WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

WELL TYPE:	OG
COMPANY:	SOUTHERN CALIF. GAS CO.
WELL:	SESNON FEE 6
FIELD:	ALISO CANYON
COUNTY:	LOS ANGELES
STATE:	CALIFORNIA

AJ

LOCATION:
DISTRICT 2

API NUMBER: 0403700652
SEC: 32 TWN: 3N RNG: 16W

OTHER SVC:

PERMANENT DATUM: GROUND LEVEL ELEV:

LOG MEASURED FROM MAT 0' ABOVE PERM DATUM

DRILLING MEASURED FROM

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

DATE LOG RAN	04-11-2016	PRESSURE	FLOWING	INJECTION	SHUT-IN
RUN NUMBER	ONE	TUBING PSI		571	
EFFECTIVE DEPTH	9240'	CASING PSI		593	
PICKUP DEPTH	9204'	INJECTION RATE		N|A	
BOT LOGGED INT	9204'	OBSERVED RATE		N|A	
TOP LOGGED INT	50'	R/A SOURCE		N|A	
TYPE OF INJECT	NONE	ACTIVITY		N|A	
FLUID IN WELL	O|W|G	HALF LIFE		N|A	
FLUID LEVEL	N|A				
WELL STATUS	STATIC			PRODUCTION DATA	
MAX TEMPERATURE	198.9 F	OIL Gr.		OIL =	
AT DEPTH	9198.5'	GAS Gr.		GAS=	
TEMPERATURE SENS	1 F/DIV.	MPP		BHP =	
LOGGING SPEED	100 FPM			WATER=	
RECORDED BY	C. FITZPATRICK				
WITNESSED BY	N|A				
EMAIL TO	A.KARGAR				
DEPTH CORRELATION	PACKER				

Equipment Data

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

Remarks/Survey Results

PLEASE NOTE: MANDREL LEAK @ 2390'-2396'.

8:15AM ON LOCATION
8:30AM RAN IN HOLE
8:45AM BEGIN SURVEY
1:30PM PULL OUT OF HOLE
2:00PM OFF LOCATION

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SAND TAG MARKERS: 8147' TOP MP
                  8320' TOP S1
                  8451' TOP S4
                  8564' TOP S8
                  8829' TOP FREW
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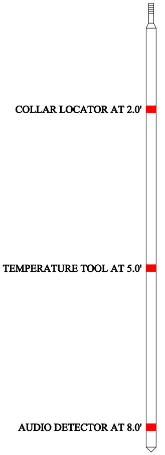
CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
7.0"	28	SURFACE	9268'				
2.875"	6.5	SURFACE	8882.4'				

STR.	PIPE DIA.	PERFORATIONS
A	7.0"	WS□: 8920' WS□: 8922' WS□: 8962'
		8964'-9012', 9030'-9070', 9130'-9210',
		PACKERS: 8878.2'-8882.4'.
		GAS LIFT MANDRELS: 2390.2'-2396.3', 4337'-4343.1',
		5986.4'-5992.6', 7317.5'-7323.7',
		7767.1'-7773.2', 8799.4'-8807.5'.
		NO-GO: 8839.6'.
		PLUG: 9240'.

TOOL DIAGRAM



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     Audio Data:  C:\data\NOISE.txt
-----------------------------------------------------------------------------------------
   DEPTH |   200HZ |   600HZ |  1000HZ |  2000HZ |  COMMENTS |
-----------------------------------------------------------------------------------------
      50 |    6.00 |    5.10 |    1.70 |    0.60 |
     250 |    6.90 |    3.90 |    2.60 |    0.80 |
     500 |    4.70 |    3.60 |    2.50 |    0.80 |
     750 |    4.90 |    4.30 |    3.00 |    0.80 |
    1000 |    4.30 |    3.90 |    2.70 |    0.80 |
    1250 |    7.00 |    5.00 |    3.70 |    0.90 |
    1500 |   11.90 |    5.40 |    3.60 |    0.90 |
    1750 |   25.80 |   13.20 |    6.10 |    1.00 |
    2000 |   53.30 |   28.50 |   20.80 |    3.30 |
    2100 |  201.20 |  141.90 |  108.90 |   40.70 |
    2120 |  201.60 |  159.10 |  126.10 |   31.80 |
    2140 |  164.00 |  129.10 |  107.80 |   28.50 |
    2160 |  201.10 |  143.30 |  113.80 |   31.90 |
    2180 |  177.70 |  133.00 |  108.70 |   34.40 |
    2200 |  214.90 |  157.60 |  113.90 |   34.20 |
    2220 |  205.20 |  152.50 |  107.50 |   35.10 |
    2240 |  197.80 |  151.30 |  116.30 |   38.70 |
    2260 |  212.00 |  163.10 |  123.50 |   44.40 |
    2280 |  224.50 |  162.50 |  120.00 |   41.50 |
    2300 |  194.10 |  149.00 |  108.00 |   37.70 |
    2320 |  203.00 |  149.30 |  105.10 |   36.30 |
    2340 |  151.30 |   91.60 |   63.10 |   18.70 |
    2360 |  124.40 |  102.20 |   85.30 |   21.50 |
    2380 |  125.90 |   82.30 |   54.90 |   18.30 |
    2400 |  130.40 |   83.40 |   52.90 |   18.10 |
    2420 |  152.30 |  103.40 |   74.60 |   28.80 |
    2440 |  159.30 |  113.20 |   76.50 |   29.30 |
    2450 |  110.80 |   59.80 |   39.40 |   12.10 |
    2500 |   95.20 |   60.90 |   39.70 |   12.40 |   GAS COMING OUT OF MANDREL, MOVING DOWN AND UPWARD |
    2750 |   37.30 |   20.00 |   13.00 |    4.00 |
    3000 |   33.10 |   13.80 |    8.30 |    1.70 |   COMING UP ON GAS |
    3250 |   11.90 |    7.80 |    4.90 |    0.90 |   COMING UP ON GAS |
    3500 |    6.70 |    5.10 |    3.40 |    0.80 |   COMING UP ON GAS |
    3750 |    6.70 |    6.10 |    3.80 |    0.80 |   COMING UP ON GAS |
    4000 |    4.40 |    4.20 |    2.90 |    0.80 |   COMING UP ON GAS |
    4250 |    4.00 |    3.80 |    2.60 |    0.80 |
    4500 |    4.00 |    3.80 |    2.70 |    0.80 |
    4750 |    3.80 |    3.50 |    2.50 |    0.80 |
    5000 |    3.80 |    3.60 |    2.50 |    0.80 |
    5250 |    3.90 |    3.70 |    2.60 |    0.80 |
    5500 |    3.70 |    3.50 |    2.50 |    0.80 |
    5750 |    3.70 |    3.60 |    2.50 |    0.80 |
    6000 |    3.70 |    3.50 |    2.50 |    0.80 |
    6250 |    3.60 |    3.50 |    2.50 |    0.80 |
    6500 |    3.60 |    3.50 |    2.50 |    0.80 |
    6750 |    3.80 |    3.50 |    2.50 |    0.80 |
    7000 |    3.70 |    3.50 |    2.50 |    0.80 |
    7200 |    3.70 |    3.50 |    2.50 |    0.80 |
    7220 |    3.60 |    3.50 |    2.50 |    0.80 |
    7240 |    3.60 |    3.50 |    2.50 |    0.80 |
    7260 |    3.60 |    3.50 |    2.50 |    0.80 |
    7280 |    3.80 |    3.50 |    2.50 |    0.80 |
    7300 |    3.70 |    3.50 |    2.50 |    0.80 |
    7320 |    3.70 |    3.50 |    2.50 |    0.80 |
    7340 |    3.60 |    3.50 |    2.50 |    0.80 |
    7360 |    3.70 |    3.50 |    2.50 |    0.80 |
    7380 |    3.70 |    3.50 |    2.50 |    0.80 |
    7400 |    3.70 |    3.50 |    2.50 |    0.80 |
    7500 |    3.60 |    3.50 |    2.50 |    0.80 |
    7750 |    3.60 |    3.50 |    2.50 |    0.80 |
    8000 |    3.60 |    3.50 |    2.50 |    0.80 |
    8250 |    3.60 |    3.50 |    2.50 |    0.80 |
    8500 |    3.50 |    3.40 |    2.40 |    0.80 |
    8800 |    3.70 |    3.50 |    2.50 |    0.80 |
    8810 |    3.70 |    3.50 |    2.50 |    0.80 |
    8820 |    3.60 |    3.50 |    2.40 |    0.80 |
    8830 |    3.60 |    3.50 |    2.50 |    0.80 |
    8840 |    3.70 |    3.50 |    2.40 |    0.80 |
    8850 |    3.70 |    3.50 |    2.50 |    0.80 |
    8860 |    3.70 |    3.50 |    2.50 |    0.80 |
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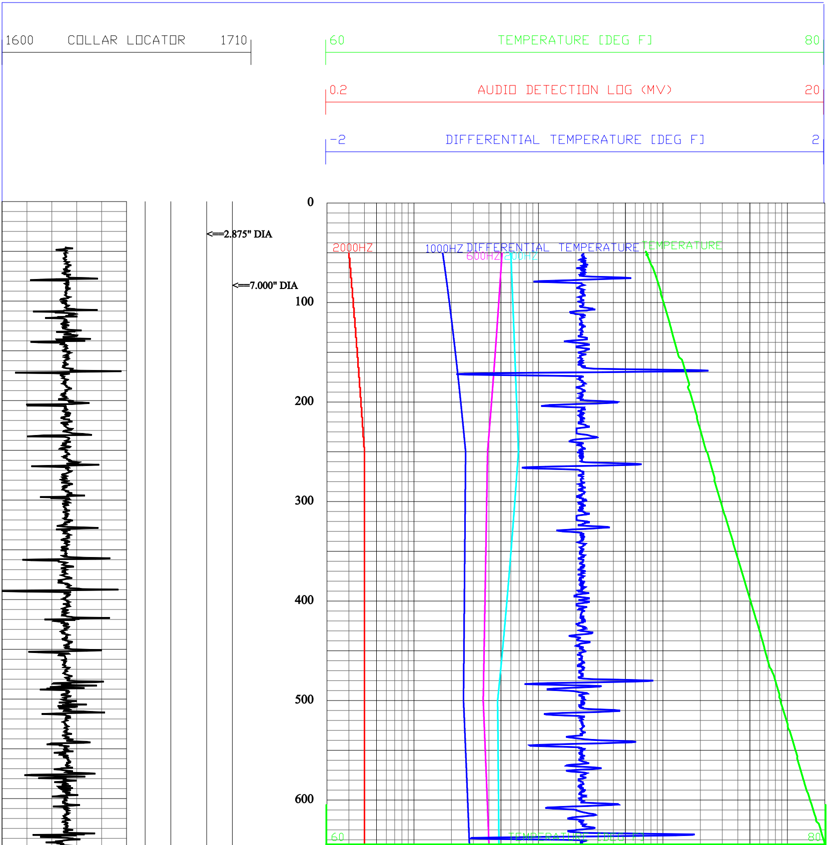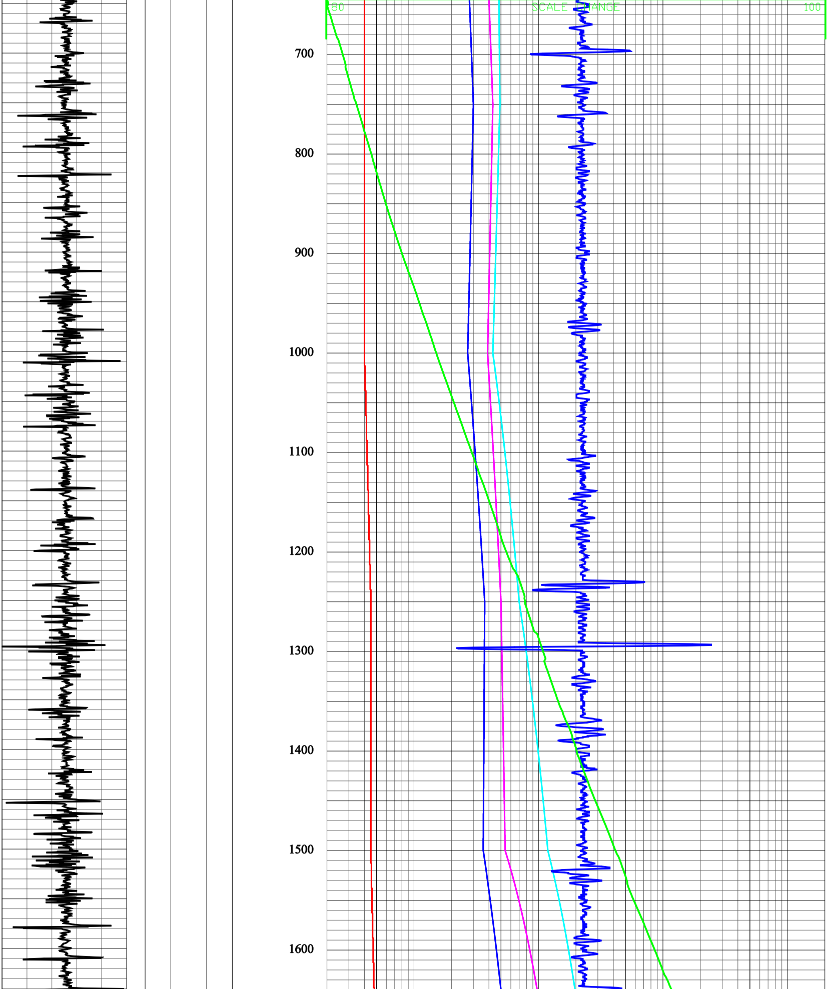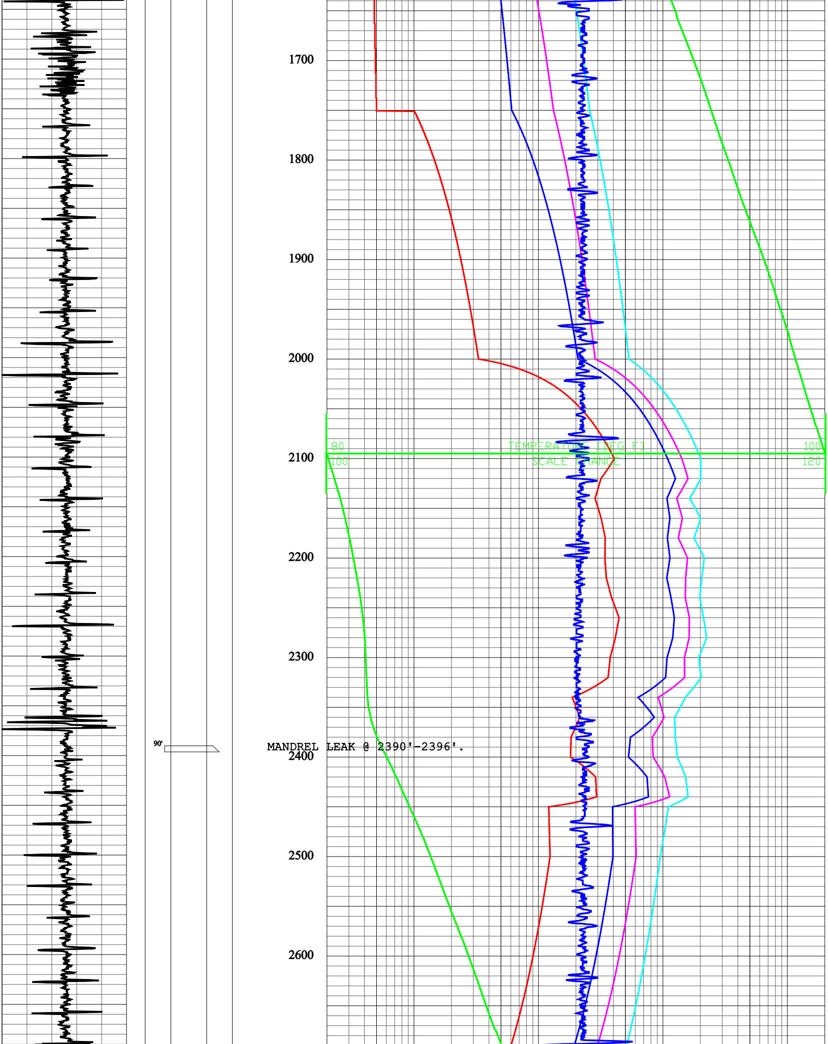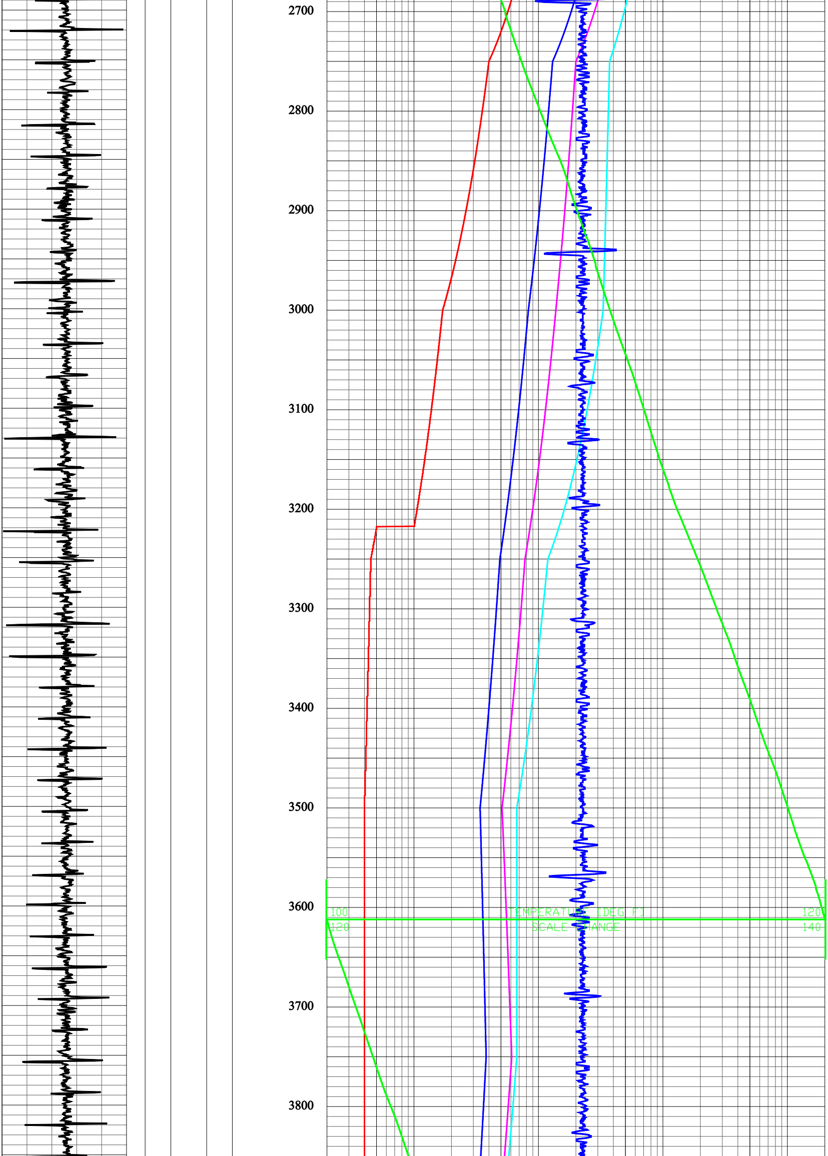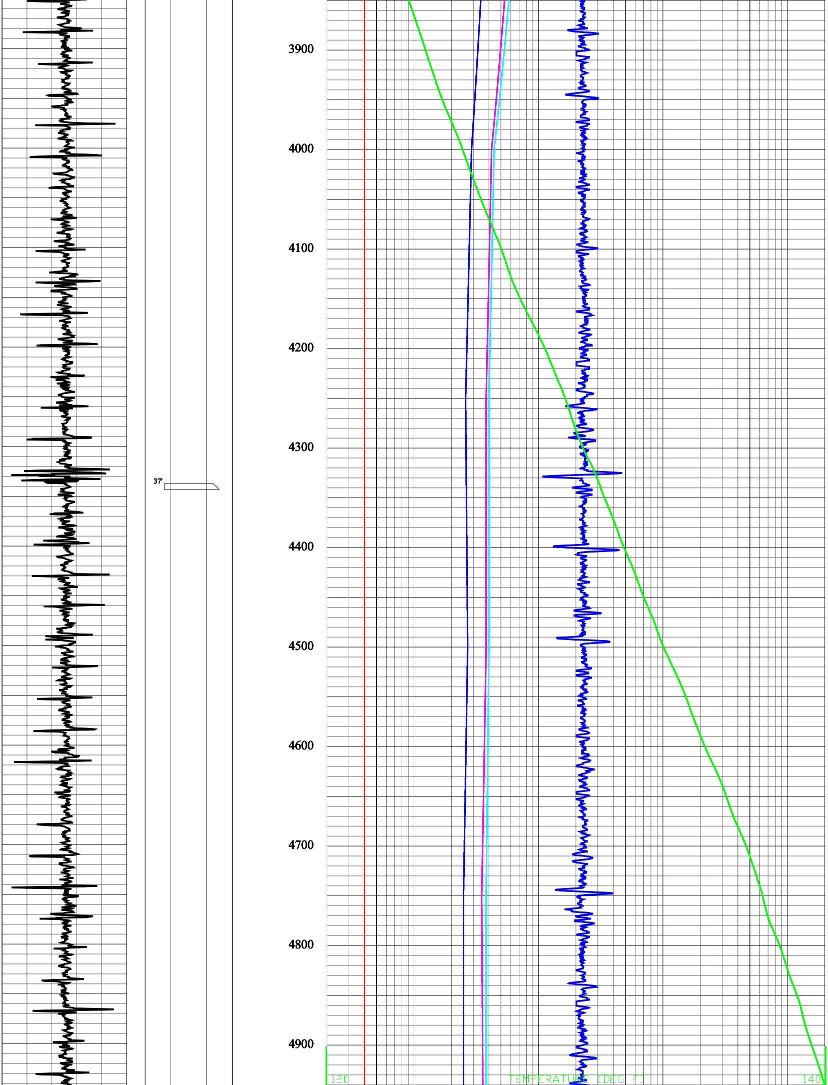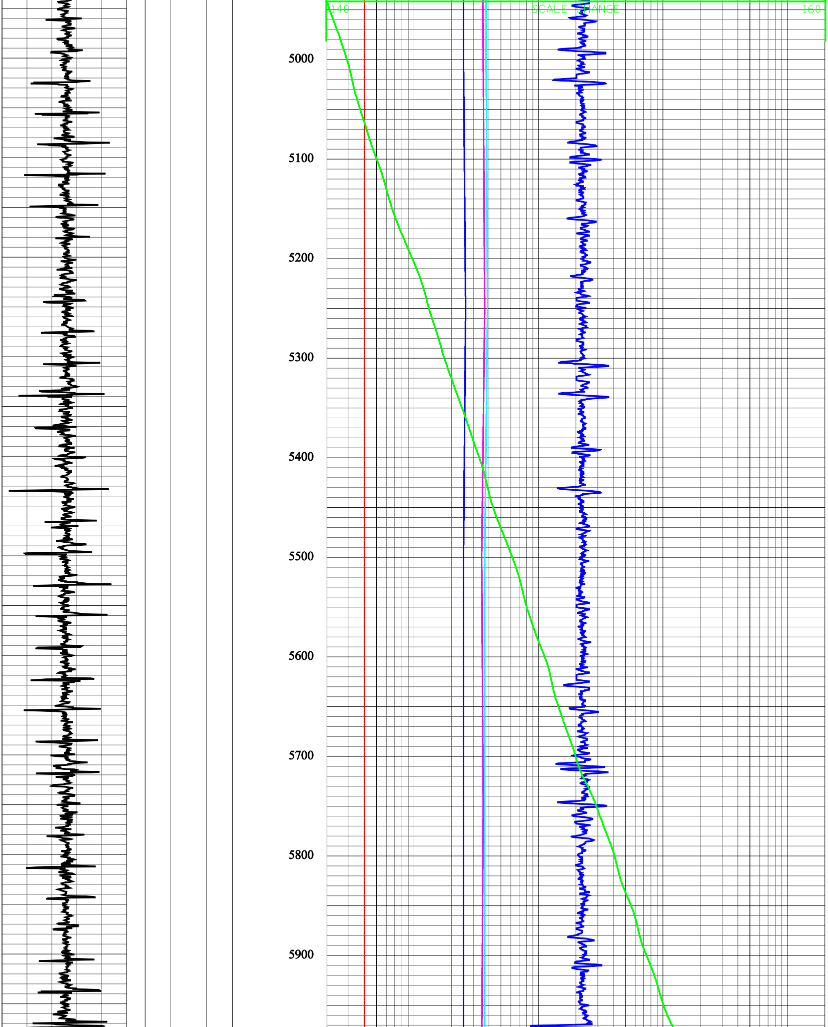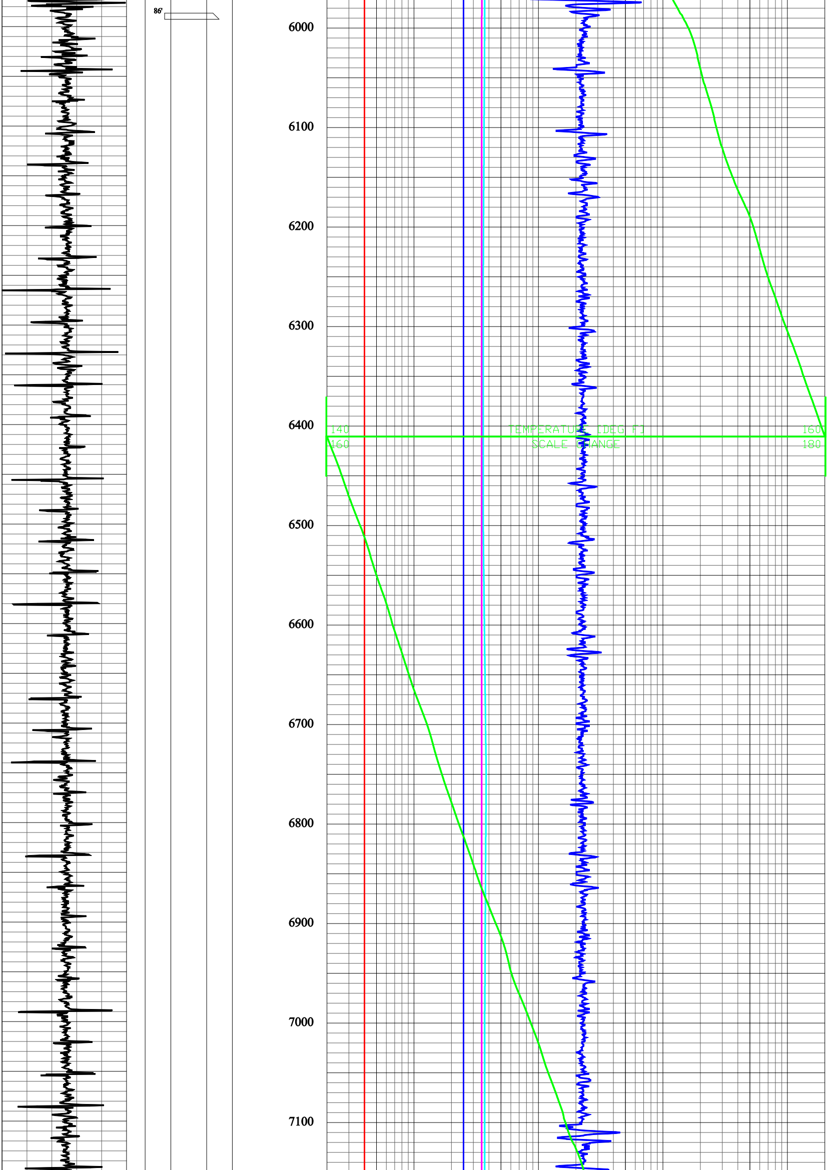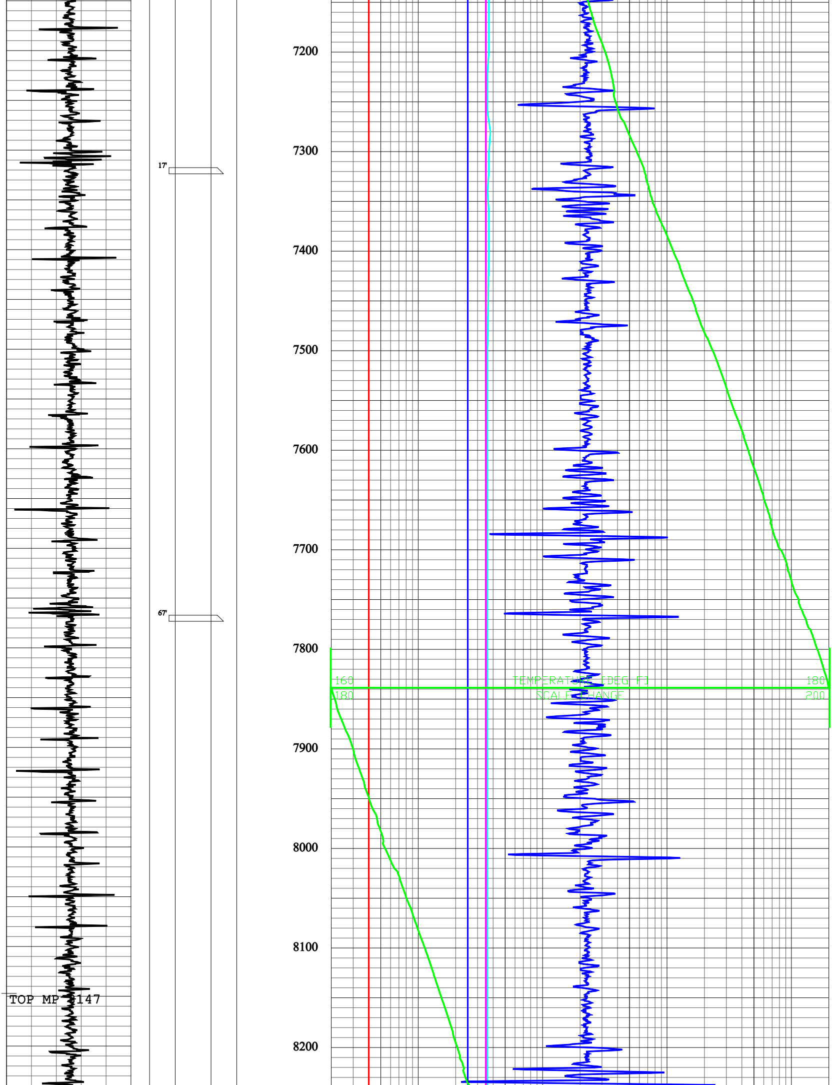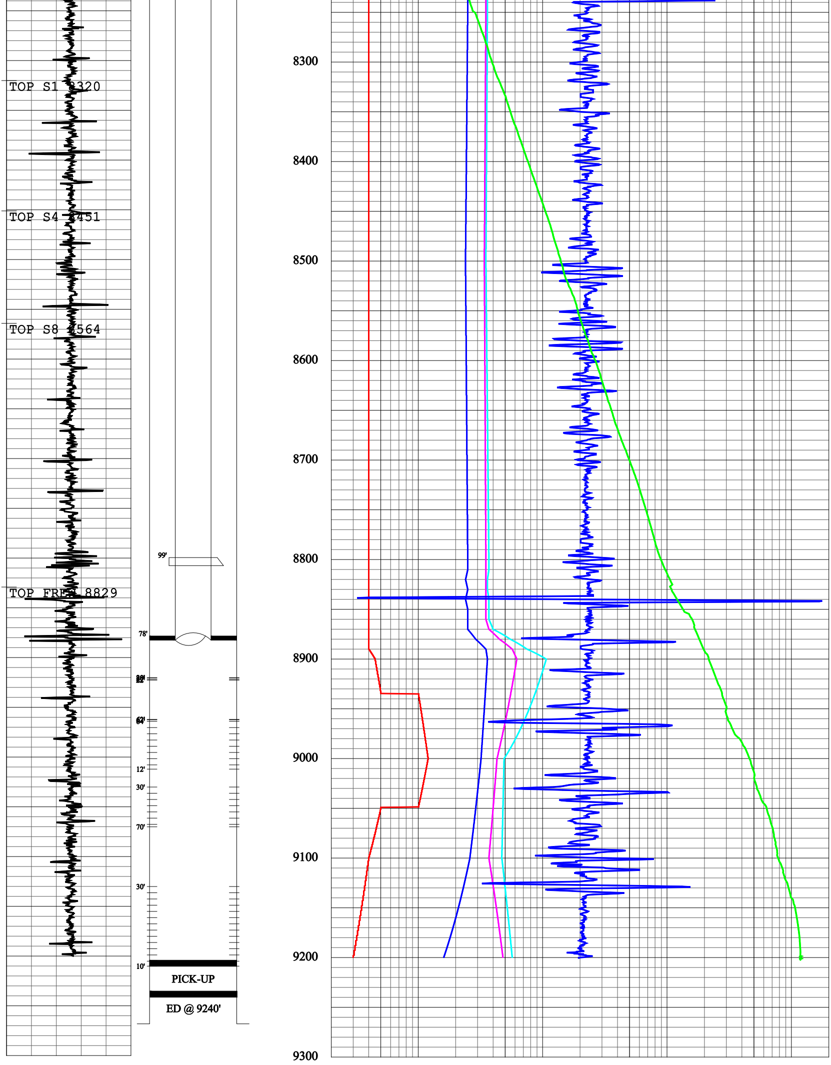8870	4.00	3.70	2.50	0.80	
8880	5.50	4.50	2.90	0.80	
8890	7.50	5.70	3.50	0.80	
8900	10.70	6.20	3.60	0.90	TOOL POPPING BECAUSE OF WATER
9000	4.90	4.30	3.20	1.20	
9100	4.70	3.70	2.60	0.80	
9200	5.70	4.80	1.60	0.60