C:\DATA\FERNANDO FEE 32E.LAS

WELL ANALYSIS CORPORATION

AUDIO DETECTION SURVEY

WELL TYPE	GS
COMPANY:	SOUTHERN CALIF. GAS CO.
WELL:	FERNANDO FEE 32E
FIELD:	ALISO CANYON
COUNTY:	LOS ANGELES
STATE:	CALIFORNIA
LOCATION:	DISTRICT 2
OTHER SVC:	
CB	
API NUMBER:	0403721321
SEC: 27	TWN: 3N RNG: 16W
PERMANENT DATUM: GROUND LEVEL	ELEV: 1995.00 FT.
LOG MEASURED FROM KB 15' ABOVE PERM DATUM	
DRILLING MEASURED FROM	

-ELEVATIONS-
KB: 2010.00 Ft.
DF: Ft.
GL: 1995.00 Ft.

		PRESSURE	FLOWING	INJECTION	SHUT-IN
DATE LOG RAN	04-19-2016				
RUN NUMBER	ONE	TUBING PSI			2
EFFECTIVE DEPTH	7474'	CASING PSI			10
PICKUP DEPTH	6960'	INJECTION RATE	N/A		
BOT LOGGED INT	6960'	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	1302'				
WELL STATUS	STATIC	PRODUCTION DATA			
MAX TEMPERATURE	164.5 F.	OIL Gr.		OIL =	
AT DEPTH	6960.0'	GAS Gr.		GAS=	
TEMPERATURE SENS	1 F/DIV.	MPP		BHP =	
LOGGING SPEED	100 FPM			WATER=	
RECORDED BY	S. MACIAS				
WITNESSED BY	N/A				
EMAIL TO	A. KARGAR				
DEPTH CORRELATION	N/A				

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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

PLEASE NOTE: WATER INJECTION WELL 30 FT. AWAY FROM THIS WELL.
06:30 AM - ON LOCATION
08:02 AM - RAN IN HOLE
08:02 AM - BEGIN SURVEY
02:24 PM - PULL OUT OF HOLE
02:45 PM - OFF LOCATION
SAND TAG MARKERS: 6950' TOP MP
7220' TOP S1
7344' TOP S4
7418' TOP S8

CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
13.375"	48.0	SURFACE	717'	3.500"	9.6	7050'	7224'
8.625"	36.0	SURFACE	7189'	2.875"	6.5	7224'	7244'
6.625"	28.0	7145'	7506'				
4.500"	11.2	SURFACE	7050'				

STR.	PIPE DIA.	PERFORATIONS
A	6.625"	WSO: 7328' , 7345'-7385',
		7400'-7474'.
		PACKERS: 7242'-7244'.
		GAS LIFT MANDREL: 7088'.
		SLIDING SLEEVES: 7127.2'.

Audio Data: C:\data\NOISE.txt

DEPTH	200HZ	600HZ	1000HZ	2000HZ
100	5.00	4.50	4.20	3.10
350	5.50	4.70	4.40	3.20
600	5.80	5.30	4.90	3.60
620	6.10	4.90	4.60	3.20
640	5.40	4.80	4.40	3.20
660	5.30	4.70	4.40	3.10
680	6.30	5.30	4.90	3.20
700	6.70	5.30	4.80	3.20
720	4.60	4.40	4.10	3.00
740	5.50	5.00	4.70	3.30
760	8.60	6.10	5.60	3.50
780	9.60	6.80	6.10	3.60
800	8.00	6.90	6.00	3.60
1000	6.80	5.80	5.30	3.50
1250	13.20	5.10	4.30	3.20
1500	15.30	5.20	4.30	3.20
1750	16.30	5.20	4.30	3.20
2000	14.00	5.00	4.30	3.20
2250	16.00	5.40	4.40	3.20
2500	14.60	5.20	4.30	3.20
2750	16.70	5.60	4.50	3.30
3000	8.90	5.90	4.50	2.90
3250	7.50	5.40	4.50	3.00
3500	6.30	4.50	4.10	2.90
3520	6.30	4.70	4.30	3.10
3540	6.20	4.70	4.30	3.10
3560	6.10	4.60	4.30	3.10
3580	6.40	4.60	4.30	3.10
3600	6.00	4.60	4.20	3.00
3620	6.30	4.80	4.30	3.00
3640	6.40	4.60	4.20	3.00
3660	6.20	4.70	4.20	3.00
3680	6.60	4.70	4.30	3.10
3700	6.60	4.80	4.30	3.10
3720	6.70	4.90	4.40	3.10
3740	7.30	5.10	4.50	3.10
3760	6.70	5.00	4.40	3.10
3780	6.70	4.80	4.30	3.00
3800	7.40	5.50	4.80	3.30
3820	7.70	5.50	4.70	3.10
3840	7.20	5.00	4.50	3.00
3860	7.40	5.10	4.50	3.00
3880	7.70	5.40	4.70	3.00
3900	7.90	5.30	4.50	3.00
3920	8.60	5.70	4.90	3.10
3940	8.20	5.50	4.80	3.00
3960	7.90	5.60	4.80	3.00
3980	8.50	5.80	5.10	3.00
4000	9.20	6.50	5.70	3.10
4020	8.30	6.00	5.20	3.00
4040	9.80	7.30	6.20	3.70
4060	6.90	4.80	4.30	3.00
4080	6.80	4.90	4.50	3.10
4100	7.50	5.20	4.80	3.40
4300	7.80	4.60	4.10	2.90
4550	9.50	5.60	4.70	2.90
4800	15.90	9.40	6.40	2.80
5050	18.50	11.40	7.90	3.00
5300	24.30	16.70	11.30	3.10
5320	35.70	24.70	16.80	3.80
5340	12.30	5.20	4.50	2.90
5360	12.60	5.40	4.60	3.00
5380	12.90	5.60	4.50	2.90
5400	13.30	5.90	4.70	3.00
5420	12.80	5.50	4.60	2.90
5440	12.90	5.50	4.60	3.00
5460	13.20	5.40	4.50	3.00
5480	13.50	6.10	5.00	3.20
5500	13.80	5.90	4.80	3.10
5520	13.60	6.00	4.90	3.20
5540	12.50	5.80	4.60	2.90
5560	12.60	5.80	4.80	3.00
5580	11.70	5.60	4.60	3.00
5600	12.10	5.70	4.60	2.90
5620	11.80	5.50	4.60	3.00
5640	11.10	5.40	4.50	3.00
5660	10.20	5.50	4.70	3.10
5680	10.80	5.60	4.60	3.00
5700	10.00	5.30	4.50	2.90
5720	14.80	8.40	6.40	3.80
5740	13.80	7.30	5.40	3.00
5760	13.70	7.40	5.40	3.00
5780	13.20	7.30	5.50	3.10
5800	10.00	5.90	4.90	3.20
5820	13.10	7.70	6.30	3.80
5840	12.50	7.40	6.00	3.80
5860	12.60	7.60	6.10	3.60
5880	12.10	8.30	6.70	4.20
5900	10.00	6.50	5.20	3.30
5920	8.60	6.60	5.00	3.00
5940	16.30	10.00	6.70	3.40
5960	31.60	13.30	7.60	2.90
5980	36.20	12.90	6.40	2.90
6000	9.20	6.80	6.00	3.50
6020	8.50	6.20	5.30	3.20
6040	8.10	6.00	5.30	3.00
6060	7.00	5.00	4.40	2.90
6080	7.20	4.90	4.30	2.80
6100	9.20	5.70	4.80	3.10
6120	8.90	6.30	5.40	3.50
6140	9.90	7.20	6.10	3.20
6160	9.20	6.50	5.00	2.90
6180	8.20	4.70	4.30	2.80
6200	10.50	6.30	4.90	2.90
6220	12.00	7.00	5.10	2.80
6240	10.80	6.70	5.10	3.00
6260	10.90	6.10	4.80	3.10
6280	11.10	5.90	4.70	2.90
6300	8.60	5.00	4.30	2.80
6500	9.60	5.40	4.30	2.80
6750	9.20	4.90	4.20	2.80
6800	8.00	4.70	4.20	2.80
6810	6.70	4.60	4.30	2.90
6820	6.90	4.80	4.40	2.90
6830	6.80	4.80	4.40	2.90
6840	6.90	4.90	4.40	3.00
6850	6.90	4.80	4.40	3.00
6860	6.50	4.70	4.40	3.00
6870	6.30	4.40	4.10	2.90
6880	6.50	4.40	4.20	2.90
6890	6.40	4.30	4.10	2.80
6900	5.60	4.20	4.10	2.80
6910	5.60	4.30	4.00	2.80
6920	9.20	5.40	4.50	3.00
6930	9.20	4.60	4.10	2.90
6940	8.30	4.70	4.20	2.90
6950	5.20	4.40	4.30	3.00