WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

WELL TYPE: GS

COMPANY: SOUTHERN CALIF. GAS CO.
WELL: PORTER 35
FIELD: ALISO CANYON
COUNTY: LOS ANGELES   STATE: CALIFORNIA
LOCATION: DISTRICT 2   OTHER SVC:

CB

API NUMBER: 0403724236
SEC: 28   TWN: 03N   RNG: 16W

PERMANENT DATUM: GROUND LEVEL   ELEV:
LOG MEASURED FROM MAT 0' ABOVE PERM DATUM
DRILLING MEASURED FROM

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

		PRESSURE	FLOWING	INJECTION	SHUT-IN
DATE LOG RAN	04-07-2016	TUBING PSI			0
RUN NUMBER	ONE	CASING PSI			0
EFFECTIVE DEPTH	7813' BP	INJECTION RATE	N/A		
PICKUP DEPTH	7813'	OBSERVED RATE	N/A		
BOT LOGGED INT	7813'	R/A SOURCE	N/A		
TOP LOGGED INT	100'	ACTIVITY	N/A		
TYPE OF INJECT	NONE	HALF LIFE	N/A		
FLUID IN WELL	GAS				
FLUID LEVEL	N/A	PRODUCTION DATA			
WELL STATUS	STATIC	OIL Gr.		OIL =	
MAX TEMPERATURE	177.6 F.	GAS Gr.		GAS=	
AT DEPTH	7813.0'	MPP		BHP =	
TEMPERATURE SENS	1 F/DIV.			WATER=	
LOGGING SPEED	100 FPM				
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"		

TOOL DIAGRAM

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

Remarks/Survey Results

06:30 AM - ON LOCATION
06:40 AM - RAN IN HOLE
06:45 AM - BEGIN SURVEY

CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	54.5	SURFACE	505'	2.875"	6.5	SURFACE	7834'
7.000"	23.0	SURFACE	7910'				
5.000"	18.0	7877'	8142'				
2.875"	6.5	7851'	8134'				

STR.	PIPE DIA.	PERFORATIONS
A	7.000"	SQUEEZED: 7818', SQUEEZED: 7820', SQUEEZED: 7900'.
	5.000"	7968'-7996', 8020'-8037', 8070'-8078',
		8084'-8090', 8114'-8119'.
	2.875"	7968'-7996'.
		PACKERS: 7825'-7830'.
		GAS LIFT MANDREL: 7737'-7742'.
		SLIDING SLEEVES: 7782'-7787'.
		NO-GO: 7813'.

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#     DEPTH     200Hz     600Hz     1000Hz     2000Hz
#--------------------------------------------------
      100.0     13.70      6.80      4.30      1.60
      149.0     13.40      6.70      4.30      1.70
      200.0     13.10      6.70      4.20      1.50
      250.0     13.10      6.70      4.20      1.50
      300.0     13.10      6.70      4.20      1.60
      350.0     13.30      6.80      4.20      1.50
      399.0     13.20      6.70      4.20      1.50
      450.0     13.20      6.70      4.20      1.50
      499.0     13.40      6.80      4.30      1.60
      550.0     13.50      6.70      4.20      1.50
      600.0     13.30      6.60      4.20      1.50
      650.0     13.20      6.60      4.20      1.50
      700.0     13.00      6.60      4.20      1.50
      750.0     13.40      6.60      4.20      1.50
      800.0     13.20      6.70      4.20      1.50
      850.0     13.50      6.70      4.20      1.50
      900.0     13.40      6.60      4.20      1.50
      950.0     13.40      6.70      4.20      1.50
      980.0     13.40      6.60      4.20      1.50
     1000.0     13.20      6.80      4.30      1.50
     1019.0     13.20      6.80      4.30      1.60
     1040.0     13.20      6.70      4.20      1.50
     1060.0     13.20      6.70      4.20      1.50
     1079.0     13.10      6.70      4.20      1.50
     1100.0     13.10      6.70      4.20      1.50
     1119.0     13.10      6.70      4.20      1.60
     1139.0     13.10      6.60      4.20      1.50
     1160.0     12.90      6.60      4.10      1.50
     1180.0     13.00      6.60      4.20      1.50
     1199.0     13.00      6.60      4.20      1.50
     1219.0     13.00      6.60      4.20      1.50
     1240.0     13.00      6.60      4.20      1.50
     1261.0     12.90      6.60      4.20      1.50
     1279.0     12.90      6.60      4.20      1.50
     1300.0     12.90      6.70      4.20      1.50
     1320.0     12.90      6.70      4.20      1.50
     1340.0     13.00      6.70      4.20      1.50
     1359.0     13.00      6.70      4.20      1.50
     1379.0     12.80      6.60      4.20      1.60
     1399.0     13.00      6.70      4.20      1.50
     1420.0     12.90      6.70      4.20      1.50
     1439.0     12.80      6.60      4.20      1.50
     1460.0     12.90      6.60      4.20      1.50
     1480.0     13.00      6.60      4.20      1.50
     1503.0     12.80      6.60      4.20      1.50
     1520.0     12.80      6.60      4.20      1.50
     1549.0     12.90      6.60      4.20      1.50
     1600.0     12.80      6.60      4.20      1.50
     1649.0     12.80      6.60      4.20      1.50
     1699.0     12.90      6.70      4.20      1.50
     1749.0     12.80      6.60      4.20      1.50
     1800.0     12.70      6.70      4.20      1.50
     1849.0     12.80      6.60      4.20      1.50
     1899.0     12.70      6.70      4.20      1.50
     1950.0     12.70      6.60      4.20      1.50
     2000.0     12.80      6.70      4.20      1.60
     2050.0     12.60      6.60      4.20      1.50
     2100.0     12.70      6.60      4.20      1.60
     2149.0     12.70      6.60      4.20      1.50
     2200.0     12.70      6.70      4.20      1.50
     2199.0     12.80      6.60      4.20      1.50
     2300.0     12.80      6.60      4.20      1.50
     2349.0     12.70      6.60      4.20      1.50
     2380.0     12.70      6.60      4.20      1.50
     2400.0     12.60      6.60      4.20      1.50
     2419.0     12.50      6.70      4.20      1.50
     2439.0     12.60      6.60      4.20      1.50
     2460.0     12.60      6.60      4.20      1.50
     2479.0     12.50      6.60      4.20      1.50
     2499.0     12.60      6.60      4.20      1.50
     2520.0     12.50      6.60      4.20      1.50
     2540.0     12.60      6.60      4.20      1.50
     2559.0     12.60      6.60      4.20      1.50
     2580.0     12.60      6.60      4.20      1.50
     2599.0     12.60      6.60      4.20      1.50
     2620.0     12.60      6.60      4.20      1.50
     2639.0     12.50      6.60      4.20      1.50
     2660.0     12.40      6.60      4.20      1.50
     2680.0     12.60      6.60      4.20      1.50
     2700.0     12.50      6.60      4.20      1.50
     2719.0     12.50      6.60      4.20      1.50
     2739.0     12.50      6.60      4.20      1.50
     2760.0     12.40      6.60      4.20      1.50
     2779.0     12.50      6.60      4.20      1.50
     2800.0     12.40      6.70      4.20      1.50
     2819.0     12.40      6.60      4.20      1.50
     2840.0     12.30      6.60      4.20      1.50
     2860.0     12.40      6.60      4.20      1.50
     2879.0     12.40      6.70      4.20      1.60
     2900.0     12.30      6.60      4.20      1.50
     2920.0     12.40      6.60      4.20      1.50
     2939.0     12.40      6.70      4.20      1.60
     2959.0     12.40      6.60      4.20      1.50
     2980.0     12.30      6.60      4.20      1.50
     2999.0     12.30      6.60      4.20      1.50
     3020.0     12.30      6.70      4.20      1.60
     3040.0     12.40      6.70      4.20      1.50
     3059.0     12.20      6.60      4.20      1.60
     3080.0     12.30      6.70      4.20      1.60
     3100.0     12.20      6.70      4.20      1.60
     3120.0     12.20      6.60      4.20      1.50
     3140.0     12.40      6.60      4.20      1.50
     3160.0     12.40      6.70      4.20      1.60
     3179.0     12.30      6.70      4.20      1.50
     3200.0     12.20      6.70      4.20      1.60
     3220.0     12.20      6.60      4.20      1.50
     3239.0     12.30      6.60      4.20      1.50
     3300.0     12.40      6.70      4.20      1.60
     3349.0     12.20      6.60      4.20      1.50
     3400.0     12.40      6.70      4.20      1.50
     3450.0     12.20      6.70      4.20      1.50
     3500.0     12.30      6.70      4.20      1.50
     3550.0     12.40      6.60      4.20      1.50
     3599.0     12.30      6.70      4.20      1.50
     3649.0     12.20      6.70      4.20      1.50
     3700.0     12.20      6.70      4.20      1.50
     3749.0     12.30      6.70      4.20      1.50
     3800.0     12.20      6.70      4.20      1.50
     3850.0     12.30      6.80      4.30      1.60
     3900.0     12.20      6.70      4.30      1.50
     3950.0     12.20      6.70      4.30      1.50
     4000.0     12.20      6.70      4.20      1.50
     4049.0     12.20      6.70      4.20      1.50
     4100.0     12.30      6.70      4.20      1.50
     4150.0     12.20      6.70      4.30      1.50
     4199.0     12.20      6.70      4.30      1.50
     4249.0     12.20      6.70      4.20      1.50
     4300.0     12.10      6.70      4.20      1.50
     4350.0     12.20      6.70      4.20      1.50
     4400.0     12.20      6.70      4.20      1.50
     4449.0     12.10      6.60      4.20      1.50
     4499.0     12.20      6.60      4.20      1.50
     4549.0     12.20      6.70      4.20      1.40
     4600.0     12.20      6.60      4.20      1.50
     4650.0     12.10      6.60      4.20      1.50
     4699.0     12.10      6.60      4.20      1.50
     4750.0     12.10      6.60      4.20      1.50
     4800.0     12.10      6.60      4.20      1.50
     4800.0     12.10      6.60      4.20      1.50
     4850.0     12.00      6.60      4.20      1.50
     4900.0     12.10      6.60      4.20      1.50
     4949.0     12.00      6.60      4.20      1.50
     5000.0     12.00      6.60      4.20      1.50
     5019.0     11.90      6.60      4.20      1.50
     5040.0     12.00      6.60      4.20      1.50
     5059.0     11.90      6.50      4.20      1.50
     5080.0     11.90      6.60      4.20      1.50
     5099.0     11.90      6.60      4.20      1.50
     5120.0     12.00      6.60      4.30      1.50
     5140.0     11.90      6.60      4.20      1.50
     5160.0     12.00      6.70      4.20      1.50
     5180.0     12.00      6.60      4.20      1.50
     5199.0     12.00      6.60      4.20      1.50
     5219.0     11.90      6.60      4.20      1.50
     5240.0     12.00      6.60      4.20      1.50
     5260.0     11.90      6.60      4.20      1.50
     5280.0     11.90      6.60      4.20      1.50
     5299.0     11.90      6.70      4.20      1.50
     5320.0     11.90      6.70      4.20      1.50
     5340.0     11.90      6.70      4.20      1.50
     5360.0     11.80      6.60      4.20      1.50
     5380.0     11.90      6.60      4.20      1.50
     5399.0     11.90      6.70      4.30      1.50
     5420.0     11.90      6.60      4.20      1.50
     5440.0     11.90      6.60      4.30      1.60
     5459.0     11.90      6.70      4.30      1.50
     5480.0     11.90      6.70      4.30      1.50
     5499.0     11.90      6.70      4.20      1.50
     5519.0     11.80      6.70      4.30      1.50
     5540.0     11.80      6.60      4.20      1.50
     5559.0     11.80      6.60      4.20      1.50
     5580.0     11.80      6.70      4.30      1.50
     5600.0     11.80      6.70      4.30      1.60
     5649.0     11.80      6.60      4.20      1.50
     5700.0     11.80      6.60      4.30      1.60
     5749.0     11.70      6.60      4.20      1.50
     5800.0     11.70      6.70      4.30      1.60
     5850.0     11.60      6.60      4.20      1.50
     5900.0     11.60      6.60      4.20      1.50
     5919.0     11.60      6.60      4.20      1.50
     5940.0     11.50      6.70      4.20      1.50
     5960.0     11.50      6.60      4.20      1.50
     5980.0     11.60      6.70      4.20      1.60
     5999.0     11.60      6.70      4.30      1.50
     6020.0     11.60      6.70      4.30      1.50
     6040.0     11.50      6.60      4.20      1.50
     6059.0     11.50      6.70      4.30      1.60
     6080.0     11.40      6.60      4.20      1.50
     6099.0     11.50      6.60      4.20      1.50
     6120.0     11.50      6.70      4.30      1.60
     6139.0     11.40      6.70      4.20      1.50
     6160.0     11.40      6.60      4.20      1.50
     6180.0     11.40      6.70      4.30      1.60
     6199.0     11.40      6.70      4.30      1.60
     6220.0     11.40      6.70      4.30      1.50
     6239.0     11.30      6.70      4.30      1.50
     6260.0     11.40      6.70      4.30      1.60
     6279.0     11.30      6.70      4.30      1.60
     6300.0     11.30      6.70      4.30      1.60
     6349.0     11.30      6.70      4.30      1.70
     6399.0     11.30      6.70      4.20      1.60
     6449.0     11.30      6.70      4.20      1.60
     6500.0     11.20      6.70      4.20      1.50
     6549.0     11.20      6.70      4.20      1.60
     6599.0     11.20      6.80      4.30      1.60
     6649.0     11.20      6.70      4.30      1.60
     6700.0     11.00      6.70      4.30      1.60
     6749.0     11.20      6.90      4.40      1.70
     6799.0     11.10      6.90      4.40      1.70
     6849.0     11.10      6.90      4.40      1.70
     6900.0     11.00      6.90      4.40      1.70
     6949.0     11.00      6.90      4.30      1.60
     7000.0     11.00      6.80      4.40      1.70
     7049.0     10.90      6.90      4.30      1.60
     7099.0     10.80      6.90      4.30      1.60
     7250.0     10.80      6.90      4.30      1.60
     7499.0     10.50      7.10      4.30      1.60
     7550.0     10.50      7.20      4.30      1.60
     7560.0     10.50      7.10      4.30      1.70
     7569.0     10.40      7.20      4.30      1.70
     7580.0     10.40      7.10      4.30      1.70
     7590.0     10.40      7.20      4.30      1.70
     7600.0     10.40      7.20      4.30      1.70
     7609.0     10.40      7.20      4.30      1.60
     7620.0     10.40      7.20      4.30      1.70
     7630.0     10.40      7.10      4.30      1.70
     7640.0     10.30      7.20      4.30      1.60
     7650.0     10.30      7.10      4.20      1.60
     7660.0     10.20      7.20      4.20      1.70
     7670.0     10.30      7.20      4.30      1.70
     7680.0     10.30      7.20      4.30      1.70
     7690.0     10.20      7.20      4.30      1.70
     7700.0     10.20      7.20      4.20      1.70
     7710.0     10.30      7.30      4.30      1.70
     7720.0     10.20      7.30      4.30      1.70
     7730.0     10.20      7.20      4.20      1.70
     7740.0     10.20      7.30      4.30      1.70
     7750.0     10.20      7.40      4.30      1.70
     7760.0     10.10      7.30      4.30      1.70
     7770.0     10.00      7.30      4.30      1.70
     7779.0      9.90      7.30      4.20      1.60
     7790.0     10.00      7.40      4.20      1.60
     7800.0     10.00      7.40      4.20      1.60
     7813.0     10.00      7.30      4.20      1.60
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