WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

WELL TYPE GS	COMPANY: SOUTHERN CALIF. GAS CO. WELL: PORTER 46 FIELD: ALISO CANYON COUNTY: LOS ANGELES STATE: CALIFORNIA
CB	LOCATION: DISTRICT 2 API NUMBER: 0403700733 SEC: 28 TWN: 3N RNG: 16W

PERMANENT DATUM: GROUND LEVEL ELEV:

LOG MEASURED FROM MAT 0' ABOVE PERM DATUM

DRILLING MEASURED FROM

OTHER SVC:

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

DATE LOG RAN	04-12-2016	PRESSURE	FLOWING	INJECTION	SHUT-IN
RUN NUMBER	ONE	TUBING PSI			0
EFFECTIVE DEPTH	7932' PBTD	CASING PSI			0
PICKUP DEPTH	7621'	INJECTION RATE	N|A		
BOT LOGGED INT	7621'	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	177.0 F.	OIL Gr.		OIL =	
AT DEPTH	7621.0'	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. KARGAR				
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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11:30 AM - ON LOCATION
11:45 AM - RAN IN HOLE
11:50 AM - BEGIN SURVEY
03:15 PM - PULL OUT OF HOLE
03:30 PM - OFF LOCATION

SAND TAG MARKERS: 7446' TOP MP
                  7652' TOP S1
                  7732' TOP S4
                  7804' TOP S8
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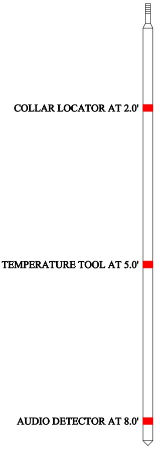
CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	55.0	SURFACE	523'				
7.000"	23.0	SURFACE	7710'				
5.000"	18.0	7682'	7929'				
2.875"	6.5	SURFACE	7665'				

STR.	PIPE DIA.	PERFORATIONS
A	7.000"	WSO: 7665'-7668'.
A	5.000"	7730'-7756', 7765'-7796',
		7824'-7838', 7848'-7852', 7857'-7886',
		7892'-7902', 7910'-7920', SLOTTED: 7714'-7929'.
		PACKERS: 7660'-7664'.
		GAS LIFT MANDREL: 7550'-7554'.
		SLIDING SLEEVES: 7594'-7598'.
		NO-GO: 7628'.

TOOL DIAGRAM



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     Audio Data:  C:\data\NOISE.txt
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   DEPTH |   200HZ |   600HZ |  1000HZ |  2000HZ |
---------------------------------------------------
     100 |   13.90 |    7.00 |    4.50 |    2.10 |
     120 |   14.80 |    6.80 |    4.30 |    1.70 |
     140 |   14.10 |    6.80 |    4.30 |    1.60 |
     160 |   14.50 |    7.00 |    4.30 |    1.60 |
     180 |   14.40 |    6.80 |    4.30 |    1.60 |
     200 |   14.60 |    6.90 |    4.30 |    1.60 |
     220 |   14.20 |    6.90 |    4.30 |    1.60 |
     240 |   14.20 |    6.90 |    4.30 |    1.70 |
     260 |   14.30 |    6.90 |    4.30 |    1.60 |
     280 |   13.90 |    6.80 |    4.20 |    1.60 |
     300 |   14.20 |    6.90 |    4.40 |    1.60 |
     320 |   14.40 |    6.90 |    4.30 |    1.60 |
     340 |   13.90 |    6.80 |    4.20 |    1.50 |
     360 |   13.80 |    6.80 |    4.20 |    1.60 |
     380 |   14.00 |    6.70 |    4.20 |    1.50 |
     400 |   13.80 |    6.90 |    4.30 |    1.50 |
     420 |   13.90 |    6.80 |    4.20 |    1.50 |
     440 |   13.80 |    6.80 |    4.20 |    1.50 |
     460 |   13.70 |    6.70 |    4.20 |    1.50 |
     480 |   13.50 |    6.50 |    4.10 |    1.50 |
     500 |   13.60 |    6.50 |    4.10 |    1.50 |
     520 |   13.50 |    6.60 |    4.10 |    1.50 |
     540 |   13.60 |    6.60 |    4.10 |    1.50 |
     560 |   13.70 |    6.60 |    4.10 |    1.50 |
     580 |   13.80 |    6.50 |    4.10 |    1.50 |
     600 |   14.10 |    6.50 |    4.10 |    1.50 |
     620 |   14.20 |    6.70 |    4.10 |    1.50 |
     640 |   14.30 |    6.50 |    4.10 |    1.50 |
     660 |   14.30 |    6.50 |    4.00 |    1.40 |
     680 |   14.40 |    6.50 |    4.00 |    1.50 |
     700 |   13.80 |    6.50 |    4.00 |    1.50 |
    1000 |   13.50 |    6.50 |    4.00 |    1.50 |
    1250 |   13.40 |    6.50 |    4.10 |    1.50 |
    1340 |   13.40 |    6.60 |    4.10 |    1.50 |
    1360 |   13.40 |    6.60 |    4.10 |    1.50 |
    1380 |   13.40 |    6.50 |    4.10 |    1.50 |
    1400 |   13.30 |    6.50 |    4.00 |    1.50 |
    1420 |   13.20 |    6.50 |    4.10 |    1.50 |
    1440 |   13.40 |    6.50 |    4.10 |    1.50 |
    1460 |   13.20 |    6.50 |    4.10 |    1.50 |
    1480 |   13.30 |    6.50 |    4.10 |    1.50 |
    1500 |   13.30 |    6.50 |    4.10 |    1.50 |
    1520 |   13.40 |    6.50 |    4.10 |    1.50 |
    1540 |   13.50 |    6.50 |    4.10 |    1.50 |
    1560 |   13.50 |    6.50 |    4.10 |    1.50 |
    1580 |   13.30 |    6.50 |    4.10 |    1.60 |
    1600 |   13.20 |    6.50 |    4.20 |    1.60 |
    1620 |   13.00 |    6.50 |    4.10 |    1.50 |
    1640 |   13.10 |    6.50 |    4.10 |    1.50 |
    1660 |   13.30 |    6.60 |    4.10 |    1.50 |
    1680 |   13.10 |    6.50 |    4.10 |    1.50 |
    1700 |   13.10 |    6.50 |    4.10 |    1.50 |
    1720 |   13.10 |    6.50 |    4.10 |    1.50 |
    1740 |   13.20 |    6.50 |    4.10 |    1.50 |
    1760 |   13.10 |    6.50 |    4.20 |    1.60 |
    1780 |   13.20 |    6.50 |    4.10 |    1.50 |
    1800 |   13.00 |    6.40 |    4.10 |    1.50 |
    2000 |   12.90 |    6.40 |    4.10 |    1.50 |
    2250 |   13.00 |    6.50 |    4.10 |    1.50 |
    2500 |   13.00 |    6.50 |    4.10 |    1.50 |
    2750 |   13.00 |    6.50 |    4.10 |    1.50 |
    3000 |   12.90 |    6.50 |    4.10 |    1.50 |
    3250 |   13.00 |    6.60 |    4.30 |    1.60 |
    3500 |   12.90 |    6.50 |    4.20 |    1.50 |
    3750 |   12.70 |    6.50 |    4.20 |    1.60 |
    4000 |   12.70 |    6.60 |    4.20 |    1.70 |
    4250 |   12.80 |    6.50 |    4.10 |    1.50 |
    4500 |   12.50 |    6.40 |    4.10 |    1.50 |
    4750 |   12.60 |    6.40 |    4.10 |    1.60 |
    5000 |   12.30 |    6.40 |    4.10 |    1.50 |
    5250 |   12.50 |    6.50 |    4.20 |    1.60 |
    5300 |   12.50 |    6.50 |    4.20 |    1.60 |
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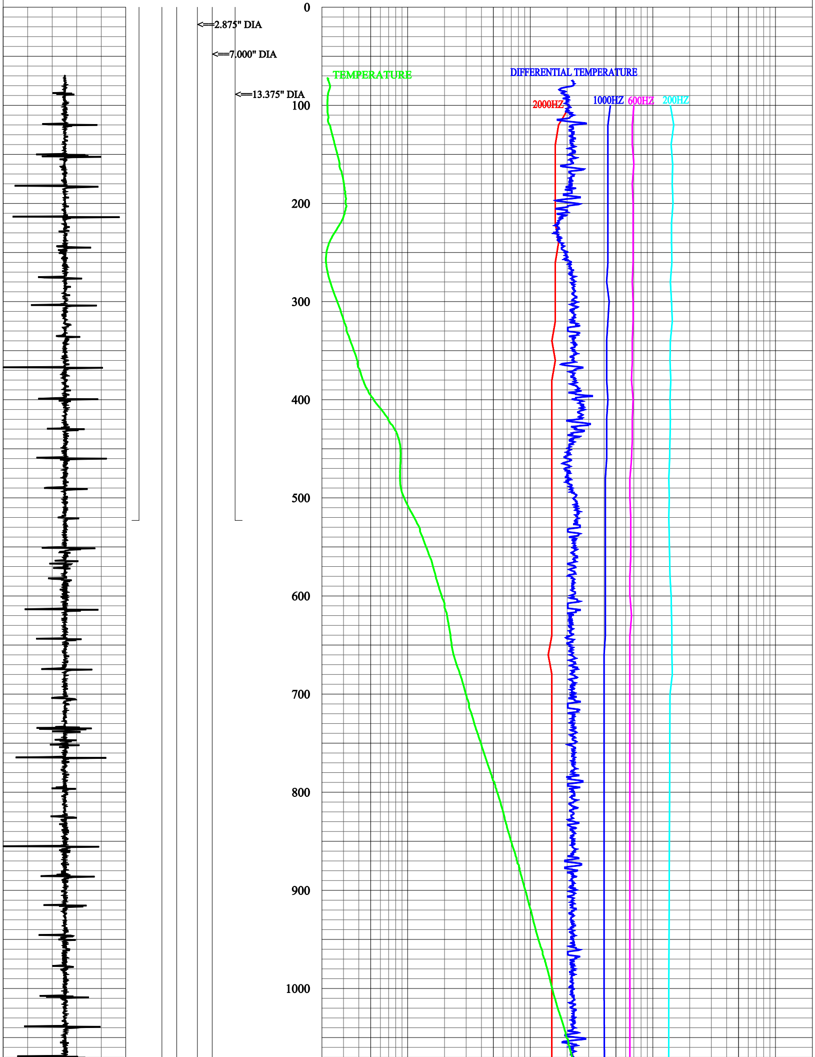
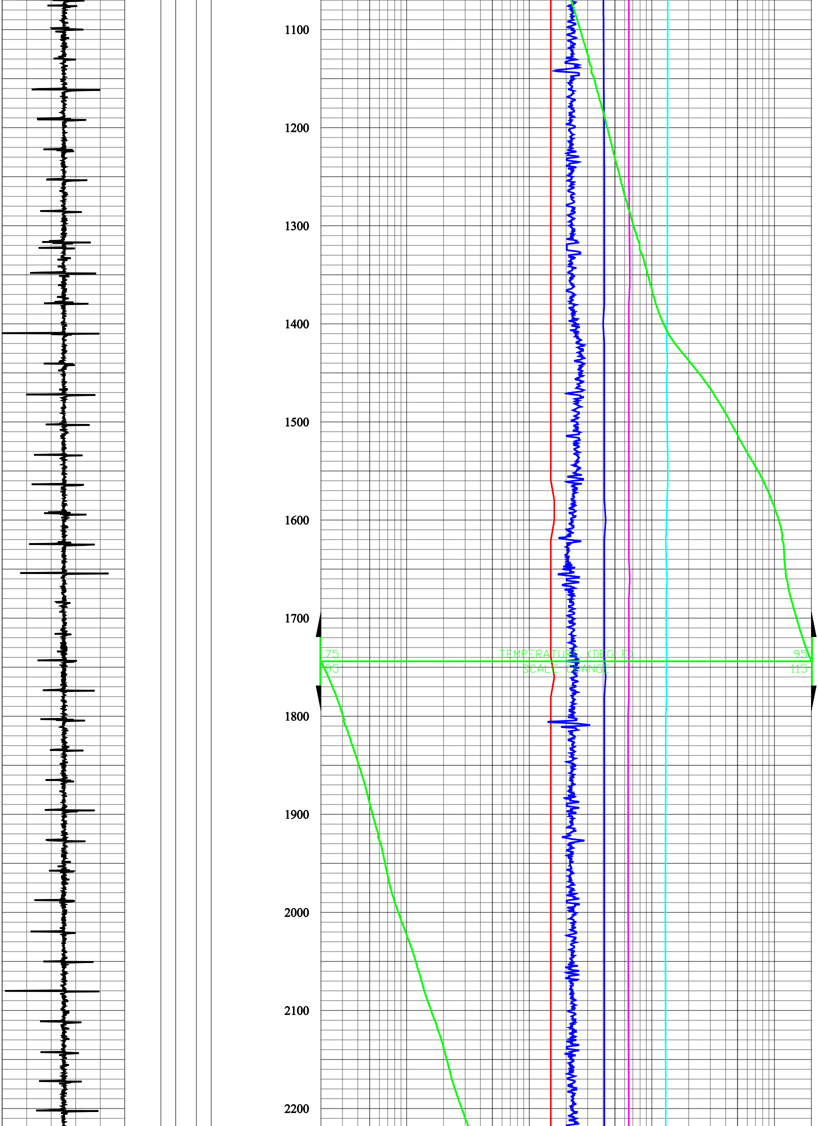
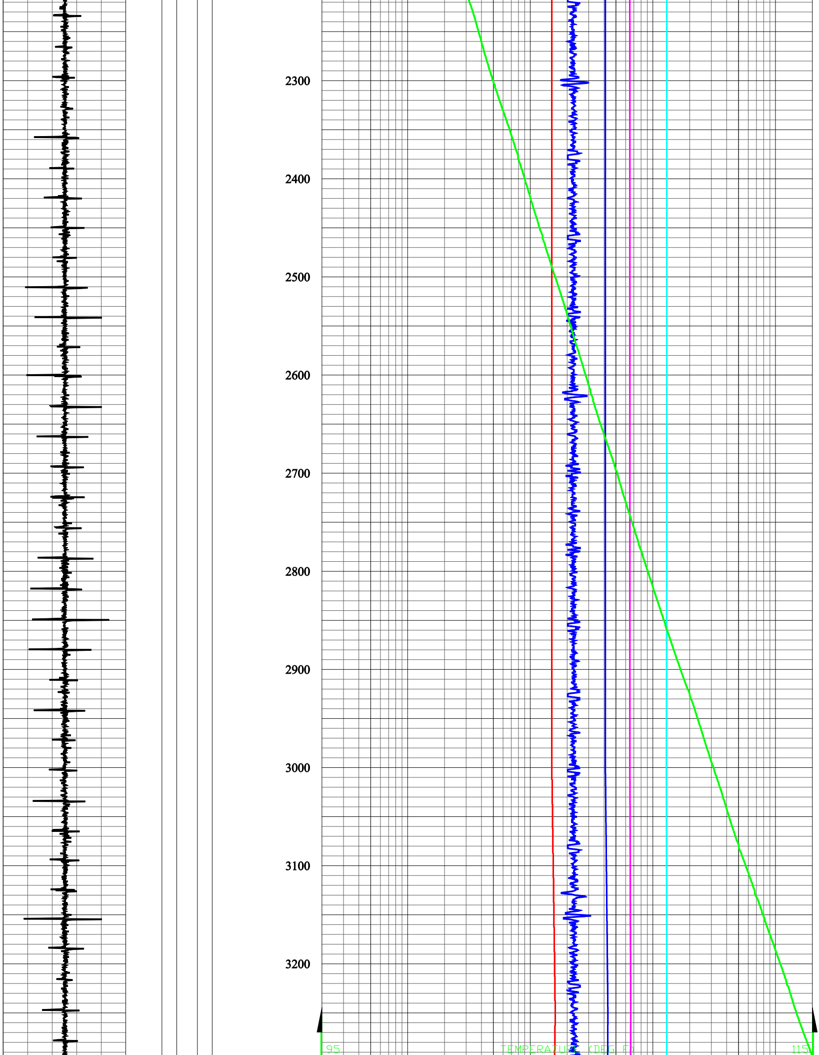
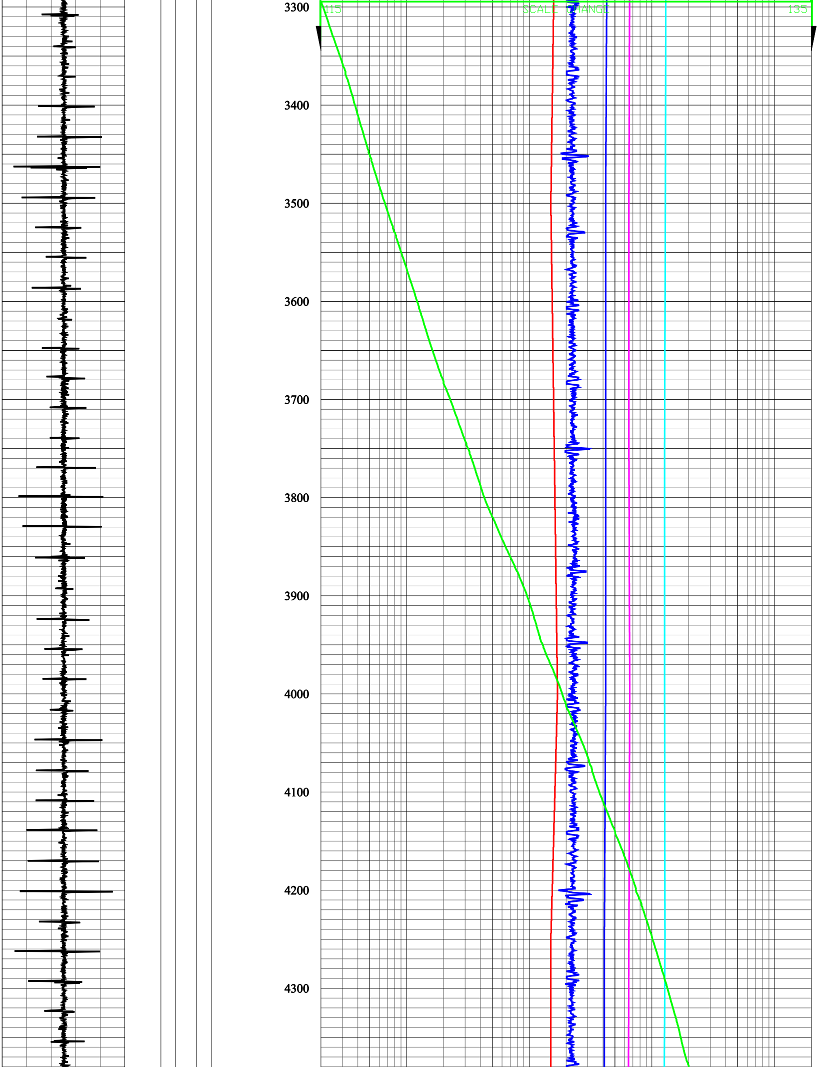
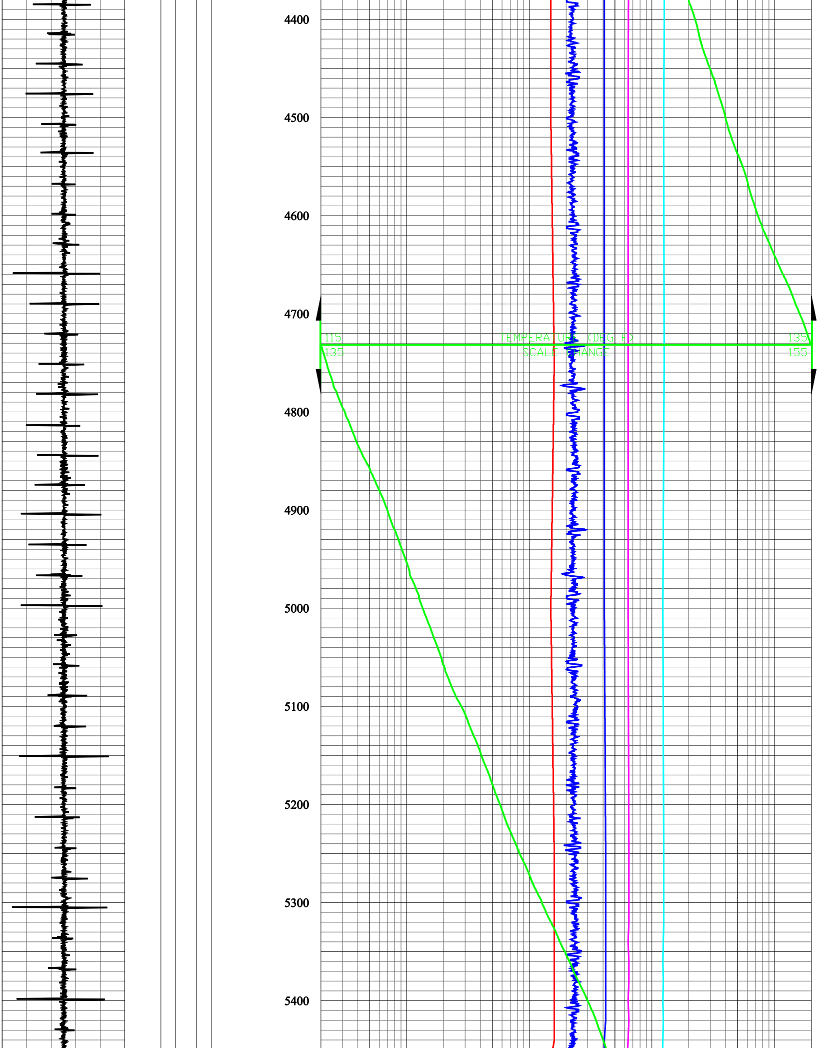
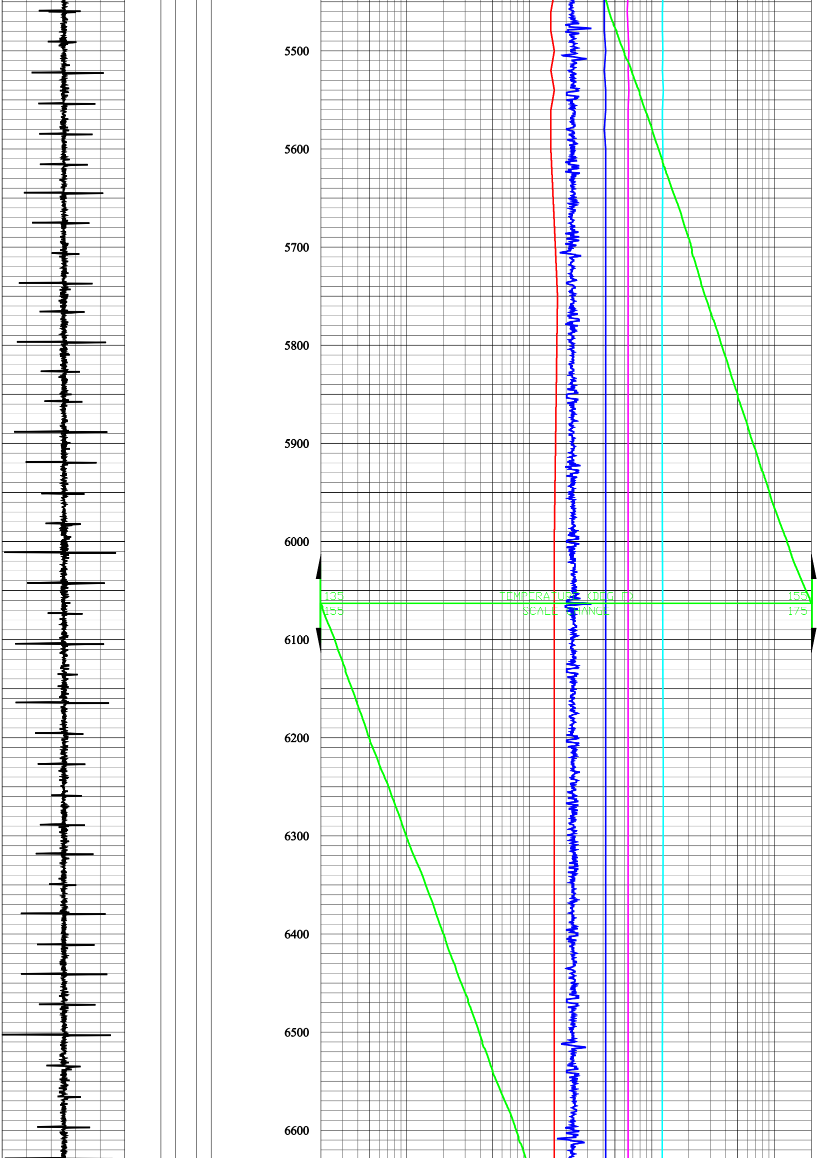
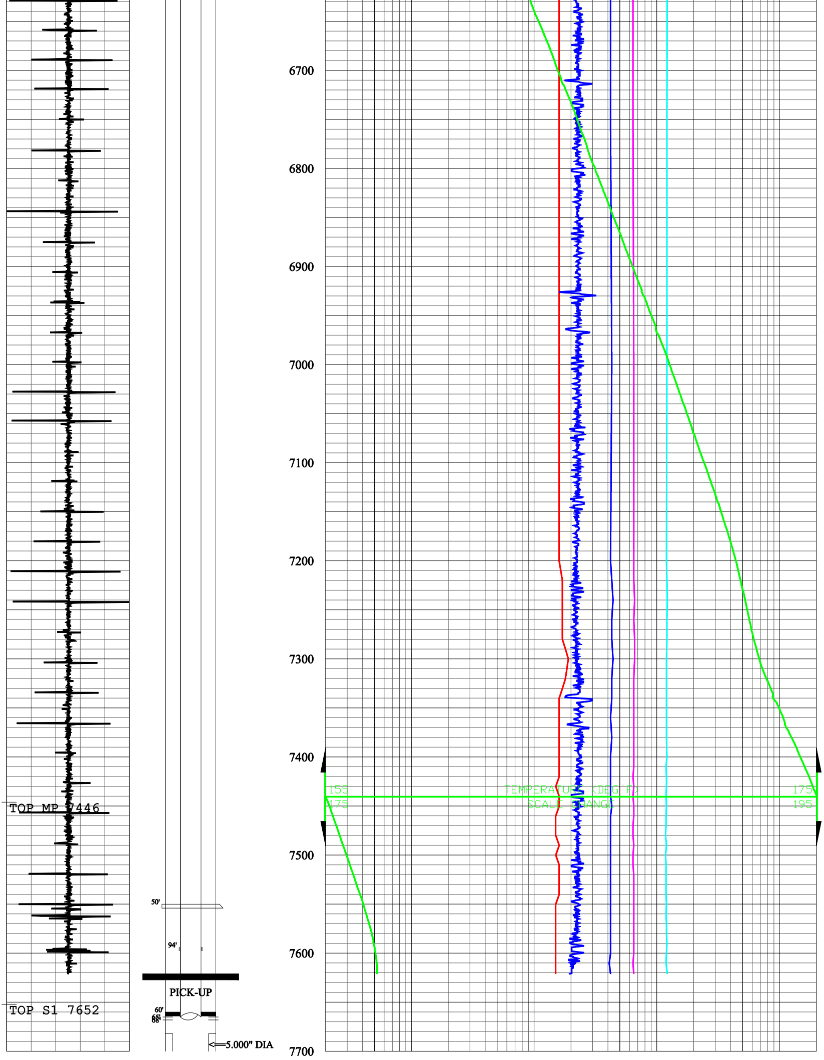
5320	12.50	6.50	4.20	1.60
5340	12.40	6.40	4.20	1.60
5360	12.30	6.50	4.20	1.60
5380	12.40	6.50	4.20	1.60
5400	12.30	6.40	4.20	1.60
5420	12.40	6.50	4.20	1.60
5440	12.30	6.40	4.10	1.60
5460	12.20	6.30	4.10	1.50
5480	12.20	6.40	4.10	1.50
5500	12.30	6.50	4.20	1.60
5520	12.20	6.40	4.10	1.50
5540	12.40	6.50	4.20	1.60
5560	12.20	6.40	4.20	1.50
5580	12.20	6.40	4.10	1.50
5600	12.30	6.40	4.20	1.50
5750	12.10	6.40	4.20	1.70
6000	12.20	6.40	4.20	1.60
6250	12.40	6.40	4.20	1.60
6500	12.20	6.40	4.20	1.60
6750	12.10	6.40	4.20	1.60
7000	12.10	6.50	4.30	1.60
7200	12.00	6.50	4.20	1.60
7220	12.10	6.50	4.30	1.70
7240	12.20	6.60	4.40	1.70
7260	12.10	6.50	4.30	1.70
7280	12.10	6.60	4.30	1.70
7300	12.00	6.60	4.40	1.90
7320	12.00	6.50	4.30	1.80
7340	12.00	6.50	4.30	1.60
7360	12.00	6.50	4.20	1.60
7380	12.00	6.50	4.30	1.60
7400	12.10	6.50	4.20	1.60
7410	11.90	6.50	4.20	1.60
7420	12.00	6.40	4.20	1.60
7430	12.00	6.50	4.20	1.50
7440	11.90	6.40	4.20	1.60
7450	12.00	6.50	4.30	1.60
7460	11.90	6.50	4.20	1.50
7470	11.90	6.40	4.20	1.50
7480	11.80	6.40	4.20	1.50
7490	12.00	6.50	4.20	1.60
7500	11.80	6.40	4.20	1.50
7510	11.90	6.40	4.20	1.60
7520	11.90	6.50	4.20	1.60
7530	11.90	6.50	4.20	1.60
7540	11.90	6.50	4.20	1.60
7550	12.00	6.50	4.20	1.50
7560	11.90	6.50	4.20	1.50
7570	12.00	6.50	4.20	1.50
7580	12.00	6.50	4.20	1.50
7590	12.10	6.50	4.20	1.50
7600	12.00	6.50	4.20	1.50
7610	11.90	6.40	4.10	1.50
7621	12.20	6.50	4.20	1.50

1515 COLLAR LOCATOR (MV) 2005

75 TEMPERATURE (DEG F) 95

0.02 AUDIO DETECTION LOG (MV) 200

-2 DIFFERENTIAL TEMPERATURE (DEG F) 2