

WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

WELL TYPE: COMPANY: SOUTHERN CALIF. GAS CO.
 FIELD: PORTER 27
 COUNTY: LOS ANGELES STATE: CALIFORNIA
 LOCATION: DISTRICT 2
 OTHER SVC:

API NUMBER: 0403700724
 SEC 27 T4W 3N R4G 16W
 PERMANENT DATUM GROUND LEVEL: ELEV: 1900.00 FT
 LOG MEASURED FROM TO 7 ABOVE BERM DATUM
 DRILLING MEASURED FROM
 DATE LOG RAN: 03-29-2016 PRESSURE FLOWING INJECTION SHUT-IN

RUNNING PSI: 1063
 EFFECTIVE DEPTH: 7740'
 PICKUP DEPTH: 7721'
 TOP LOGGED INT: NONE
 TYPE OF INJECT: NONE
 FLUID IN WELL: GAS

WELL STATUS: STATIC
 MAX TEMPERATURE: 56.63 OIL GR.
 AT DEPTH: 7330' MPP
 TEMPERATURE SPNS: 1720' V
 LOGGING SPEED: 100 PPM
 RECORDER BY: C BARAKAS
 WITNESSED BY: N/A
 EMAIL TO: A KARAR
 DEPTH CORRECTION: LINER TOP

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	55	SURFACE	520'	2.375"	4.7	SURFACE	7438'
7"	29	SURFACE	7440'				
5.5"	20	SURFACE	7440'				
5"	18	7592'	7740'				

STR.	PIPE DIA.	PERFORATIONS
A	5"	SLOTTED: 7640'-7738' . PACKERS: 7334'-7436' . GAS LIFT MANDRELS: 7326.5'-7330' . SLIDING SLEEVES: 7365.3'-7368' . NO-GO: 7400.6' .

Equipment Data
 Collar Locator: 1.375"
 Temperature Dial: 1.375"
 Audio Detector: 1.375"

Remarks/Survey Results
 6:30AM ON LOCATION
 SAND TAG MARKERS: 7648" TOP S4
 7774" TOP S8

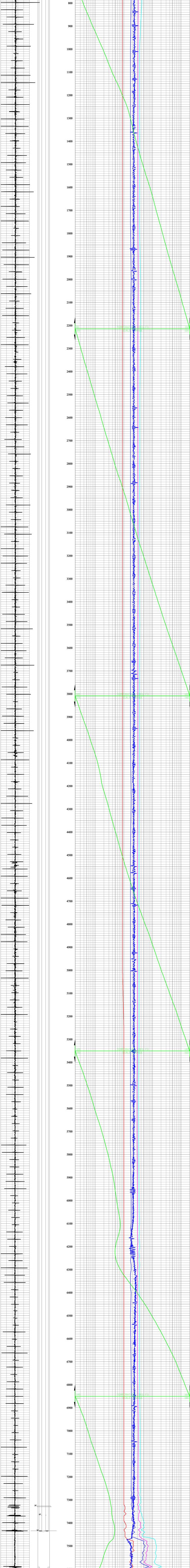
TOOL DIAGRAM
 COLLAR LOCATOR AT 2.0'
 TEMPERATURE TOOL AT 5.0'
 AUDIO DETECTOR AT 8.0'

Audio Data: C:\data\NOISE.txt

DEPTH	200HZ	600HZ	1000HZ	2000HZ
100	5.90	3.40	1.80	0.90
250	5.30	3.20	1.70	0.90
400	4.00	3.20	1.70	0.90
420	4.00	3.20	1.70	0.90
440	3.90	3.20	1.80	0.90
460	4.50	3.10	1.70	0.90
480	4.30	3.10	1.70	0.90
500	3.80	3.20	1.70	0.90
520	3.70	3.20	1.70	0.90
540	4.80	3.20	1.70	0.90
560	4.80	3.10	1.70	0.90
580	4.10	3.20	1.80	0.90
600	4.50	3.10	1.70	0.90
620	4.30	3.20	1.70	0.90
640	4.30	3.20	1.70	0.90
660	4.10	3.10	1.70	0.90
750	4.40	3.20	1.80	0.90
1000	3.50	3.10	1.70	0.90
1250	3.50	3.10	1.70	0.90
1500	3.60	3.10	1.70	0.90
1750	3.50	3.10	1.70	0.90
2000	3.80	3.20	1.80	0.90
2250	3.80	3.10	1.70	0.90
2500	3.60	3.10	1.70	0.90
2750	3.60	3.10	1.70	0.90
3000	3.50	3.10	1.70	0.90
3250	3.50	3.20	1.70	0.90
3500	3.60	3.10	1.70	0.90
3750	3.50	3.10	1.70	0.90
4000	3.50	3.10	1.70	0.90
4250	3.50	3.10	1.70	0.90
4500	3.40	3.00	1.70	0.90
4750	3.40	3.00	1.70	0.90
5000	3.40	3.00	1.70	0.90
5250	3.40	3.00	1.70	1.00
5500	3.30	2.90	1.70	1.00
5750	3.30	2.90	1.70	1.00
6000	3.40	3.00	1.80	1.00
6100	3.50	3.00	1.80	1.00
6120	3.40	3.00	1.70	1.00
6140	3.50	3.10	1.80	1.00
6160	3.40	3.00	1.70	1.00
6180	3.50	3.10	1.80	1.00
6200	3.60	3.00	1.70	1.00
6220	3.40	3.00	1.70	1.00
6240	3.50	3.10	1.80	1.00
6260	3.40	3.00	1.70	1.00
6280	3.60	3.10	1.80	1.00
6300	3.40	3.00	1.80	1.00
6320	3.50	3.00	1.70	1.00
6340	3.50	3.10	1.80	1.00
6360	3.40	3.00	1.70	1.00
6380	3.40	3.00	1.70	1.00
6400	3.50	3.00	1.80	1.00
6500	3.50	3.00	1.70	1.00
6750	3.50	3.00	1.90	1.00
7000	3.70	3.20	1.90	1.00
7250	3.70	3.10	1.80	1.00
7260	3.80	3.10	1.80	1.00
7270	3.70	3.20	1.90	1.00
7280	3.60	3.10	1.80	1.00
7290	3.90	3.20	1.90	1.00
7300	3.80	3.20	1.90	1.00
7310	4.00	3.30	1.90	1.00
7320	3.50	3.00	1.80	1.00
7330	3.50	3.00	1.90	1.10
7340	3.80	3.20	1.90	1.10
7350	3.80	3.60	2.40	1.00
7360	4.20	3.30	2.00	1.20
7370	4.30	3.30	2.00	1.00
7380	4.60	3.20	1.90	1.00
7390	4.80	3.30	1.90	1.00
7400	5.20	3.90	2.50	1.10
7410	4.70	3.70	2.30	1.20
7420	5.20	4.00	2.50	1.20
7430	4.00	3.20	1.90	1.00
7440	5.40	3.80	2.40	1.10
7450	4.40	3.40	1.90	1.10
7460	4.60	3.60	1.90	1.10
7470	11.80	4.50	3.10	1.30
7480	12.70	6.50	5.10	2.20
7490	12.90	6.10	4.80	2.10
7500	13.90	7.20	5.60	2.20
7510	13.50	6.50	5.00	2.00
7520	13.50	6.70	5.10	2.30
7530	12.50	5.80	4.40	1.70
7540	13.50	6.30	4.80	1.90
7550	13.40	5.90	4.40	1.90
7560	12.50	6.00	4.60	1.80
7570	11.50	5.00	3.60	1.60
7580	13.00	6.30	4.70	1.90
7590	20.70	9.60	7.40	2.10
7600	12.40	5.60	3.80	1.60
7610	12.20	5.00	3.50	1.50
7620	15.40	6.90	5.30	1.80
7630	14.40	7.40	5.70	2.00
7640	11.40	6.10	4.30	1.30
7650	13.20	8.60	6.60	2.10
7700	3.90	2.80	1.80	1.10
7721	4.40	3.70	2.90	1.60

1645 COLLAR LOCATOR 1855

60 TEMPERATURE (DEG F) 80
 0.02 AUDIO DETECTION LOG (MV) 200
 -2 DIFFERENTIAL TEMPERATURE (DEG F) 2



TOP S4 17648
 TOP S8 7774