WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

COMPANY:	SOUTHERN CALIF. GAS CO.
WELL:	PORTER 26A
FIELD:	ALISO CANYON
COUNTY:	LOS ANGELES
STATE:	CALIFORNIA

WELL TYPE
GS, OG

LOCATION:
DISTRICT 2

API NUMBER: 0403721362
SEC: 28 TWN: 3N RNG: 16W

OTHER SVC:

CB

PERMANENT DATUM: GROUND LEVEL ELEV: 2505.00 FT.
LOG MEASURED FROM KB 12' ABOVE PERM DATUM
DRILLING MEASURED FROM

-ELEVATIONS-
KB: 2517.00 Ft.
DF: Ft.
GL: 2505.00 Ft.

DATE LOG RAN	03-18-2016	PRESSURE	FLOWING	INJECTION	SHUT-IN
RUN NUMBER	ONE	TUBING PSI			1207
EFFECTIVE DEPTH	8188'	CASING PSI			1247
PICKUP DEPTH	8042'	INJECTION RATE	N/A		
BOT LOGGED INT	8042'	OBSERVED RATE	N/A		
TOP LOGGED INT	100'	R/A SOURCE	N/A		
TYPE OF INJECT	NONE	ACTIVITY	N/A		
FLUID IN WELL	GAS	HALF LIFE	N/A		
FLUID LEVEL	N/A				
WELL STATUS	STATIC	PRODUCTION DATA			
MAX TEMPERATURE	157.3 F.	OIL Gr.		OIL =	
AT DEPTH	7634.5'	GAS Gr.		GAS=	
TEMPERATURE SENS	1 F/DIV.	MPP		BHP =	
LOGGING SPEED	100 FPM			WATER=	
RECORDED BY	D.PROKUSKI				
WITNESSED BY	N/A				
EMAIL TO	A. KARGAR				
DEPTH CORRELATION	LINER TOP				

Equipment Data

COLLAR LOCATOR	1.375"		
TEMPERATURE TOOL	1.375"		
AUDIO DETECTOR	1.375"		

Remarks/Survey Results

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07:00 AM - ON LOCATION
08:00 AM - RAN IN HOLE
08:00 AM - BEGIN SURVEY

SAND TAG MARKERS: 7854' TOP S4
                  7954' TOP S8
                  8064' TOP HZ
                  8118' TOP FREW
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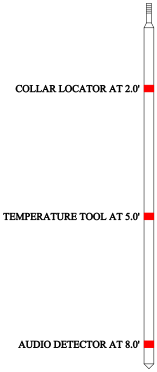
CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	54.5	SURFACE	807'	2.875"	6.5	7680.9'	7811.7'
8.625"	36.0	SURFACE	7853.7'				
6.625"	28.0	7687.4'	8188'				
3.500"	11.6	SURFACE	7680.9'				

STR.	PIPE DIA.	PERFORATIONS
A	6.625"	SLOTTED: 7852'-8135'.
		PACKER: 7687.4'-7692.2', 8136.8'-8148.4' (ECP).
		GAS LIFT MANDREL: 7571.6'-7579.6'.
		SLIDING SLEEVES: 7612.1'-7615.3', 7698.2'-7700.8'.
		ON-OFF TOOL: 7646.8'-7648.5'.
		STAGE COLLAR: 2968'.

TOOL DIAGRAM



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     Audio Data:  c:\data\noise.txt
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   DEPTH |   200HZ |   600HZ |  1000HZ |  2000HZ |
--------------------------------------------------
     100 |   18.40 |   15.30 |    9.80 |    3.60 |
     250 |   16.30 |   13.50 |    7.90 |    2.50 |
     500 |   13.60 |   11.10 |    5.40 |    1.50 |
     520 |   13.90 |   11.20 |    5.30 |    1.40 |
     540 |   13.20 |   10.50 |    5.00 |    1.50 |
     560 |   13.20 |   10.50 |    4.70 |    1.30 |
     580 |   13.00 |   10.50 |    4.80 |    1.20 |
     600 |   13.30 |   10.60 |    4.90 |    1.30 |
     620 |   13.00 |   10.40 |    4.50 |    1.20 |
     640 |   13.40 |   10.70 |    4.70 |    1.20 |
     660 |   12.90 |   10.20 |    4.30 |    1.10 |
     680 |   12.90 |   10.20 |    4.10 |    1.10 |
     700 |   12.70 |   10.00 |    4.30 |    1.30 |
     720 |   12.40 |    9.80 |    4.10 |    1.10 |
     740 |   12.20 |    9.80 |    4.10 |    1.20 |
     760 |   12.20 |    9.70 |    4.00 |    1.10 |
     780 |   12.30 |    9.60 |    3.70 |    1.10 |
     800 |   12.10 |    9.50 |    3.70 |    1.10 |
     820 |   12.00 |    9.40 |    3.50 |    1.10 |
     840 |   11.90 |    9.30 |    3.40 |    1.10 |
     860 |   11.80 |    9.20 |    3.40 |    1.10 |
     880 |   11.70 |    9.10 |    3.20 |    1.10 |
     900 |   11.60 |    9.00 |    3.10 |    1.10 |
     920 |   11.80 |    9.20 |    3.20 |    1.10 |
     940 |   11.70 |    9.10 |    3.00 |    1.10 |
     960 |   11.70 |    9.00 |    3.00 |    1.10 |
     980 |   11.30 |    8.90 |    2.80 |    1.10 |
    1000 |   11.60 |    9.10 |    3.00 |    1.10 |
    1250 |   11.20 |    8.60 |    2.30 |    1.00 |
    1450 |   10.80 |    8.40 |    2.10 |    1.10 |
    1750 |   10.40 |    8.30 |    1.90 |    1.10 |
    2000 |   10.20 |    8.00 |    1.80 |    1.10 |
    2250 |   10.10 |    8.00 |    1.80 |    1.10 |
    2500 |    9.90 |    8.00 |    1.80 |    1.10 |
    2750 |    9.80 |    7.80 |    1.80 |    1.10 |
    3000 |    9.80 |    7.70 |    1.80 |    1.10 |
    3250 |    9.80 |    7.70 |    1.70 |    1.10 |
    3500 |    9.70 |    7.70 |    1.70 |    1.10 |
    3750 |    9.80 |    7.80 |    1.80 |    1.10 |
    4000 |   10.20 |    7.90 |    1.80 |    1.10 |
    4250 |    9.70 |    7.60 |    1.70 |    1.10 |
    4500 |   10.50 |    8.00 |    1.80 |    1.10 |
    4750 |    9.70 |    7.60 |    1.80 |    1.10 |
    5000 |   10.20 |    7.70 |    1.90 |    1.10 |
    5250 |    9.80 |    7.40 |    1.80 |    1.10 |
    5440 |    9.90 |    7.60 |    1.90 |    1.10 |
    5460 |    9.60 |    7.50 |    1.80 |    1.10 |
    5480 |    9.70 |    7.50 |    1.80 |    1.10 |
    6000 |    9.90 |    7.80 |    1.90 |    1.10 |
    5520 |   10.00 |    7.50 |    1.80 |    1.10 |
    5540 |    9.60 |    7.50 |    1.80 |    1.10 |
    5560 |    9.60 |    7.60 |    1.80 |    1.10 |
    5580 |    9.70 |    7.50 |    1.80 |    1.10 |
    5600 |    9.60 |    7.40 |    1.80 |    1.10 |
    5620 |    9.50 |    7.40 |    1.80 |    1.10 |
    5640 |   10.60 |    7.60 |    1.90 |    1.10 |
    5660 |   10.00 |    7.80 |    1.90 |    1.10 |
    5680 |    9.80 |    7.70 |    1.90 |    1.10 |
    5700 |   10.00 |    7.70 |    1.90 |    1.10 |
    5720 |    9.50 |    7.30 |    1.80 |    1.10 |
    5740 |   10.80 |    7.50 |    1.90 |    1.10 |
    5760 |    9.80 |    7.20 |    1.80 |    1.10 |
    5780 |    9.90 |    7.50 |    1.90 |    1.10 |
    5800 |    9.50 |    7.30 |    1.90 |    1.10 |
    6000 |    9.70 |    7.40 |    1.80 |    1.10 |
    6250 |    9.40 |    7.30 |    1.90 |    1.10 |
    6500 |    9.70 |    7.30 |    1.90 |    1.20 |
    6750 |    9.80 |    7.30 |    1.90 |    1.10 |
    7000 |    9.20 |    7.00 |    1.90 |    1.10 |
    7020 |    9.70 |    7.10 |    1.90 |    1.20 |
    7040 |    9.50 |    7.00 |    1.90 |    1.10 |
    7060 |   10.50 |    7.60 |    2.40 |    1.20 |
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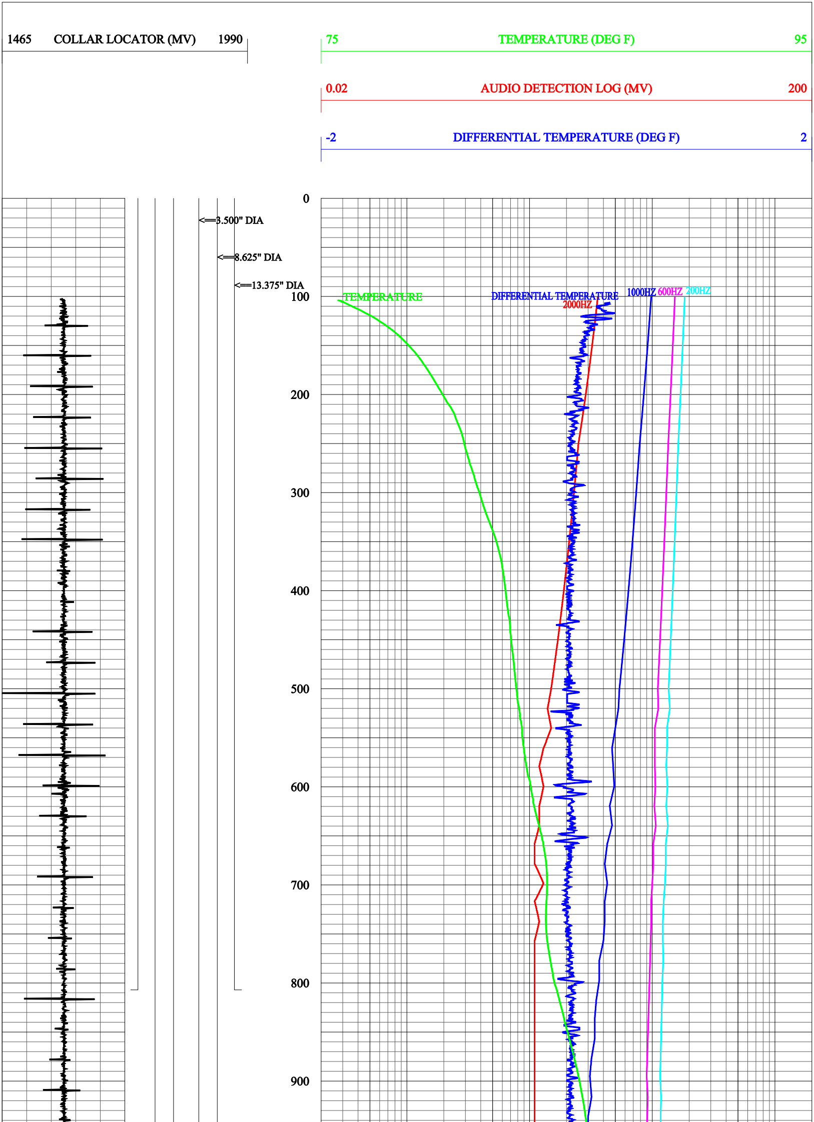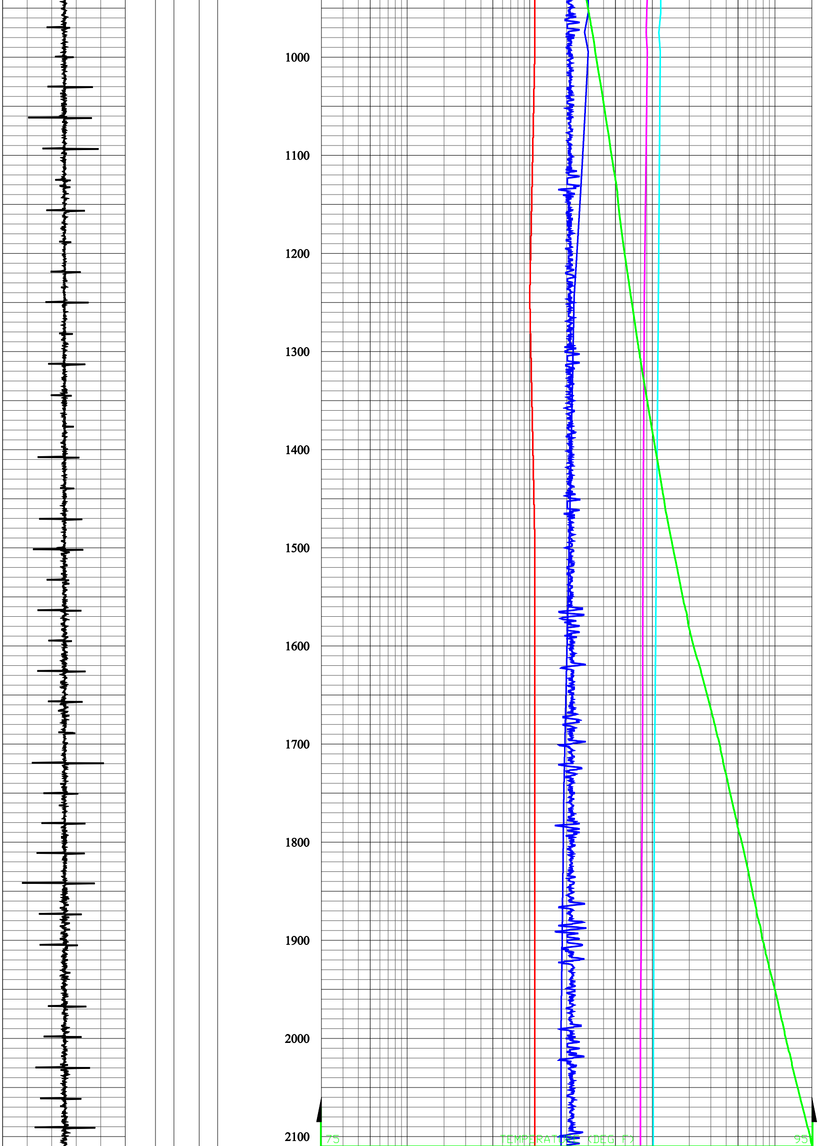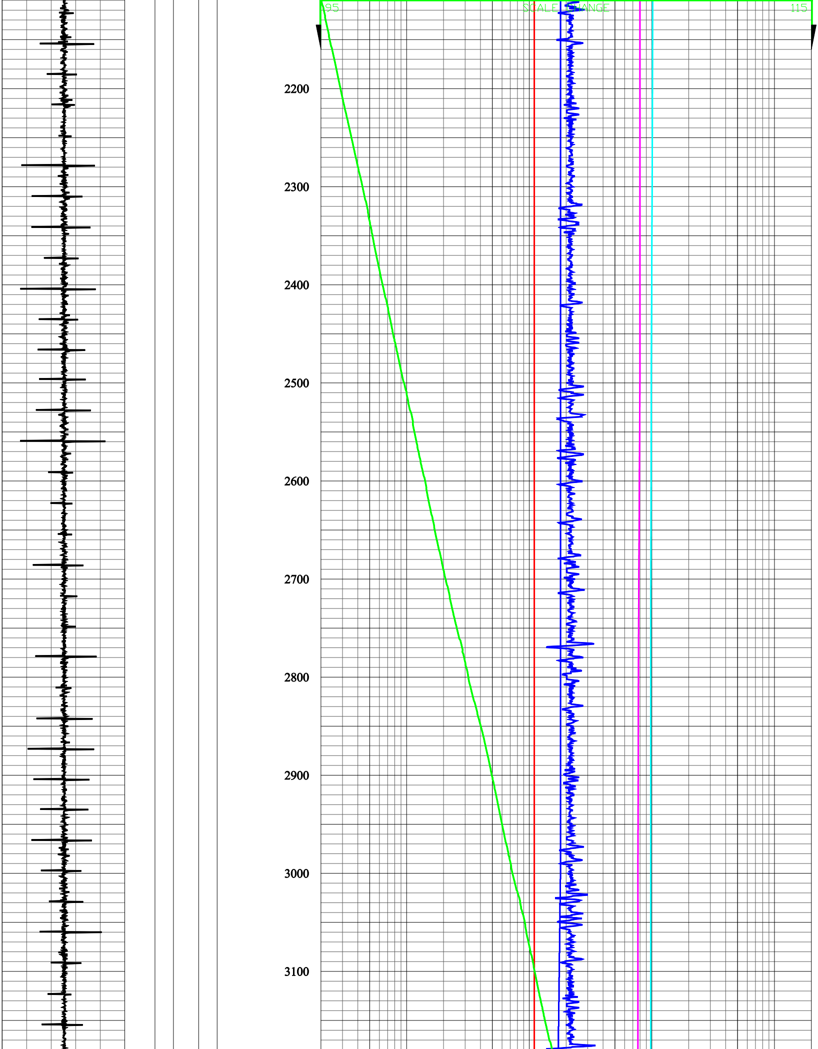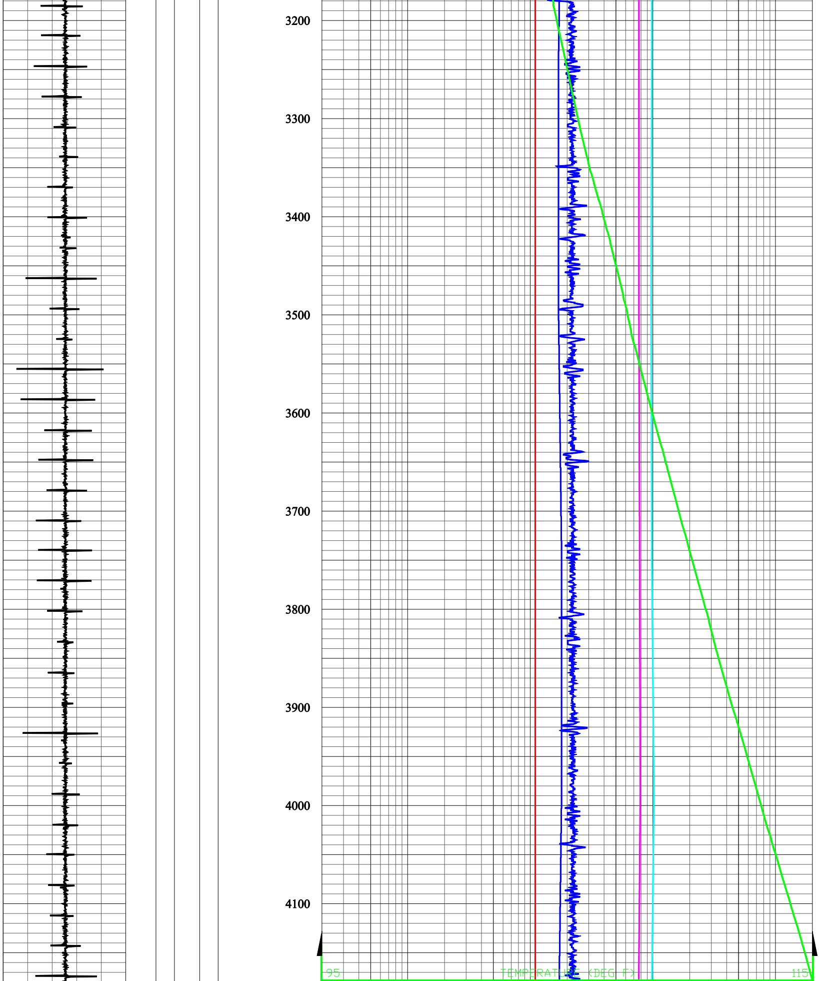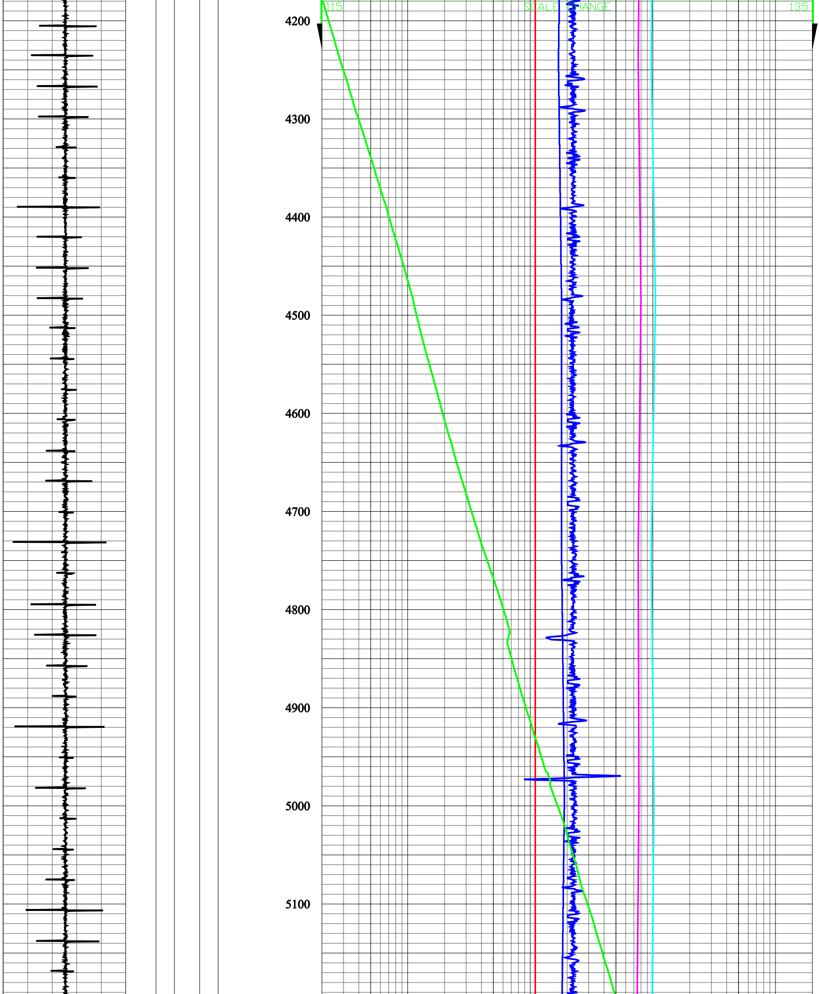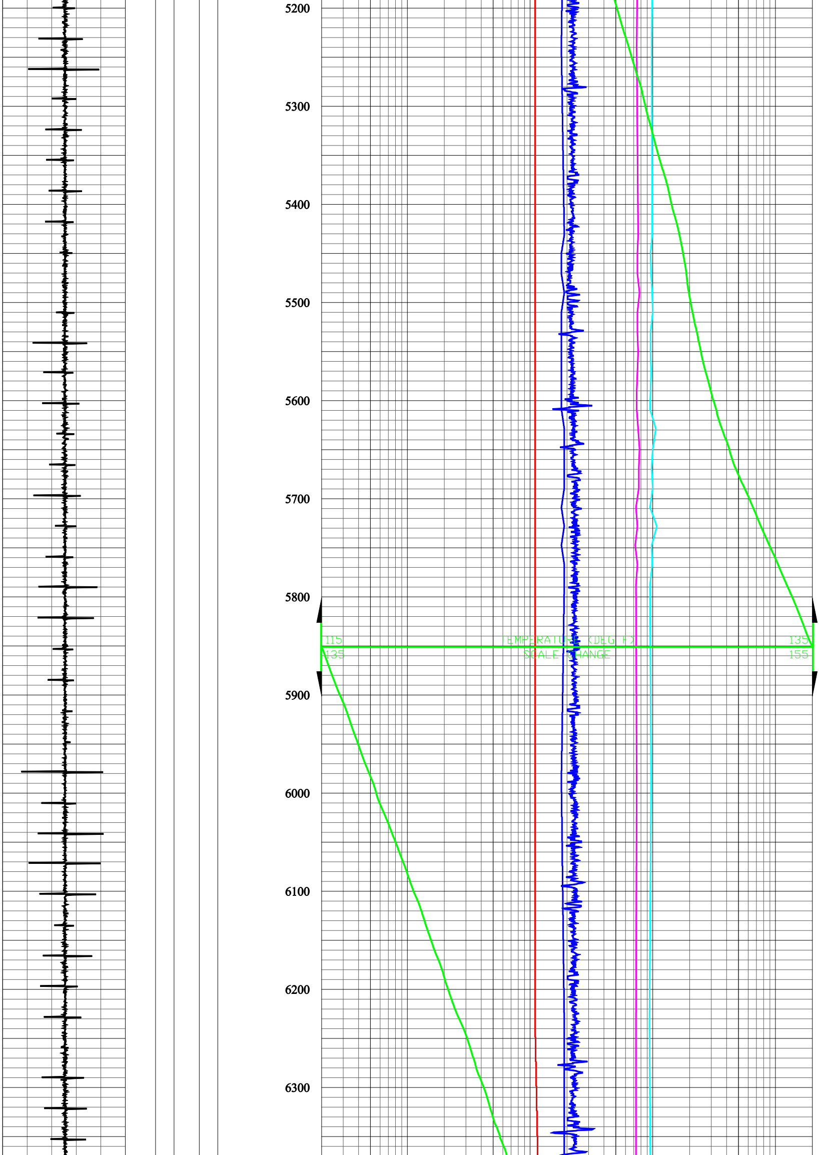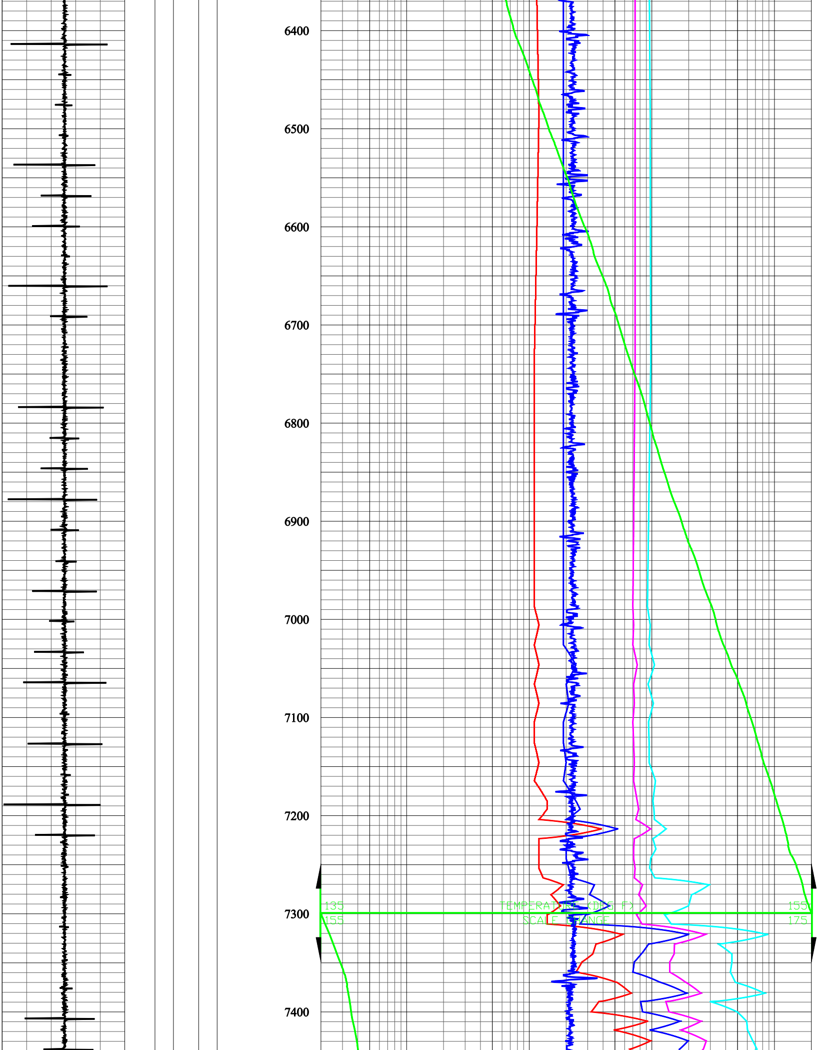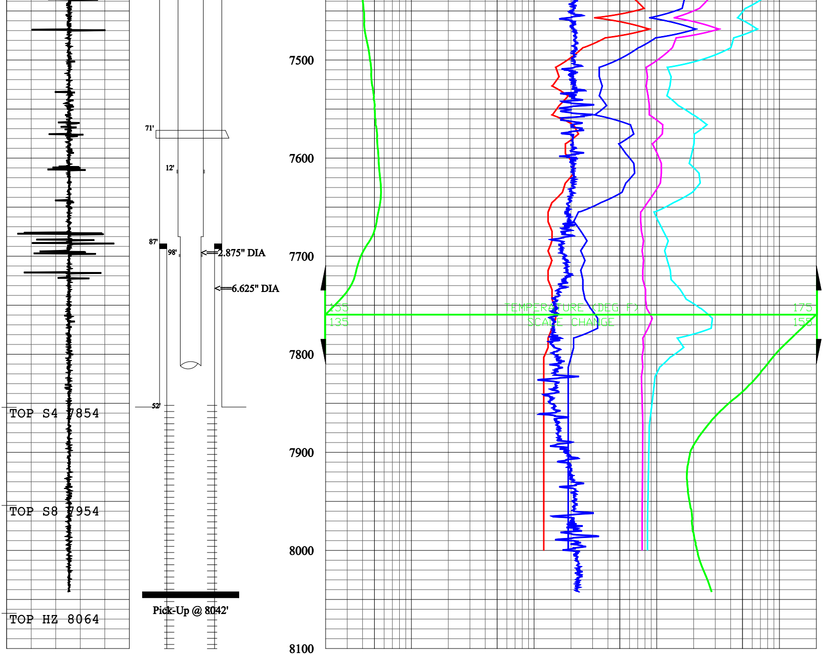```
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    7100 |   10.30 |    7.20 |    2.10 |    1.20 |
    7120 |    9.40 |    7.00 |    1.90 |    1.10 |
    7140 |    9.50 |    7.10 |    1.90 |    1.10 |
    7160 |    9.50 |    7.20 |    2.00 |    1.20 |
    7180 |   10.70 |    7.10 |    1.90 |    1.10 |
    7200 |   10.20 |    7.60 |    2.40 |    1.40 |
    7210 |   10.40 |    7.80 |    2.60 |    1.40 |
    7220 |   10.50 |    7.40 |    2.00 |    1.20 |
    7230 |   13.10 |    9.80 |    5.30 |    3.90 |
    7240 |   10.20 |    7.20 |    2.10 |    1.20 |
    7250 |   10.80 |    7.10 |    2.00 |    1.20 |
    7260 |    9.80 |    7.10 |    2.00 |    1.20 |
    7270 |    9.60 |    7.30 |    2.10 |    1.20 |
    7280 |   10.60 |    7.20 |    2.20 |    1.30 |
    7290 |   29.40 |    8.40 |    3.40 |    1.90 |
    7300 |   21.10 |    7.80 |    3.10 |    1.50 |
    7310 |   19.90 |    9.00 |    4.50 |    1.80 |
    7320 |   12.70 |    7.50 |    2.90 |    1.40 |
    7330 |   14.40 |    8.30 |    2.60 |    1.40 |
    7340 |   88.70 |   27.50 |   20.10 |    5.80 |
    7350 |   35.00 |   15.30 |    9.40 |    3.50 |
    7360 |   45.00 |   15.20 |    8.20 |    3.30 |
    7370 |   45.00 |   14.00 |    7.20 |    2.70 |
    7380 |   43.70 |   14.00 |    7.00 |    2.40 |
    7390 |   48.10 |   19.00 |   11.80 |    5.20 |
    7400 |   83.60 |   25.30 |   19.30 |    6.80 |
    7410 |   29.80 |   13.00 |    8.10 |    3.70 |
    7420 |   49.60 |   13.80 |    8.40 |    3.20 |
    7430 |   59.40 |   25.30 |   17.00 |    9.30 |
    7440 |   60.30 |   17.20 |    9.60 |    4.90 |
    7450 |   66.60 |   27.80 |   19.80 |    9.80 |
    7460 |   72.00 |   26.30 |   16.80 |    6.60 |
    7470 |   52.60 |   22.20 |   16.10 |    7.90 |
    7480 |   45.60 |   13.80 |    8.70 |    3.10 |
    7490 |   66.20 |   32.20 |   20.80 |    8.70 |
    7500 |   42.40 |   14.40 |    9.80 |    3.80 |
    7510 |   40.20 |   13.40 |    7.10 |    2.50 |
    7530 |   12.20 |    8.20 |    3.40 |    1.50 |
    7540 |   13.10 |    8.40 |    3.40 |    1.60 |
    7550 |   12.80 |    8.20 |    3.60 |    1.40 |
    7560 |   12.10 |    8.50 |    3.40 |    1.90 |
    7570 |   15.00 |    8.70 |    3.90 |    1.60 |
    7580 |   19.90 |    8.70 |    3.10 |    1.40 |
    7590 |   25.70 |   11.20 |    6.10 |    2.10 |
    7600 |   20.20 |   11.10 |    6.50 |    2.30 |
    7610 |   20.10 |    9.20 |    4.90 |    1.80 |
    7620 |   19.30 |   10.10 |    5.60 |    1.80 |
    7630 |   18.40 |   10.90 |    6.50 |    2.10 |
    7640 |   22.10 |   10.90 |    6.60 |    2.10 |
    7650 |   22.60 |   10.70 |    5.60 |    1.80 |
    7660 |   19.50 |    9.60 |    5.20 |    1.70 |
    7670 |   13.70 |    8.40 |    3.50 |    1.40 |
    7680 |    9.50 |    7.40 |    2.30 |    1.30 |
    7690 |   10.30 |    7.40 |    2.10 |    1.30 |
    7700 |   11.30 |    7.50 |    2.40 |    1.40 |
    7710 |   12.40 |    7.80 |    2.70 |    1.40 |
    7720 |   11.60 |    7.60 |    2.40 |    1.30 |
    7730 |   12.20 |    7.80 |    2.60 |    1.40 |
    7740 |   12.90 |    7.70 |    2.40 |    1.30 |
    7750 |   13.10 |    7.70 |    2.50 |    1.30 |
    7760 |   15.50 |    8.10 |    2.50 |    1.40 |
    7770 |   17.40 |    8.10 |    2.60 |    1.40 |
    7780 |   23.00 |    8.30 |    2.90 |    1.50 |
    7790 |   28.40 |    9.20 |    3.30 |    1.50 |
    7800 |   27.80 |    8.50 |    3.30 |    1.40 |
    7810 |   14.70 |    7.70 |    2.10 |    1.30 |
    7820 |   16.60 |    7.80 |    2.10 |    1.30 |
    7830 |   12.90 |    7.60 |    2.00 |    1.20 |
    7840 |   10.60 |    7.70 |    1.90 |    1.20 |
    7850 |    9.70 |    7.50 |    1.90 |    1.20 |
    7900 |    8.70 |    7.70 |    1.90 |    1.20 |
    8000 |    8.40 |    7.60 |    1.90 |    1.20 |
```