WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

COMPANY:	SOUTHERN CALIF. GAS CO.
WELL:	STANDARD SESNON 14
FIELD:	ALISO CANYON
COUNTY:	LOS ANGELES
STATE:	CALIFORNIA
LOCATION:	DISTRICT 2
OTHER SVC:	
WELL TYPE	GS
	BFW
API NUMBER: 0403700766	SEC: 28 TWN: 3N RNG: 16W

PERMANENT DATUM: GROUND LEVEL ELEV: 2401 Ft.
LOG MEASURED FROM MAT 0' ABOVE PERM DATUM
DRILLING MEASURED FROM

-ELEVATIONS-
KB: 2408 Ft.
DF: Ft.
GL: 2401 Ft.

		PRESSURE	FLOWING	INJECTION	SHUT-IN
DATE LOG RAN	04-21-2016	TUBING PSI			1480
RUN NUMBER	ONE	CASING PSI			1477
EFFECTIVE DEPTH	9157' PLUG				
PICKUP DEPTH	9072'	INJECTION RATE		N/A	
BOT LOGGED INT	9072'	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	193.2 F.	OIL Gr.	N/A	OIL =	N/A
AT DEPTH	9072.0'	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	PACKERS				

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

06:00AM - ON LOCATION
06:30AM - RAN IN HOLE
06:45AM - BEGIN SURVEY
09:45AM - PULL OUT OF HOLE
10:00AM - OFF LOCATION

SAND TAG MARKERS: 8563' TOP MP
8843' TOP S1
8897' TOP S4
9015' TOP S8

CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	54.5	SURFACE	817'	2.375"		8045'	9157'
7.000"	23.0	SURFACE	8889'				
5.000"	18.0	8062'	9171'				
2.875"	6.50	SURFACE	8045'				

STR.	PIPE DIA.	PERFORATIONS
A	7.000"	WSO: 8889'.
	5.000"	8895'-8947', WSO: 9010', '-9000',
		9020'-9118', 9132'-9165'.
		PACKERS: 8840', 9009'.
		GAS LIFT MANDRELS: 2556', 4303',
		5798', 7103',
		7967', 8767'.
		SLIDING SLEEVES: 8852'.
		NO-GO: 8012', 8886', 9030'.

Audio Data: C:\data\NOISE.txt

DEPTH	200HZ	600HZ	1000HZ	2000HZ
100	13.10	6.40	3.70	0.80
250	13.30	6.40	3.70	0.80
500	13.20	6.40	3.70	0.80
700	13.10	6.30	3.60	0.70
720	13.10	6.30	3.60	0.70
740	13.20	6.30	3.60	0.80
760	13.10	6.30	3.60	0.80
780	13.20	6.30	3.60	0.80
800	13.10	6.30	3.60	0.70
820	13.20	6.40	3.70	0.80
840	13.00	6.30	3.60	0.70
860	13.10	6.30	3.60	0.70
880	13.10	6.30	3.60	0.70
900	13.20	6.40	3.70	0.90
1000	13.30	6.40	3.80	1.10
1250	13.10	6.40	3.80	0.90
1500	13.00	6.30	3.70	0.80
1600	13.30	6.40	3.70	0.90
1620	13.00	6.30	3.70	0.80
1640	13.30	6.40	3.80	1.00
1660	13.10	6.40	3.80	0.90
1680	13.10	6.40	3.70	0.80
1700	12.80	6.40	3.70	0.90
1720	13.30	6.30	3.70	0.80
1740	13.20	6.40	3.80	0.90
1760	13.20	6.40	3.80	1.00
1780	13.00	6.40	3.80	0.90
1800	12.80	6.30	3.60	0.80
1820	13.20	6.40	3.80	0.90
1840	13.40	6.40	3.80	1.00
1860	13.20	6.40	3.80	0.90
1880	13.20	6.30	3.60	0.80
1900	13.10	6.30	3.70	0.80
1920	13.00	6.30	3.70	0.90
1940	13.00	6.30	3.60	0.80
1960	13.30	6.30	3.70	0.80
1980	12.80	6.30	3.70	0.80
2000	13.30	6.40	3.70	0.80
2020	13.40	6.40	3.70	0.90
2040	13.40	6.40	3.70	0.80
2060	13.00	6.30	3.70	0.80
2080	12.90	6.30	3.70	0.80
2100	13.00	6.40	3.80	1.00
2120	13.10	6.30	3.70	0.90
2140	13.20	6.40	3.70	0.80
2160	13.30	6.40	3.80	0.90
2180	12.80	6.30	3.60	0.80
2200	13.00	6.40	3.70	0.90
2220	13.20	6.40	3.70	0.90
2240	13.00	6.40	3.70	0.90
2260	13.20	6.40	3.70	0.90
2280	13.00	6.30	3.70	0.80
2300	13.00	6.50	4.00	1.20
2560	13.10	6.30	3.70	0.80
2580	13.20	6.30	3.60	0.80
2600	13.00	6.40	3.70	0.80
2620	13.30	6.30	3.70	0.80
2640	13.40	6.30	3.70	0.80
2660	12.80	6.30	3.70	0.80
2680	13.60	6.30	3.70	0.80
2700	13.20	6.40	3.80	0.90
3000	13.20	6.40	3.70	0.80
3250	13.10	6.20	3.60	0.80
3500	12.80	6.20	3.60	0.80
3750	13.10	6.20	3.60	0.80
4000	13.20	6.60	4.10	1.40
4250	13.30	6.70	4.20	1.40
4500	13.40	6.40	3.80	1.00
4750	13.70	6.70	4.00	1.20
5000	14.10	6.50	3.90	1.30
5250	13.60	6.40	3.80	0.90
5500	13.00	6.50	3.90	1.20
5750	13.10	6.80	4.50	2.10
6000	14.90	9.60	7.90	5.80
6250	15.10	9.60	7.70	5.00
6500	16.40	11.60	10.10	7.70
6750	19.00	15.40	14.40	12.60
7000	29.30	27.10	26.40	24.50
7100	37.10	35.20	34.70	32.70
7200	46.50	45.00	44.60	42.30
7300	51.90	50.60	50.30	48.20
7400	44.50	42.70	42.30	39.40
7500	38.00	35.80	35.20	32.10
7550	40.50	38.40	37.90	34.90
7600	33.40	30.70	30.00	26.50
7650	33.50	30.50	29.60	25.60
7700	27.40	24.40	23.50	20.60
7750	25.00	22.10	21.10	17.10
7800	26.10	23.30	22.40	19.20
7850	26.10	23.30	22.30	18.80
7900	25.70	22.80	21.70	17.90
7920	26.00	23.30	22.20	18.40
7940	26.20	23.30	22.20	18.50
7960	26.90	24.20	23.20	19.70
7980	27.00	24.40	23.40	19.60
8000	31.00	28.70	27.80	24.20
8020	34.80	32.20	31.10	26.30
8040	37.60	35.10	34.00	29.00
8060	36.60	34.10	32.90	27.80
8080	37.30	34.60	33.50	28.60
8100	37.60	34.90	33.60	27.30
8120	43.90	41.70	40.60	35.50
8140	44.90	42.70	41.70	36.70
8160	48.20	46.00	45.10	39.40
8180	48.20	45.50	44.40	38.60
8200	49.40	47.30	46.30	41.10
8220	50.70	48.40	47.30	41.70
8240	53.40	51.50	50.50	45.20
8260	57.50	55.40	54.40	48.90
8280	57.30	55.40	54.30	48.60
8300	59.70	57.70	56.80	51.30
8320	61.60	59.70	58.70	52.60
8340	65.00	63.40	62.30	56.00
8360	72.30	70.50	69.40	60.40
8380	59.80	57.70	56.40	47.70
8400	56.30	54.20	52.80	43.70
8420	58.30	56.10	54.40	44.50
8440	54.40	52.20	50.60	40.00
8460	54.50	52.10	50.50	38.60
8480	57.90	55.70	54.00	42.90
8500	57.40	54.80	52.30	38.70
8510	55.60	53.00	51.00	38.90
8520	57.80	55.00	52.60	37.80
8530	56.70	53.90	51.10	37.10
8540	58.00	55.50	52.70	38.10
8550	62.80	60.10	56.50	38.20
8560	53.00	50.00	47.70	34.60
8570	54.40	51.70	48.90	35.40
8580	56.60	53.80	51.30	37.60
8590	58.10	55.40	52.10	36.70
8600	57.80	55.00	52.30	36.90
8610	53.90	51.00	48.50	35.30
8620	56.40	53.60	51.00	36.60
8630	57.30	54.70	52.00	36.80
8640	60.50	57.70	55.10	39.80
8650	58.50	56.00	53.70	38.80
8660	61.90	59.10	56.50	40.50
8670	65.00	62.60	60.00	44.50
8680	64.30	61.60	59.00	43.80
8690	62.20	59.60	56.90	42.20
8700	63.10	60.20	57.40	42.60
8710	66.50	64.00	60.90	45.90
8720	66.70	64.10	61.20	46.20
8730	68.30	65.70	62.60	47.60
8740	73.60	71.00	67.70	50.90
8750	76.80	74.60	70.20	52.80
8760	77.00	74.50	69.70	52.20
8770	81.00	78.50	73.50	54.80
8780	80.60	78.30	74.60	57.70
8790	67.30	64.90	61.60	43.80
8800	67.70	65.60	62.80	44.20
8810	62.80	60.80	58.10	42.80
8820	61.60	59.40	56.40	36.00
8830	62.80	60.70	57.80	39.50
8840	64.00	61.70	58.90	41.20
8850	54.70	51.50	49.00	32.60
8860	34.80	31.50	29.90	21.80
8870	114.80	52.20	39.40	19.90
8880	105.60	39.70	28.00	14.90
8890	116.40	42.10	28.90	15.30
8900	117.90	38.00	23.60	12.50
8950	153.20	48.80	29.40	15.30
9000	139.00	47.80	31.20	14.00
9072	68.40	28.00	25.80	20.30

1210 COLLAR LOCATOR [MV] 1510

65 TEMPERATURE [DEG F] 85

0.02 AUDIO DETECTION LOG [MV] 200

-2 DIFFERENTIAL TEMPERATURE [DEG F] 2