WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

WELL TYPE
GS

COMPANY: SOUTHERN CALIF. GAS CO.
WELL: STANDARD SESNON 14
FIELD: ALISO CANYON
COUNTY: LOS ANGELES
STATE: CALIFORNIA

LOCATION:
DISTRICT 2

OTHER SVC:

VS

API NUMBER: 0403700766
SEC: 28 TWN: 3N RNG: 16W

-ELEVATIONS-
KB: 2408 Ft.
DF: Ft.
GL: 2401 Ft.

PERMANENT DATUM: GROUND LEVEL ELEV: 2401 FT.
LOG MEASURED FROM MAT 0' ABOVE PERM DATUM
DRILLING MEASURED FROM

DATE LOG RAN	09-23-2016	PRESSURE		FLOWING	INJECTION	SHUT-IN
RUN NUMBER	ONE	TUBING PSI				0
EFFECTIVE DEPTH	9157'	CASING PSI				0
PICKUP DEPTH	8728'	INJECTION RATE		N/A		
BOT LOGGED INT	8728'	OBSERVED RATE		N/A		
TOP LOGGED INT	100'	R/A SOURCE		N/A		
TYPE OF INJECT	NONE	ACTIVITY		N/A		
FLUID IN WELL	WATER	HALF LIFE		N/A		
FLUID LEVEL	SURFACE					
WELL STATUS	STATIC			PRODUCTION DATA		
MAX TEMPERATURE	184.2 F.	OIL Gr.		OIL =		
AT DEPTH	8728.0'	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.ALSHAMMASI					
DEPTH CORRELATION	N/A					

Equipment Data

Collar Locator	1.375"		
Temperature Tool	1.375"		
Audio Detector	1.375"		

Remarks/Survey Results

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09:00AM - ON LOCATION
09:05AM - RAN IN HOLE
09:10AM - BEGIN SURVEY
12:00PM - PULL OUT OF HOLE
12:30PM - OFF LOCATION
SAND TAG MARKERS: 8563' TOP MP
                  8843' TOP S1
                  8897' TOP S4
                  9015' TOP S8
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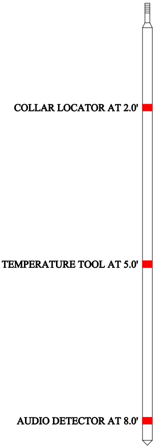
CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	54.5	SURFACE	817'	2.375"	4.7	8045'	9033'
7.000"	23	SURFACE	8896'				
5.000"	18	8062'	9171'				
2.875"	6.5	SURFACE	8045'				

STR.	PIPE DIA.	PERFORATIONS
A	7.000"	WSO: 8889'.
	5.000"	8895'-8947', 8961'-9000', WSO: 9010',
		9020'-9118', 9132'-9165'.
		PACKERS: 8840', 9009'.
		MANDRELS: 2556', 4303',
		5798', 7103',
		7967', 8767'.
		SLEEVES: 8852'.
		NO-GO: 8012', 8886', 9030'.

TOOL DIAGRAM



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     Audio Data:  C:\data\NOISE.txt
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   DEPTH |   200HZ |   600HZ |  1000HZ |  2000HZ |
--------------------------------------------------
      50 |    7.90 |    4.30 |    1.80 |    0.70 |
     250 |   12.40 |    4.20 |    1.60 |    0.50 |
     500 |   14.20 |    3.90 |    1.60 |    0.40 |
     700 |    9.50 |    3.90 |    1.60 |    0.40 |
     720 |    8.80 |    4.00 |    1.60 |    0.50 |
     740 |    9.20 |    4.00 |    1.60 |    0.40 |
     760 |    8.90 |    4.00 |    1.60 |    0.40 |
     780 |    8.60 |    4.10 |    1.60 |    0.40 |
     800 |    8.10 |    4.00 |    1.70 |    0.50 |
     820 |    9.30 |    3.80 |    1.60 |    0.40 |
     840 |    7.90 |    3.90 |    1.60 |    0.50 |
     860 |    7.50 |    3.70 |    1.60 |    0.40 |
     880 |    8.10 |    3.70 |    1.60 |    0.40 |
     900 |    8.40 |    3.70 |    1.60 |    0.40 |
    1000 |    9.00 |    3.60 |    1.60 |    0.50 |
    1250 |    8.00 |    3.50 |    1.60 |    0.40 |
    1500 |    7.90 |    3.40 |    1.70 |    0.50 |
    1750 |    8.30 |    3.50 |    1.60 |    0.40 |
    2000 |    7.80 |    3.30 |    1.60 |    0.40 |
    2250 |    7.70 |    3.40 |    1.70 |    0.40 |
    2500 |    7.70 |    3.30 |    1.70 |    0.50 |
    2750 |    7.60 |    3.40 |    1.70 |    0.50 |
    3000 |    7.60 |    3.40 |    1.70 |    0.40 |
    3250 |    7.60 |    3.50 |    1.70 |    0.50 |
    3500 |    7.50 |    3.40 |    1.70 |    0.50 |
    3750 |    7.40 |    3.40 |    1.70 |    0.40 |
    3900 |    7.40 |    3.40 |    1.70 |    0.50 |
    3920 |    7.30 |    3.40 |    1.70 |    0.50 |
    3940 |    7.40 |    3.40 |    1.70 |    0.50 |
    3960 |    7.40 |    3.50 |    1.70 |    0.50 |
    3980 |    7.40 |    3.40 |    1.60 |    0.50 |
    4000 |    7.40 |    3.40 |    1.70 |    0.50 |
    4020 |    7.40 |    3.40 |    1.70 |    0.50 |
    4040 |    7.20 |    3.40 |    1.70 |    0.50 |
    4060 |    7.30 |    3.40 |    1.60 |    0.50 |
    4080 |    7.40 |    3.50 |    1.70 |    0.50 |
    4100 |    7.30 |    3.40 |    1.60 |    0.50 |
    4250 |    7.30 |    3.30 |    1.60 |    0.50 |
    4500 |    7.30 |    3.30 |    1.60 |    0.50 |
    4750 |    7.30 |    3.20 |    1.60 |    0.50 |
    5000 |    7.40 |    3.20 |    1.60 |    0.50 |
    5250 |    7.40 |    3.30 |    1.70 |    0.50 |
    5500 |    7.50 |    3.20 |    1.70 |    0.50 |
    5750 |    7.40 |    3.20 |    1.70 |    0.50 |
    6000 |    7.40 |    3.20 |    1.70 |    0.50 |
    6250 |    7.40 |    3.20 |    1.80 |    0.50 |
    6500 |    7.30 |    3.20 |    1.70 |    0.50 |
    6750 |    7.40 |    3.40 |    1.90 |    0.50 |
    7000 |    7.40 |    3.50 |    1.90 |    0.60 |
    7250 |    7.40 |    3.40 |    1.90 |    0.50 |
    7500 |    7.40 |    3.40 |    1.90 |    0.50 |
    7750 |    7.50 |    3.40 |    2.00 |    0.60 |
    8000 |    7.50 |    3.30 |    1.90 |    0.60 |
    8250 |    7.60 |    3.40 |    2.00 |    0.60 |
    8500 |    7.60 |    3.40 |    2.00 |    0.60 |
    8510 |    7.60 |    3.40 |    2.00 |    0.60 |
    8520 |    7.70 |    3.50 |    2.00 |    0.60 |
    8530 |    7.70 |    3.50 |    2.10 |    0.60 |
    8540 |    7.80 |    3.40 |    2.00 |    0.60 |
    8550 |    7.70 |    3.50 |    2.10 |    0.60 |
    8560 |    7.70 |    3.50 |    2.10 |    0.60 |
    8570 |    7.70 |    3.50 |    2.10 |    0.60 |
    8580 |    7.60 |    3.40 |    2.10 |    0.60 |
    8590 |    7.80 |    3.50 |    2.10 |    0.60 |
    8600 |    7.90 |    3.60 |    2.10 |    0.60 |
    8610 |    7.70 |    3.60 |    2.10 |    0.60 |
    8620 |    7.80 |    3.60 |    2.10 |    0.60 |
    8630 |    7.80 |    3.50 |    2.10 |    0.60 |
    8640 |    7.90 |    3.70 |    2.20 |    0.60 |
    8650 |    7.80 |    3.50 |    2.10 |    0.60 |
    8660 |    7.90 |    3.70 |    2.20 |    0.60 |
    8670 |    7.80 |    3.60 |    2.10 |    0.60 |
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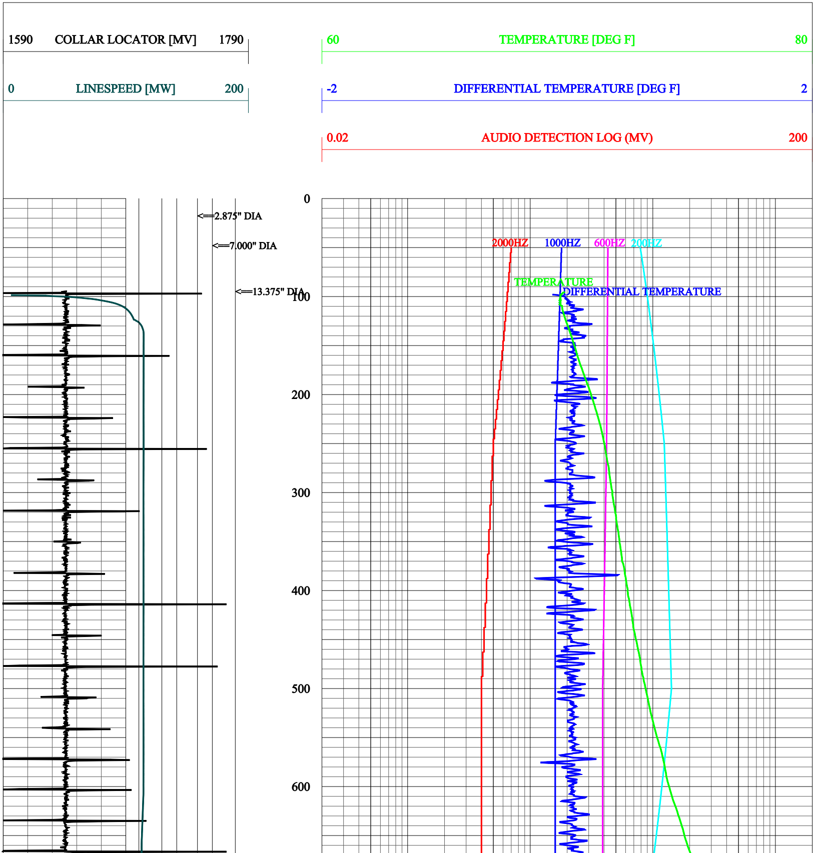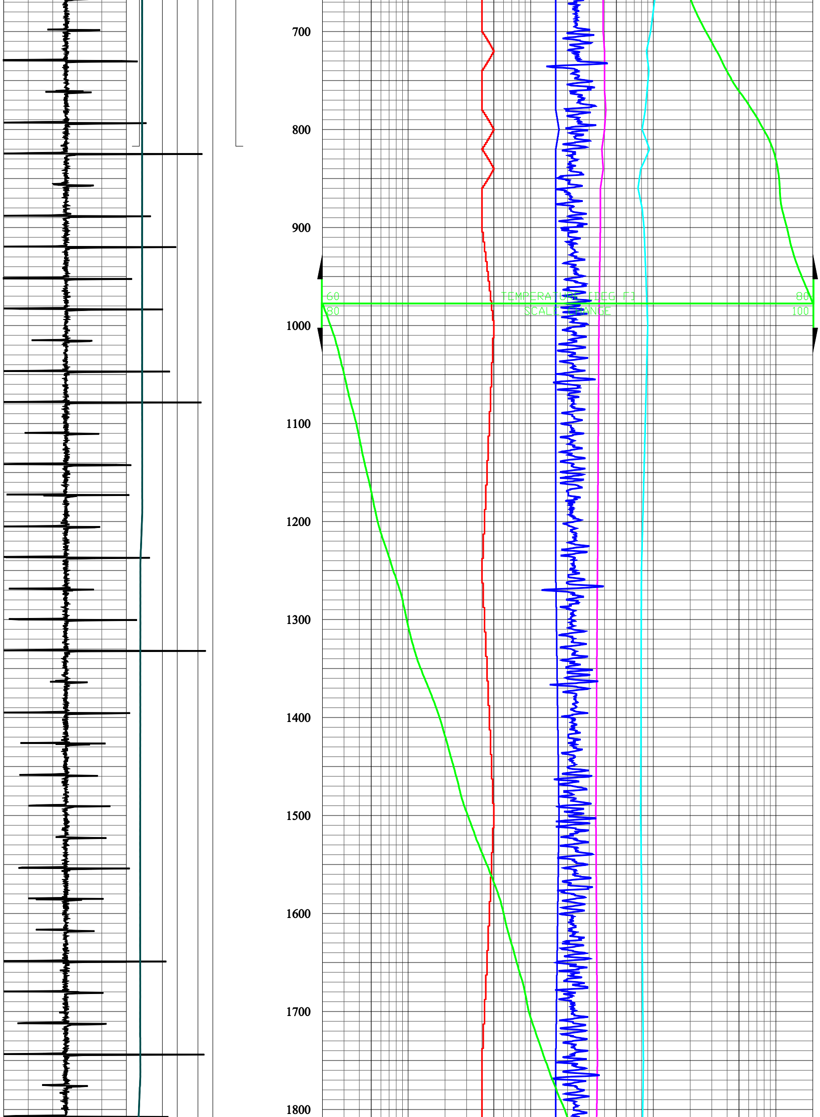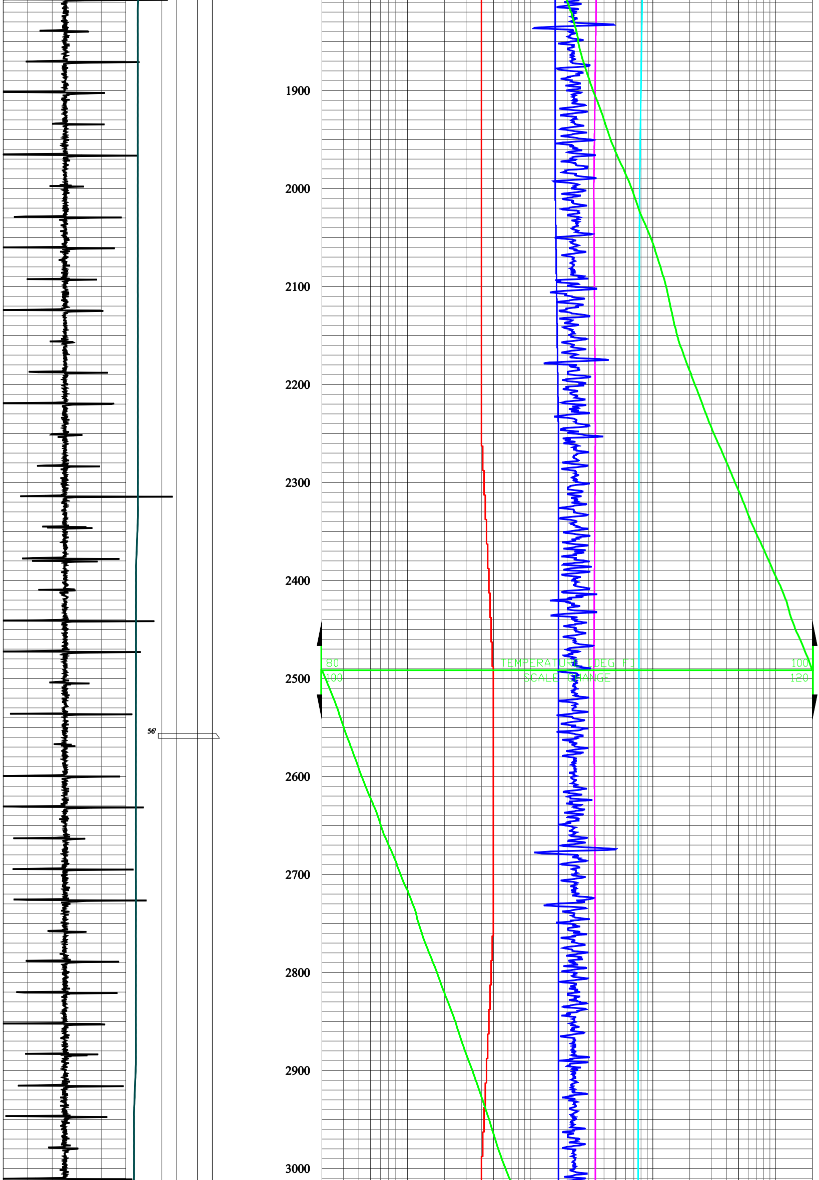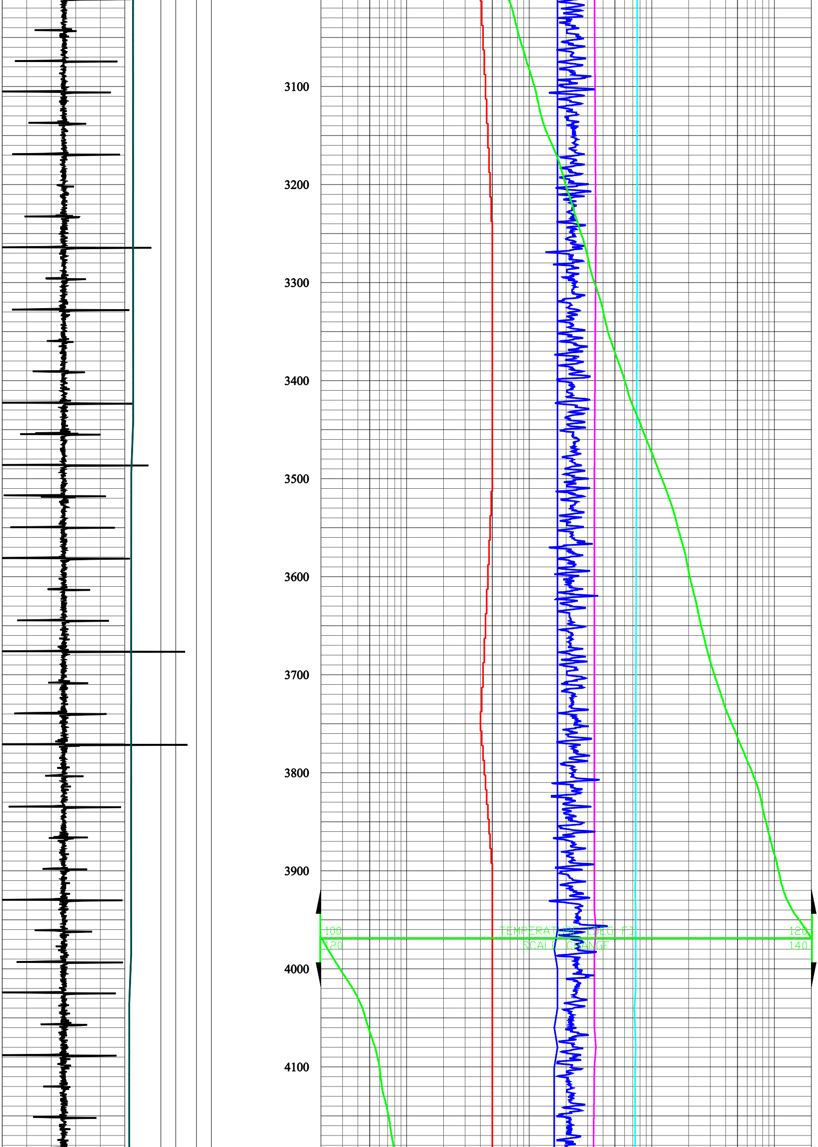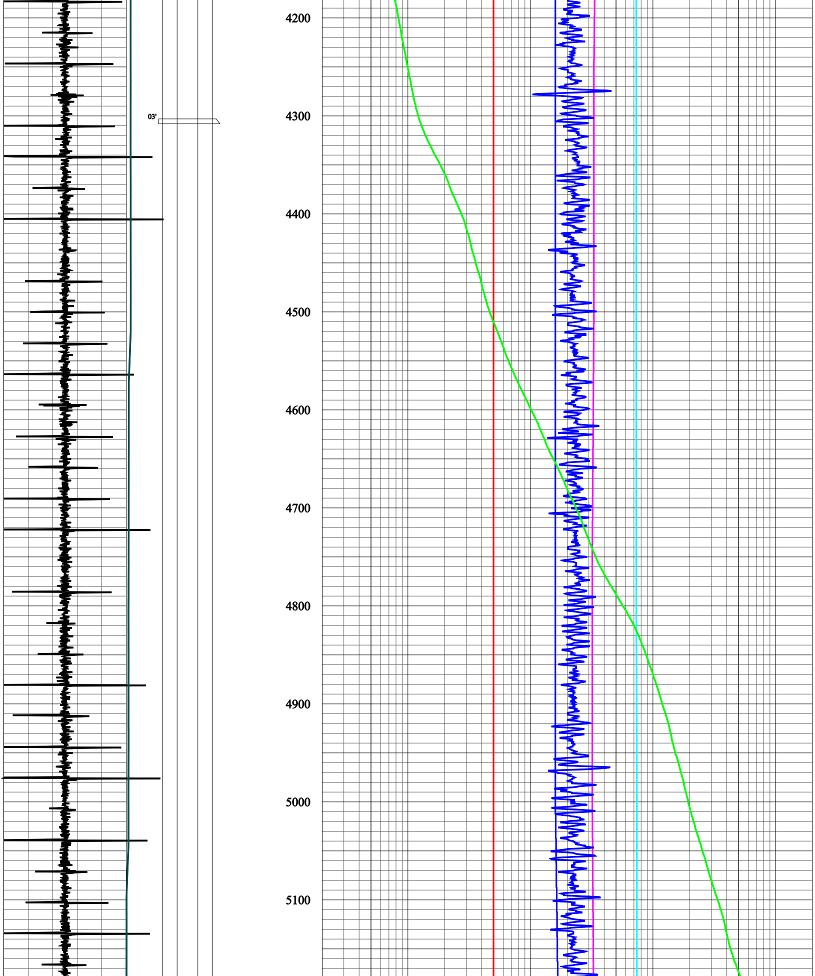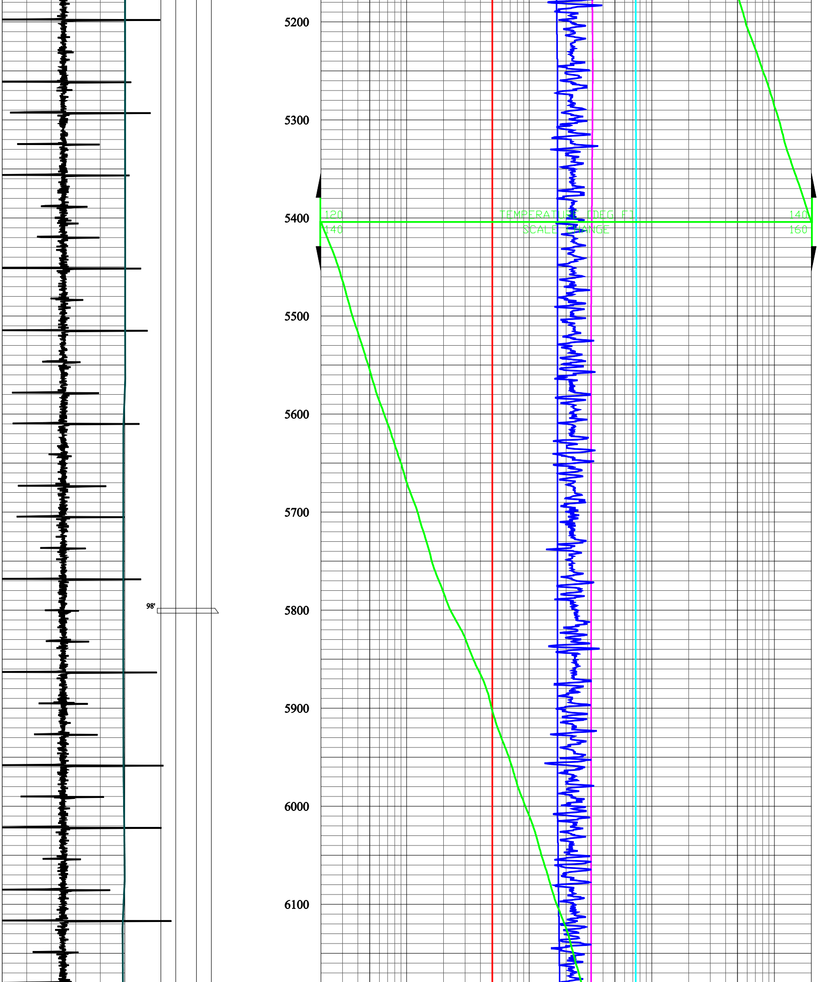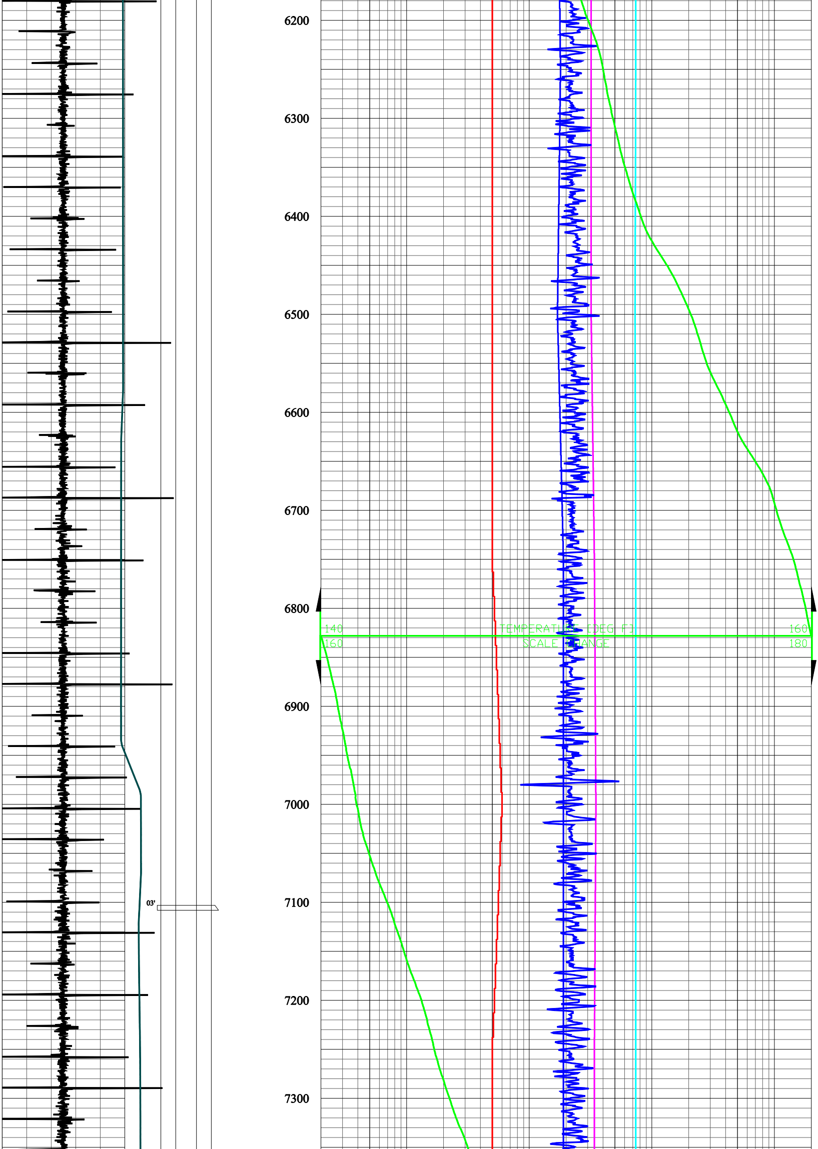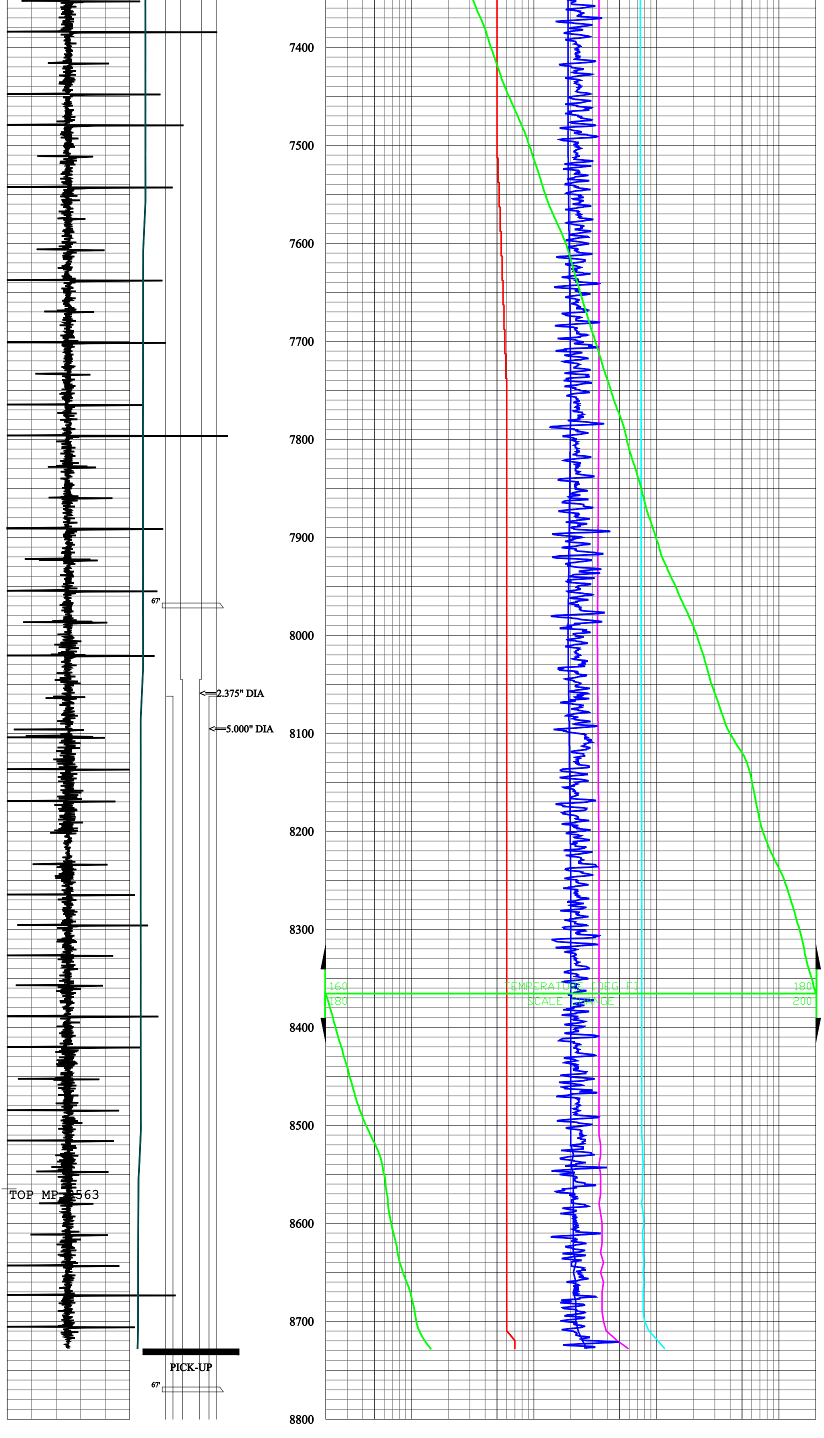8680	7.80	3.60	2.20	0.60
8690	7.80	3.60	2.20	0.60
8700	8.00	3.70	2.20	0.60
8710	8.70	3.90	2.30	0.60
8720	10.30	4.80	2.50	0.70
8728	11.70	5.90	2.70	0.70