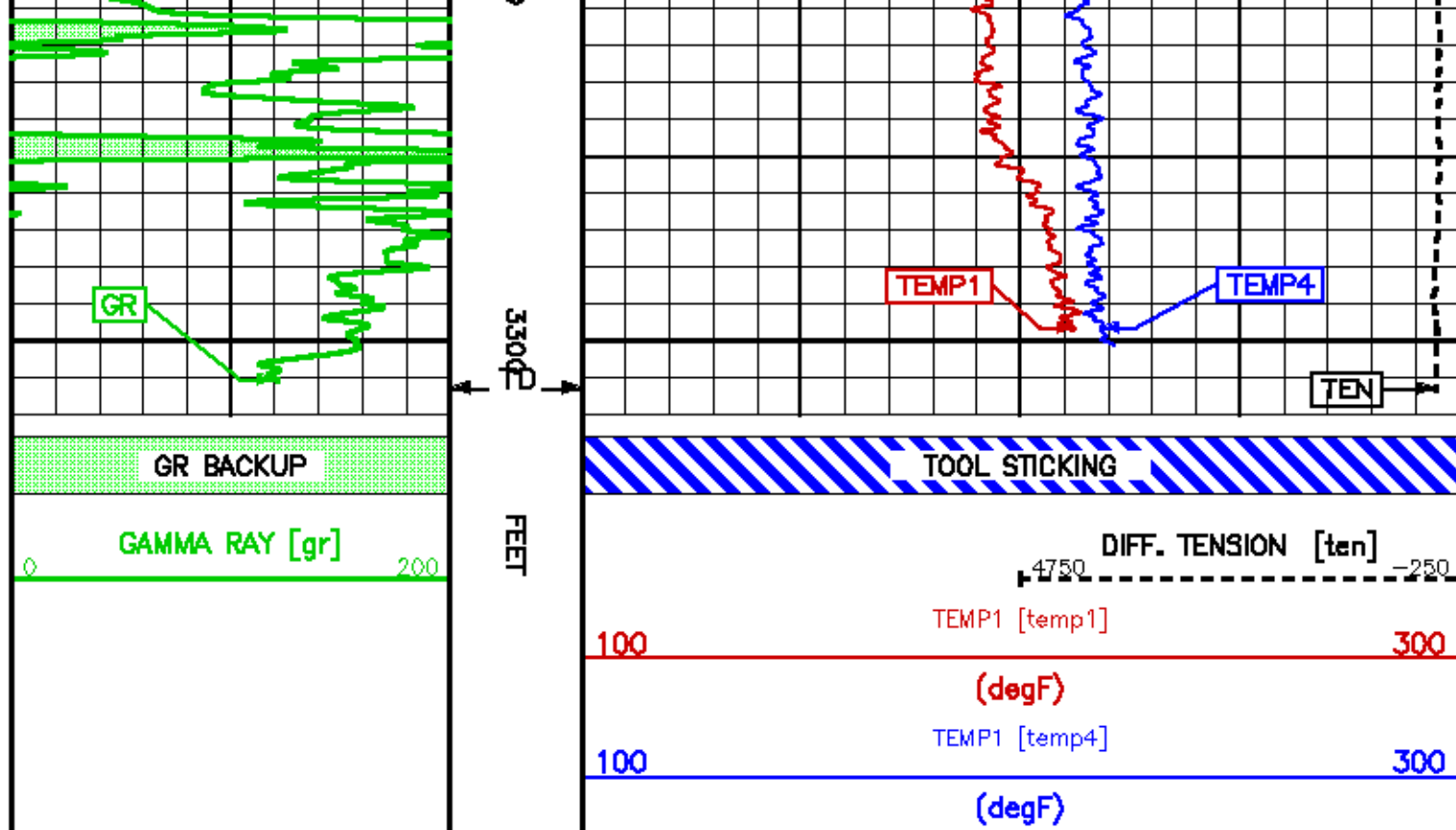
TEN













 <b>Baker Atlas</b> 	COMPANY <u>SIERRA GEOTHERMAL POWER, INC.</u> WELL <u>ALUM 25-29</u> FIELD <u>ALUM</u> COUNTY <u>ESMERALDA</u> STATE <u>NEVADA</u>	FILE NO: _____ API NO: <u>27-009-90074</u>
	LOCATION: SHL: <u>2235.16'</u> FSL & <u>938.11'</u> FWL SW/C _____ SEC <u>29</u> TWP <u>1N</u> RGE <u>38.5 E</u>	ELEVATIONS: KB <u>4919.57 FT</u> DF _____ GL <u>4903.57 FT</u> DATE <u>25-NOV-2009</u>