



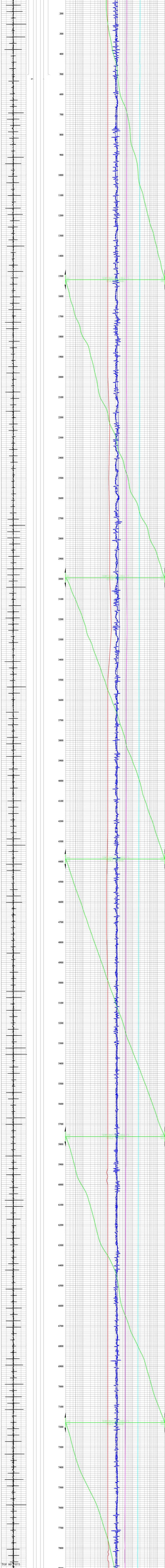
WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

WELL TYPE: COMPANY: **SOUTHERN CALIF. GAS CO.**
 WELL: **FWM 2**
 FIELD: **ALISO CANYON**
 COUNTY: **LOS ANGELES** STATE: **CALIFORNIA**
 LOCATION: **DISTRICT 2** OTHER SVC:
 A.P. NUMBER: **040370065** RING: **16W**
 SEC: **29** TWP: **3N**
 PERMANENT DATUM: **GROUND LEVEL** ELEV: **-ELEVATIONS-**
 LOG MEASURED FROM **NAT 0 ABOVE PERM DATUM** DR: **F**
 DRILLING MEASURED FROM **GL: F**
 DATE LOG RAN: **06-10-2016** PRESSURE: **FLOWING** INJECTION: **SHUT-IN**
 RUN NUMBER: **ONE** TURNING PSI: **0**
 EFFECTIVE DEPTH: **848' (PBD)** CASING PSI: **N/A**
 PICKUP DEPTH: **8014'** INJECTION RATE: **N/A**
 BOT LOGGED INT: **8014'** OBSERVED RATE: **N/A**
 TOP LOGGED INT: **100'** RA 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** OIL GR: **PRODUCTION DATA**
 MAX TEMPERATURE: **171.0** F OIL GR: **GAS-**
 AT DEPTH: **8014'** MPP: **GAS-**
 TEMPERATURE SENS: **1 F/DIV** BHM: **-**
 LOGGING SPEED: **100 PPM** WATER-
 RECORDED BY: **D. PROKINSKI**
 WITNESSED BY: **N/A**
 EMAIL TO: **A.KARBAR**
 DEPTH CORRELATION: **N/A**

Time/Events	Equipment Data	TOOL DIAGRAM					
On Location: 07:00am	Collar Locator: 1.375"						
Run In Hole: 07:30am	Temperature Tool: 1.375"						
Begin Survey: 07:40am	Audio Detector: 1.375"						
Pull Out Of Hole: 11:30am							
Off Location: 12:00pm							
Remarks/Survey Results							
SAND TAG MARKERS: 7875' TOP MP 8160' TOP S1 8262' TOP S4 8420' TOP S8							
CASING AND TUBING RECORD							
SIZE	WT(lb)	FROM	TO	SIZE	WT(lb)	FROM	TO
13.375"	48	SURFACE	501'				
7.000"	23	SURFACE	885'				
4.75"	16	8817'	929'				
2.875"	6.5	SURFACE	8166'				
PERFORATIONS							
STR.	PIPE DIA.	WSD: 8236', 8315'-8335', 8360'-8375', 8385'-8405', 8432'-8450', 8465'-8473'. SIZINGS: 9319'-9290'. PACKERS: 8160'. GAS LIFT MANDRELS: 8048'-8053'. SLIDING SLEEVES: 524', 8087'-8092'. NO-GO: 8127'.					

DEPTH	200HZ	600HZ	1000HZ	2000HZ
100	20.20	5.90	2.40	1.00
250	20.10	5.90	2.40	1.00
440	19.70	5.80	2.30	1.00
460	20.10	5.90	2.40	1.00
480	19.90	5.90	2.40	1.00
500	20.00	5.80	2.40	1.00
520	19.90	5.90	2.30	1.00
540	19.90	5.80	2.30	1.00
560	19.50	5.80	2.40	1.00
750	19.80	5.90	2.40	1.00
1000	19.40	5.80	2.40	1.00
1250	19.40	5.80	2.40	1.00
1500	19.40	5.80	2.40	1.00
1750	19.30	5.80	2.40	1.00
2000	19.20	5.70	2.40	1.00
2250	19.20	5.50	2.70	1.20
2500	18.90	5.80	2.60	1.10
2750	18.60	5.80	2.70	1.20
3000	18.80	5.80	3.00	1.40
3250	18.60	6.00	3.00	1.20
3500	18.20	5.50	2.40	1.00
3750	18.30	5.60	2.40	1.00
4000	18.20	5.60	2.40	1.00
4250	17.80	5.50	2.40	1.00
4500	17.80	5.40	2.40	0.90
4750	17.40	5.40	2.50	1.10
5000	17.50	5.40	2.40	1.00
5250	17.40	5.40	2.40	1.00
5500	17.30	5.40	2.40	1.00
5750	17.30	5.40	2.40	1.00
5900	17.10	5.40	2.50	1.10
5920	17.00	5.30	2.50	1.00
5940	17.20	5.30	2.40	0.90
5960	17.00	5.30	2.40	1.00
5980	16.80	5.30	2.40	0.90
6000	17.10	5.30	2.40	1.00
6020	17.00	5.30	2.40	1.00
6620	16.60	5.10	2.40	1.00
6640	16.60	5.10	2.40	1.00
6660	16.50	5.10	2.40	1.00
6750	16.70	5.10	2.40	1.00
7000	16.50	5.10	2.40	1.00
7250	16.50	5.10	2.50	1.00
7500	16.20	5.00	2.40	1.00
7750	16.40	4.90	2.40	1.00
7800	16.30	5.00	2.40	1.10
7810	16.30	4.90	2.40	1.10
7820	16.20	4.90	2.40	1.00
7830	16.00	4.90	2.40	1.10
7840	16.00	4.90	2.40	1.00
7850	16.20	4.90	2.40	1.00
7860	16.10	4.90	2.40	1.00
7870	16.20	4.90	2.40	1.10
7880	16.20	5.00	2.40	1.10
7890	16.10	5.00	2.50	1.10
7900	16.30	5.00	2.50	1.10
7910	16.40	5.00	2.50	1.10
7920	16.20	4.90	2.50	1.10
7930	16.30	4.90	2.50	1.10
7940	16.10	4.90	2.40	1.00
7950	16.20	4.90	2.50	1.10
7960	16.30	4.90	2.50	1.10
7970	16.20	4.90	2.50	1.10
7980	15.90	4.80	2.50	1.10
7990	15.90	4.90	2.40	1.10
8000	15.70	4.70	2.40	1.10
8014	13.30	3.70	2.00	0.80



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7800	16.30	5.00	2.40	1.10
7810	16.30	4.90	2.40	1.10
7820	16.20	4.90	2.40	1.00
7830	16.00	4.90	2.40	1.10
7840	16.00	4.90	2.40	1.00
7850	16.20	4.90	2.40	1.00
7860	16.10	4.90	2.40	1.00
7870	16.20	4.90	2.40	1.10
7880	16.20	5.00	2.40	1.10
7890	16.10	5.00	2.50	1.10
7900	16.30	5.00	2.50	1.10
7910	16.40	5.00	2.50	1.10
7920	16.20	4.90	2.50	1.10
7930	16.30	4.90	2.50	1.10
7940	16.10	4.90	2.40	1.00
7950	16.20	4.90	2.50	1.10
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