C:\DATA\03721278_SURVEY_NOISE_04-04-2016(FF35E).LAS

WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

COMPANY: SOUTHERN CALIF. GAS. CO.
WELL: FERNANDO FEE 35E
FIELD: ALISO CANYON
COUNTY: LOS ANGELES
STATE: CALIFORNIA

WELL TYPE
GS, OG

LOCATION:
DISTRICT 2
OTHER SVC:

API NUMBER: 0403721278
SEC: 34 TWN: 3N RNG: 16W

VS

PERMANENT DATUM: GROUND LEVEL ELEV: 1674'
LOG MEASURED FROM KB 15' ABOVE PERM DATUM
DRILLING MEASURED FROM

-ELEVATIONS-
KB: 1689 Ft.
DF: Ft.
GL: 1674 Ft.

DATE LOG RAN	04-04-2016	PRESSURE	FLOWING	INJECTION	SHUT-IN
RUN NUMBER	ONE	TUBING PSI			1112
EFFECTIVE DEPTH	7350'	CASING PSI			1122
PICKUP DEPTH	7338'	INJECTION RATE	N/A		
BOT LOGGED INT	7338'	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	161.2 F.	OIL Gr.	N/A	OIL =	N/A
AT DEPTH	7014.0'	GAS Gr.	N/A	GAS=	N/A
TEMPERATURE SENS	1 F/DIV.	MPP	N/A	BHP =	N/A
LOGGING SPEED	100 FPM			WATER=	N/A
RECORDED BY	D. PROKUSKI				
WITNESSED BY	N/A				
EMAIL TO	A. KARGAR				
DEPTH CORRELATION	PACKER				

C:\DATA\03721278_SURVEY_NOISE_04-04-2016(FF35E).LAS

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Equipment Data

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

Remarks/Survey Results

```
07:00AM - ON LOCATION
07:30AM - RAN IN HOLE
07:40AM - BEGIN SURVEY
11:00AM - PULL OUT OF HOLE
11:15AM - OFF LOCATION
SAND TAG MARKERS: 7170' TOP S4
                  7267' TOP MPP
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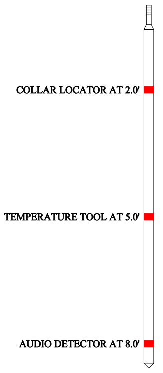
CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	54.5	SURFACE	699'	2.875"	6.5	SURFACE	6881.8'
8.625"	36	SURFACE	7190'				
7.000"	26	SURFACE	7187'				
5.000"	17	6859'	7350'				

STR.	PIPE DIA.	PERFORATIONS
A	5.000"	6859'-7350'.
		PACKERS: 6874.6'-6876.6'.
		MANDRELS: 6678.2'.
		NO-GO: 6858.8'.

TOOL DIAGRAM



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     Audio Data:  C:\data\NOISE.txt
--------------------------------------------------
   DEPTH |   200HZ |   600HZ |  1000HZ |  2000HZ |
--------------------------------------------------
     100 |   12.70 |    8.00 |    5.40 |    3.30 |
     250 |   11.70 |    7.60 |    4.90 |    2.50 |
     500 |   11.00 |    6.90 |    4.20 |    1.70 |
     580 |   10.90 |    6.80 |    4.10 |    1.70 |
     600 |   10.80 |    6.70 |    4.10 |    1.60 |
     620 |   10.90 |    6.70 |    4.10 |    1.60 |
     640 |   10.90 |    6.70 |    4.10 |    1.60 |
     660 |   10.80 |    6.70 |    4.00 |    1.50 |
     680 |   10.80 |    6.70 |    4.00 |    1.50 |
     700 |   10.80 |    6.70 |    4.10 |    1.50 |
     720 |   10.70 |    6.60 |    4.00 |    1.50 |
     740 |   10.70 |    6.60 |    4.00 |    1.50 |
     760 |   10.70 |    6.60 |    4.00 |    1.40 |
     780 |   10.80 |    6.70 |    4.00 |    1.40 |
     800 |   10.80 |    6.70 |    4.00 |    1.50 |
     820 |   10.80 |    6.60 |    4.00 |    1.50 |
     840 |   10.70 |    6.60 |    4.00 |    1.50 |
     860 |   10.70 |    6.50 |    4.00 |    1.40 |
     880 |   10.80 |    6.60 |    4.00 |    1.50 |
     900 |   10.70 |    6.60 |    4.00 |    1.50 |
     920 |   10.70 |    6.60 |    4.00 |    1.50 |
     940 |   10.70 |    6.60 |    4.00 |    1.50 |
     960 |   10.70 |    6.60 |    4.00 |    1.40 |
    1000 |   10.70 |    6.60 |    4.00 |    1.40 |
    1250 |   10.70 |    6.50 |    4.00 |    1.50 |
    1500 |   10.70 |    6.60 |    4.00 |    1.50 |
    1750 |   10.70 |    6.50 |    4.00 |    1.50 |
    2000 |   10.50 |    6.40 |    4.00 |    1.50 |
    2250 |   10.60 |    6.50 |    4.00 |    1.50 |
    2500 |   10.50 |    6.50 |    4.00 |    1.50 |
    2750 |   10.40 |    6.40 |    4.00 |    1.50 |
    3000 |   10.30 |    6.40 |    3.90 |    1.50 |
    3250 |   10.40 |    6.40 |    3.90 |    1.40 |
    3500 |   10.40 |    6.40 |    4.00 |    1.50 |
    3600 |   10.40 |    6.50 |    4.10 |    1.60 |
    3620 |   10.30 |    6.50 |    4.10 |    1.60 |
    3640 |   10.40 |    6.50 |    4.00 |    1.50 |
    3660 |   10.40 |    6.50 |    4.10 |    1.60 |
    3680 |   10.40 |    6.50 |    4.00 |    1.40 |
    3700 |   10.30 |    6.40 |    4.00 |    1.50 |
    3720 |   10.30 |    6.40 |    4.00 |    1.50 |
    3740 |   10.30 |    6.40 |    4.00 |    1.50 |
    3760 |   10.40 |    6.40 |    4.00 |    1.50 |
    3780 |   10.30 |    6.50 |    4.00 |    1.50 |
    3800 |   10.30 |    6.40 |    4.00 |    1.50 |
    3820 |   10.40 |    6.50 |    4.10 |    1.60 |
    3840 |   10.30 |    6.50 |    4.20 |    1.60 |
    3860 |   10.40 |    6.50 |    4.00 |    1.50 |
    3880 |   10.30 |    6.40 |    3.90 |    1.40 |
    3900 |   10.40 |    6.50 |    4.00 |    1.40 |
    3920 |   10.20 |    6.40 |    3.90 |    1.40 |
    3940 |   10.40 |    6.50 |    4.00 |    1.50 |
    3960 |   10.30 |    6.40 |    3.90 |    1.50 |
    3980 |   10.20 |    6.40 |    3.90 |    1.40 |
    4000 |   10.20 |    6.40 |    4.00 |    1.50 |
    4020 |   10.20 |    6.40 |    3.90 |    1.40 |
    4040 |   10.30 |    6.40 |    4.00 |    1.50 |
    4060 |   10.20 |    6.40 |    3.90 |    1.40 |
    4080 |   10.30 |    6.50 |    4.00 |    1.50 |
    4100 |   10.20 |    6.40 |    3.90 |    1.40 |
    4120 |   10.10 |    6.40 |    4.00 |    1.50 |
    4140 |   10.20 |    6.40 |    3.90 |    1.50 |
    4160 |   10.20 |    6.40 |    3.90 |    1.40 |
    4250 |   10.10 |    6.40 |    3.90 |    1.50 |
    4500 |   10.10 |    6.40 |    3.90 |    1.50 |
    4750 |   10.10 |    6.40 |    4.00 |    1.50 |
    5000 |   10.10 |    6.50 |    4.00 |    1.50 |
    5250 |   10.00 |    6.40 |    3.90 |    1.50 |
    5500 |    9.90 |    6.40 |    4.00 |    1.50 |
    5750 |    9.90 |    6.50 |    4.00 |    1.60 |
    6000 |    9.80 |    6.40 |    4.00 |    1.60 |
    6250 |    9.80 |    6.40 |    4.00 |    1.50 |
    6500 |    9.90 |    6.40 |    4.00 |    1.50 |
```
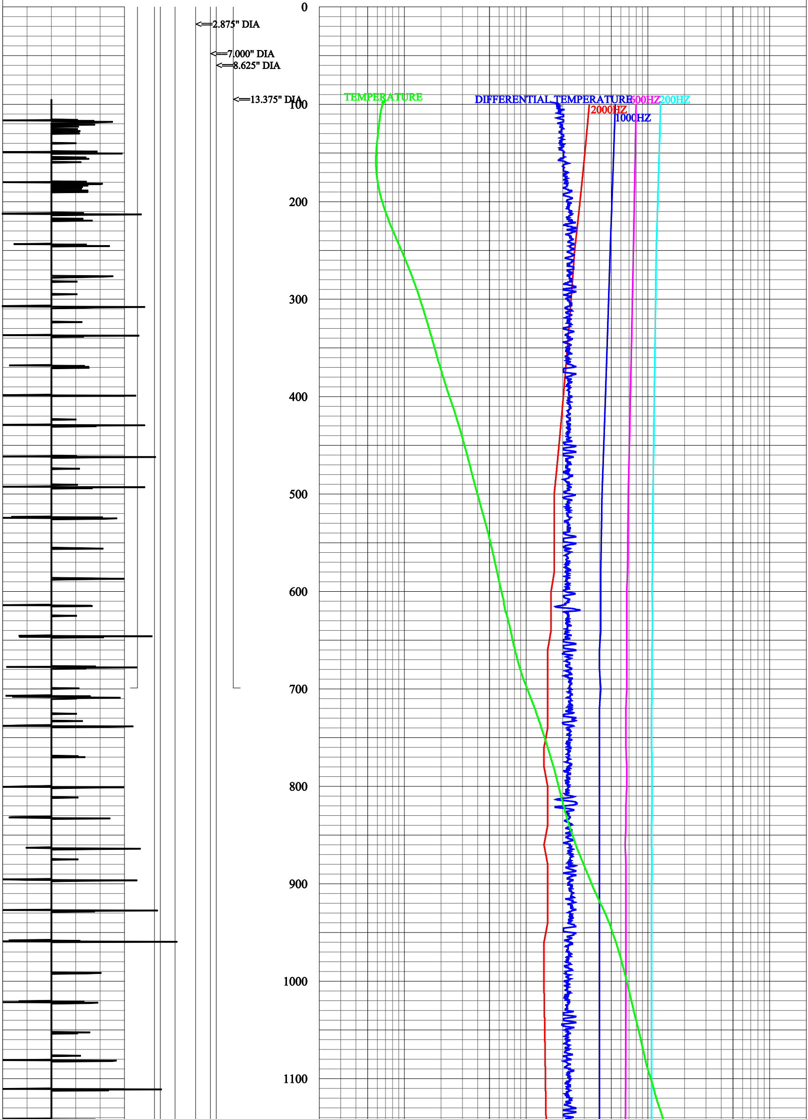
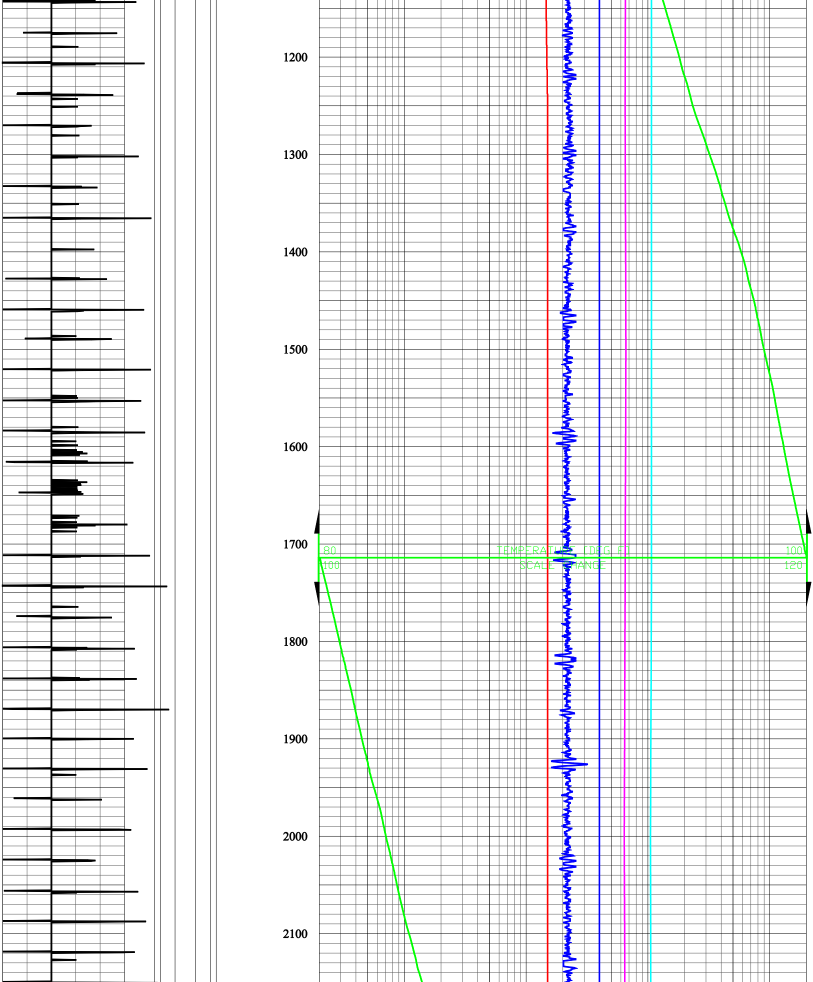
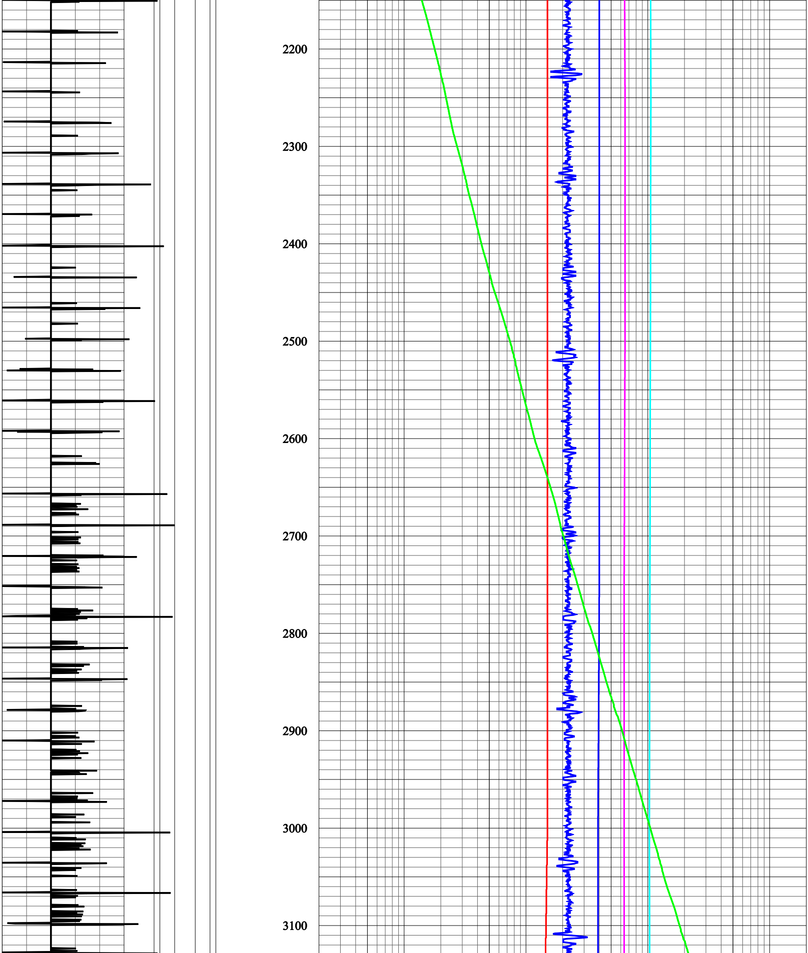
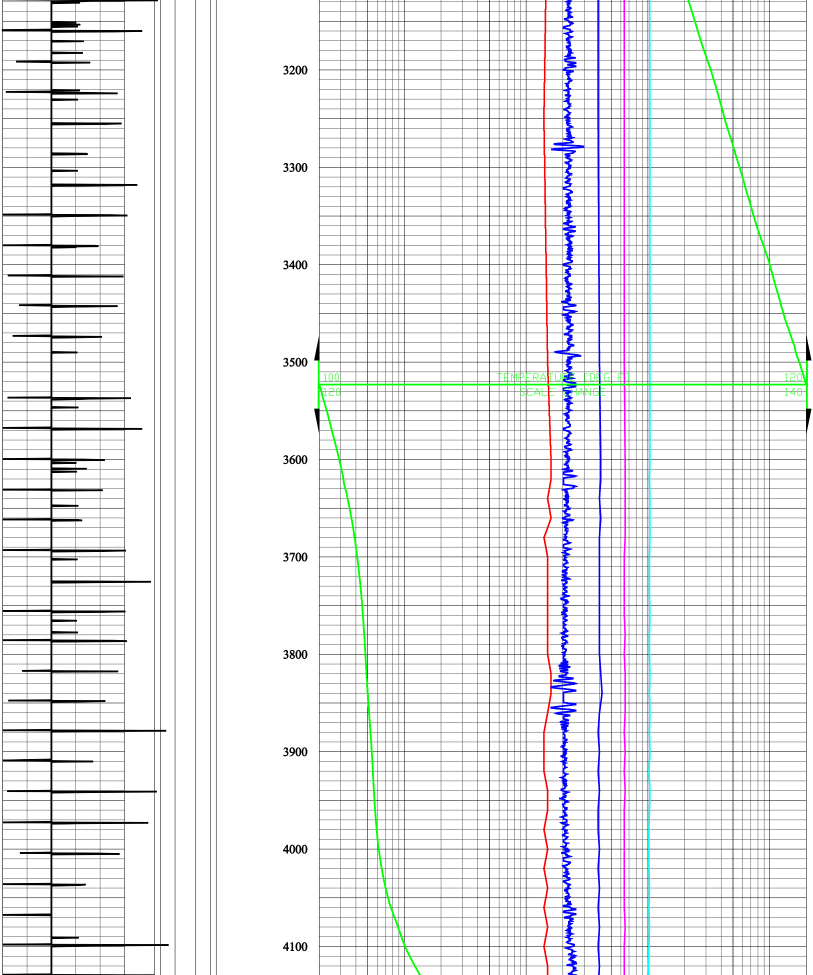
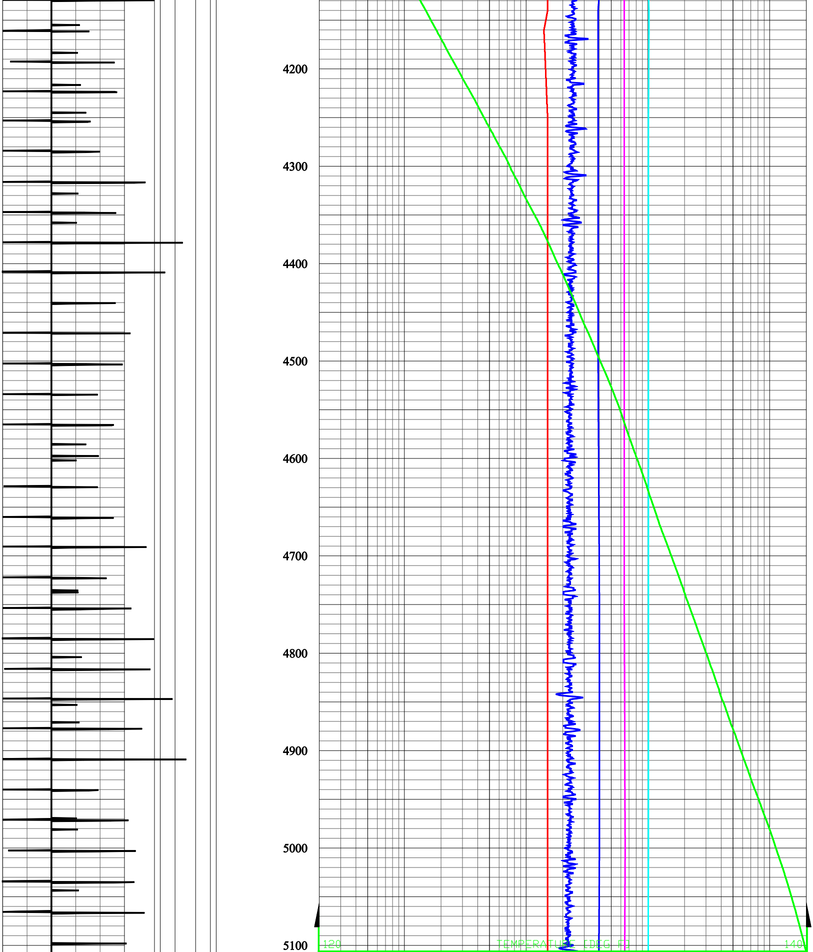
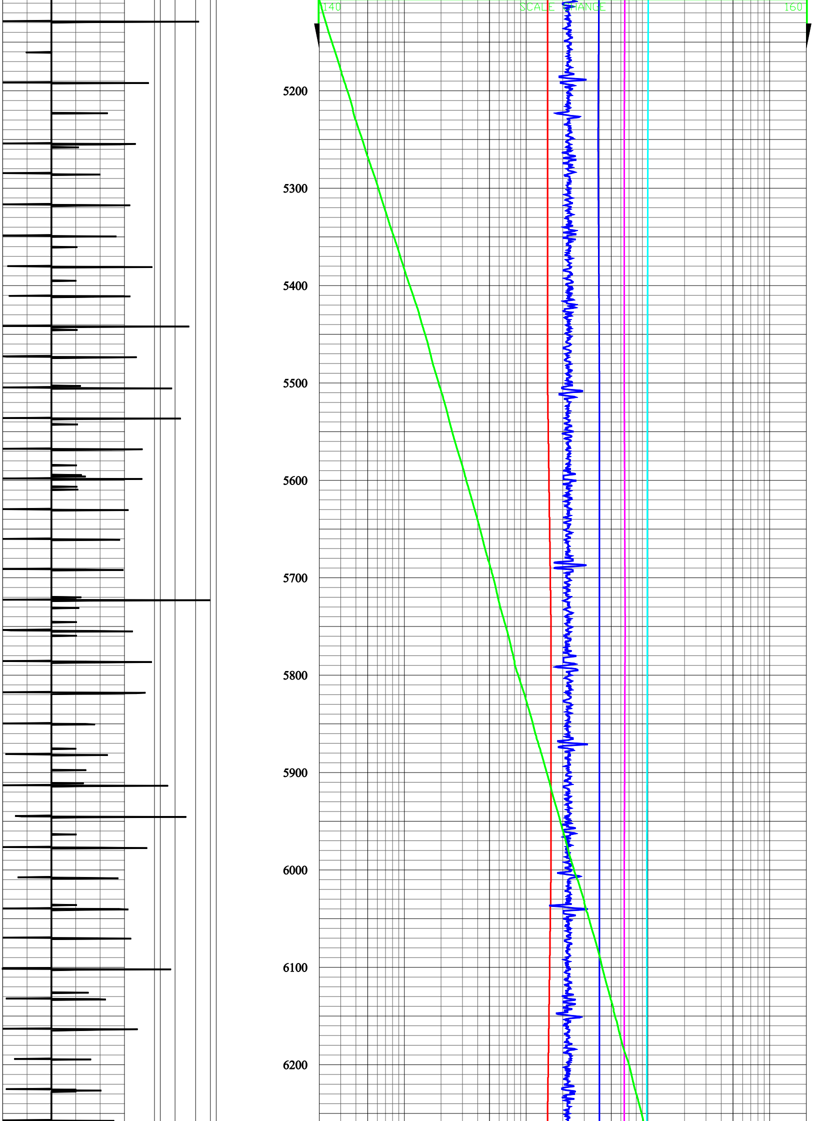
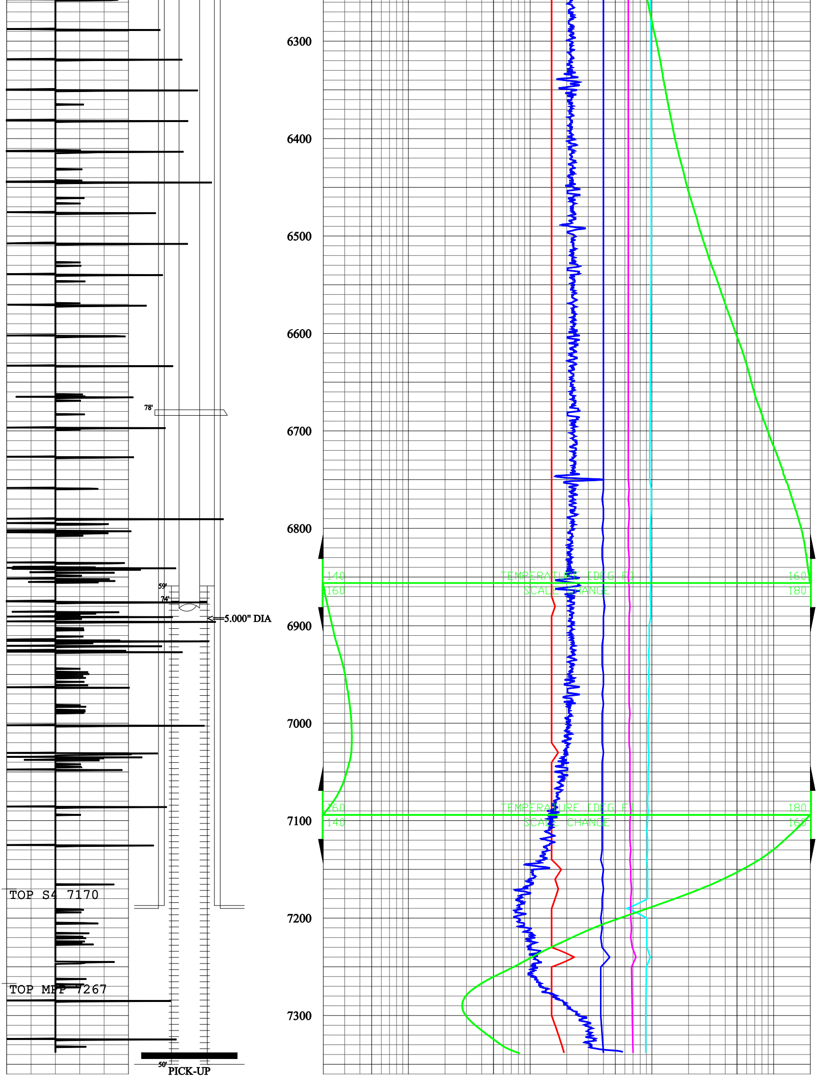

6750	9.60	6.40	4.00	1.50
6760	9.90	6.50	4.00	1.50
6770	9.90	6.40	3.90	1.50
6780	9.90	6.50	4.00	1.50
6790	9.80	6.50	4.00	1.50
6800	9.70	6.40	3.90	1.50
6810	9.70	6.40	4.00	1.50
6820	9.70	6.40	3.90	1.50
6830	9.80	6.50	3.90	1.50
6840	9.70	6.50	4.00	1.50
6850	9.80	6.40	4.00	1.50
6860	9.80	6.50	4.00	1.50
6870	9.70	6.50	4.00	1.50
6880	9.80	6.60	4.10	1.60
6890	9.80	6.50	4.00	1.50
6900	9.50	6.50	4.00	1.50
6910	9.50	6.50	4.00	1.50
6920	9.50	6.50	3.90	1.50
6930	9.40	6.50	3.90	1.50
6940	9.50	6.50	3.90	1.50
6950	9.40	6.50	4.00	1.50
6960	9.50	6.50	4.00	1.50
6970	9.40	6.50	3.90	1.50
6980	9.50	6.50	4.00	1.50
6990	9.40	6.60	3.90	1.50
7000	9.30	6.50	3.90	1.50
7010	9.30	6.50	3.90	1.50
7020	9.30	6.50	3.90	1.50
7030	9.40	6.60	4.00	1.70
7040	9.40	6.60	3.90	1.50
7050	9.30	6.60	3.90	1.50
7060	9.30	6.60	3.90	1.50
7070	9.30	6.60	3.90	1.50
7080	9.20	6.60	3.90	1.50
7090	9.30	6.70	3.90	1.50
7100	9.20	6.60	3.90	1.50
7110	9.10	6.60	3.90	1.50
7120	9.20	6.60	3.90	1.50
7130	9.20	6.70	3.90	1.50
7140	9.10	6.60	3.80	1.50
7150	9.20	6.70	4.00	1.80
7160	9.20	6.70	3.90	1.60
7170	9.20	6.80	4.00	1.70
7180	9.20	6.70	3.90	1.60
7190	6.20	6.70	3.90	1.50
7200	9.10	6.70	3.80	1.50
7210	9.10	6.80	3.90	1.50
7220	9.10	6.70	3.80	1.50
7230	9.10	6.90	3.90	1.50
7240	9.70	7.40	4.50	2.30
7250	9.00	6.80	3.80	1.50
7300	8.90	6.90	3.80	1.50
7338	8.90	7.00	4.00	1.90

1590 COLLAR LOCATOR [MV] 1790

80 TEMPERATURE [DEG F] 100

0.02 AUDIO DETECTION LOG [MV] 200

-2 DIFFERENTIAL TEMPERATURE [DEG F] 2