WELL AMALYSIS CORPORATION

DIFFERENTIAL TEMPERATURE SURVEY

WELL TYPE	OIL
COMPANY	NOTHERN ALASKA OIL CO.
FIELD	ANTICLINE
COUNTY	NORTH SLOPE
STATE	ALASKA
LOCATION	1/2 MILE SOUTH OF ANTICLINE
DATE	1993
RUN NUMBER	ONE
DATUM	SEA LEVEL
ELEVATION	0 FT
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	40 FT ABOVE PERM. DATUM
DRILLING MEASURED FROM	GROUND LEVEL
TOTAL DEPTH DRILLER	6700 FT
TOTAL DEPTH LOGGER	6700 FT
BOTTOM LOGGED INTERVAL	6700 FT
TOP LOGGED INTERVAL	SURFACE
TYPE OF FLUID IN HOLE	OIL
SALINITY, PPM CL	NONE
DENSITY / VISCOSITY	N/A / N/A
MAXIMUM RECORDED TEMP.	160 F
ESTIMATED BHT	165 F
TIME SINCE CIRCULATION	24 HR
TIME SINCE LAST RUN	FIRST RUN
MAXIMUM ANGLE	N/A
DIAMETER OF HOLE	8 1/2"
BIT SIZE	8 1/2"
CASING-DRILLER	9 5/8" @ 2500'
CASING-LOGGER	9 5/8" @ 2500'
BOTTOM LOGGED INTERVAL	6700
TOP LOGGED INTERVAL	SURFACE
TYPE OF DRILL FLUID	CACO3 GEL
SPEED	1500 FT / MIN
DEPTH REFERENCE	GL
GL ABOVE PERM. DATUM	40
DF ABOVE PERM. DATUM	N/A
KB ABOVE PERM. DATUM	N/A
RUN NUMBER	ONE
TIME LOGGER ON BOTTOM	1900
DATE	1993
UNIT NUMBER	1
WITNESS	N/A

PRODUCTION DATA

PRESSURE	N/A
FLOWING	N/A
GAS	N/A
OIL	N/A
WATER	N/A
GAS-OIL RATIO	N/A
OIL GRAVITY	N/A
PRODUCTION INTERVAL	N/A
ACTIVITY	N/A
PERFORATIONS	N/A
PLUG BACK TD	N/A
PUMP DEPTH	N/A
PUMP SIZE	N/A
PUMP TYPE	N/A
PRODUCING FORMATION	N/A

Equipment Data

COLLAR LOCATOR	1.375"
TEMPERATURE TOOL	1.375"
AUDIO DETECTOR	1.375"

Remarks/Service Issues

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INCOMPLETE SURVEY DUE TO HIGH FLOW OF A GAS ZO.

CP-1 AM - ON LOCATION
CP-1 AM - RAN IN HOLE
CP-1 AM - BREEZE SURVEY
CP-1 AM - RAN OUT OF HOLE
CP-1 AM - OFF LOCATION
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CASING AND TUBING RECORD

SIZE	WTGR.	FROM	TO	SIZE	WTGR.	FROM	TO
13 3/8"	54.5#	SURFACE	82'	9 5/8"	53	SURFACE	9500'
9 5/8"	47.0	SURFACE	8900'				
9 5/8"		7750'	8953.7'				
9 5/8"	53.5	8953'	9270'				

PERFORATIONS

SYM.	PIPE DIA.	
A	9.625"	7875'-7915', 7975'-8025', 8115'-8165'.
B	9.625"	8300'-8350', 8400'-8450', 8490'-8550'.
C	5.500"	8715'-8765'.
		7875'-8765'.
		PACKERS: 7725'-7729.4', 8072.1'-8075.7'.
		SLIDING SLEEVES: 7725'-7729.4', 7828.1'-7829.3'.
		SLIDING SLEEVES: 7842'-7843.2', 7882.4'-7883.8'.
		BO-DO: 7735.8', 8082.8'.

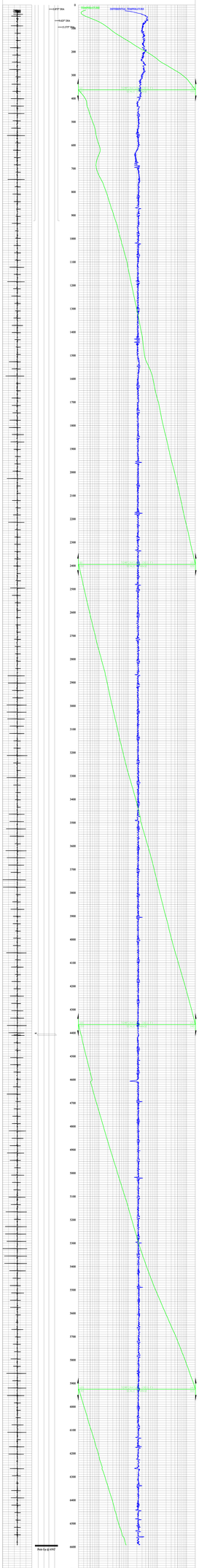
TOOL DIAGRAM

COLLAR LOCATOR AT 2.5' ■

TEMPERATURE TOOL AT 5.0' ■

AUDIO DETECTOR AT 6.0' ■

1405 COLLAR LOCATOR (MV) 1955

60 TEMPERATURE (DEG F) 80

-2 DIFFERENTIAL TEMPERATURE (DEG F) 2