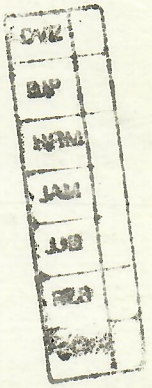
HALLIBURTON
SERVICES

TICKET NO. 04845000
31-MAR-82



FORMATION TESTING SERVICE REPORT

LEGAL LOCATION SEC. - TWP. - RNG. 4-24S-26W	FIELD AREA WILDCAT	COUNTY PROWERS	STATE COLORADO	SM/IC

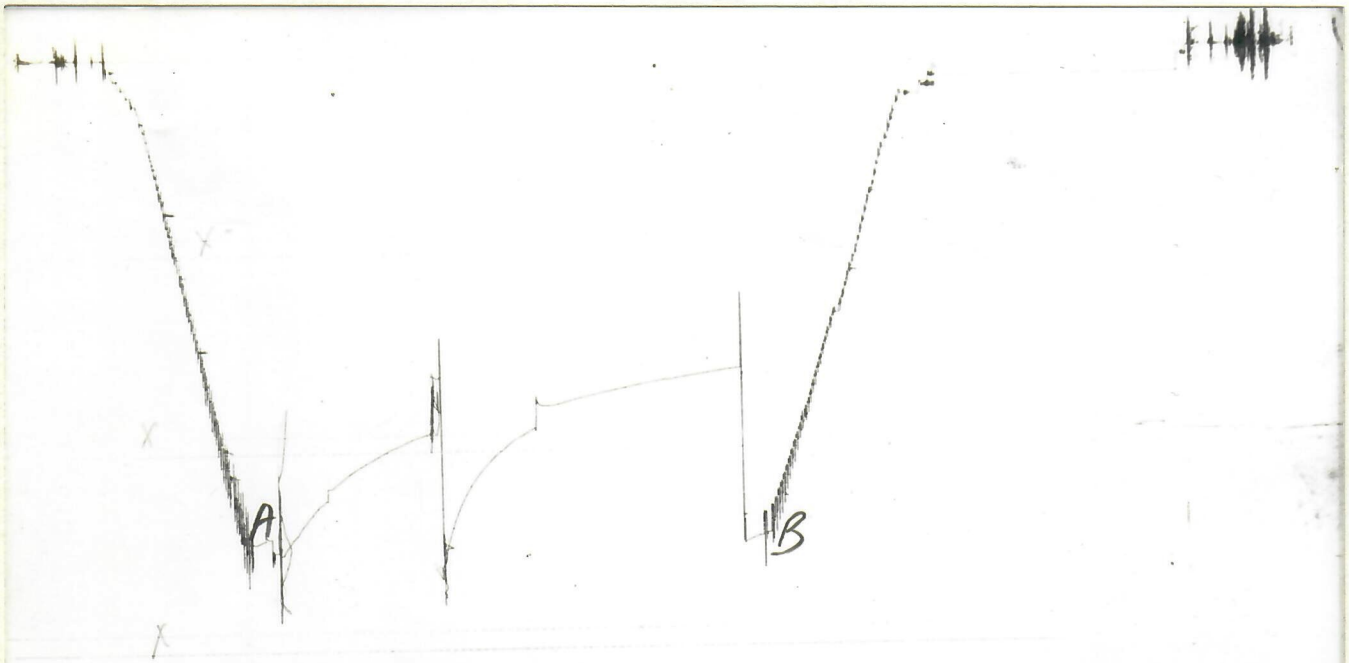
WALKER # 1-B
LEASE NAME

1-B
WELL NO.

1-A
TEST NO.

5092.' - 5112.'
TESTED INTERVAL

MARLIN OIL COMPANY
LEASE OWNER/COMPANY NAME



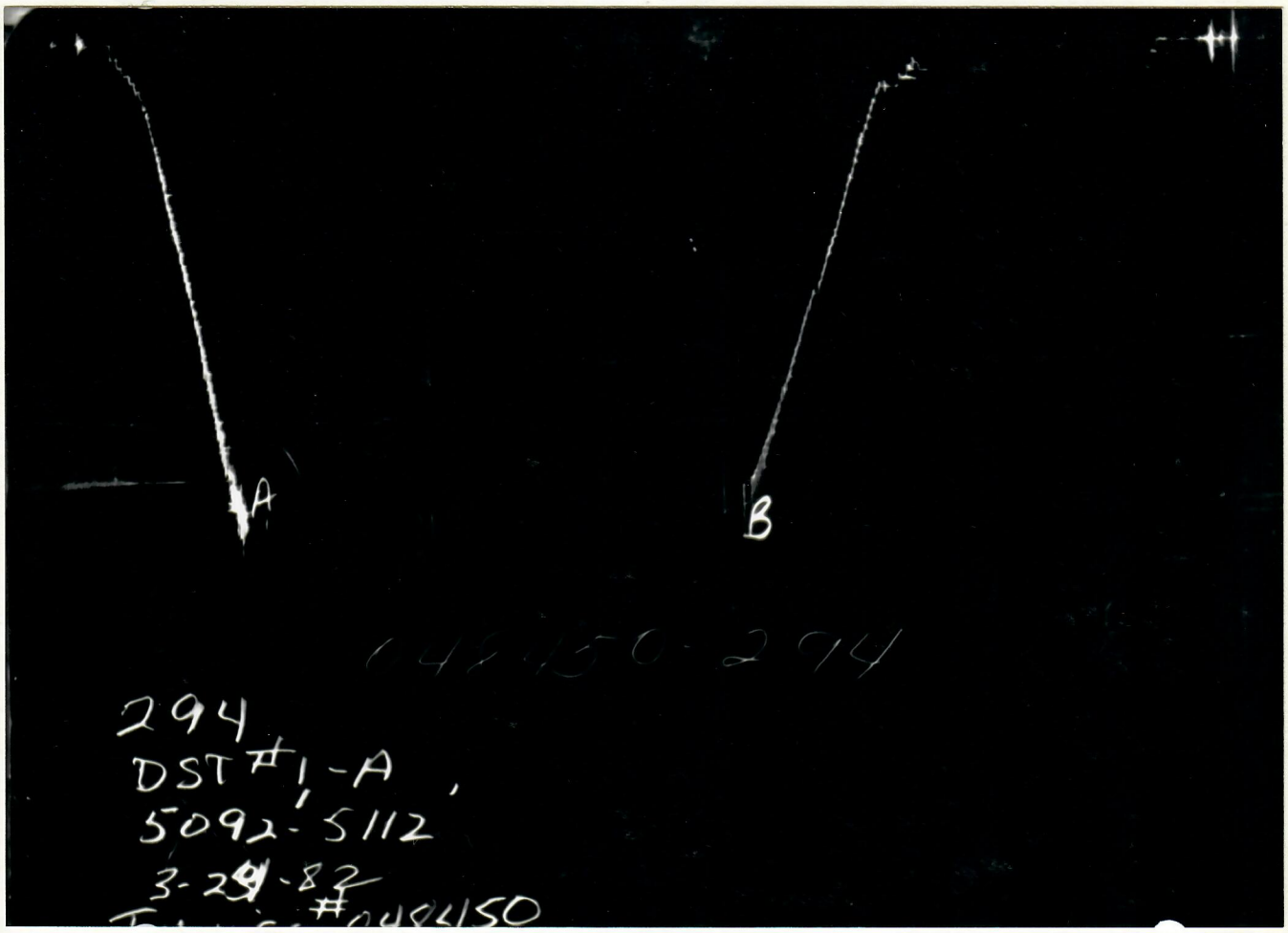
374
DST #1-A
5092'-5112'
3-14-82
Invoice #048450

X Line in error

048450-374

GAUGE NO: 374 DEPTH: 5070.0 BLANKED OFF: NO

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2455.4			
B	FINAL HYDROSTATIC		2455.4			



GAUGE NO: 294 DEPTH: 5109.0 BLANKED OFF: YES

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2460.2			
B	FINAL HYDROSTATIC		2452.4			

EQUIPMENT & HOLE DATA

FORMATION TESTED: KEYES
NET PAY (ft):
GROSS TESTED FOOTAGE: 20.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 5112.0
PACKER DEPTH(S) (ft):
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.20
MUD VISCOSITY (sec): 48
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 133 @ 5107.0 ft

TICKET NUMBER: 04845000

DATE: 3-24-82 TEST NO: 1-A

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: LAMAR

TESTER: G. D. MOORE

WITNESS: RICH BACON

DRILLING CONTRACTOR: SNYDER DRILLING COMPANY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

30 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

MISRUN...TOOL PLUGGED WITH SHALE...HYDROSTATIC PRESSURES ARE THE ONLY RELIABLE READINGS AVAILABLE.

TYPE & SIZE MEASURING DEVICE: ______________________ TICKET NO: 04845000

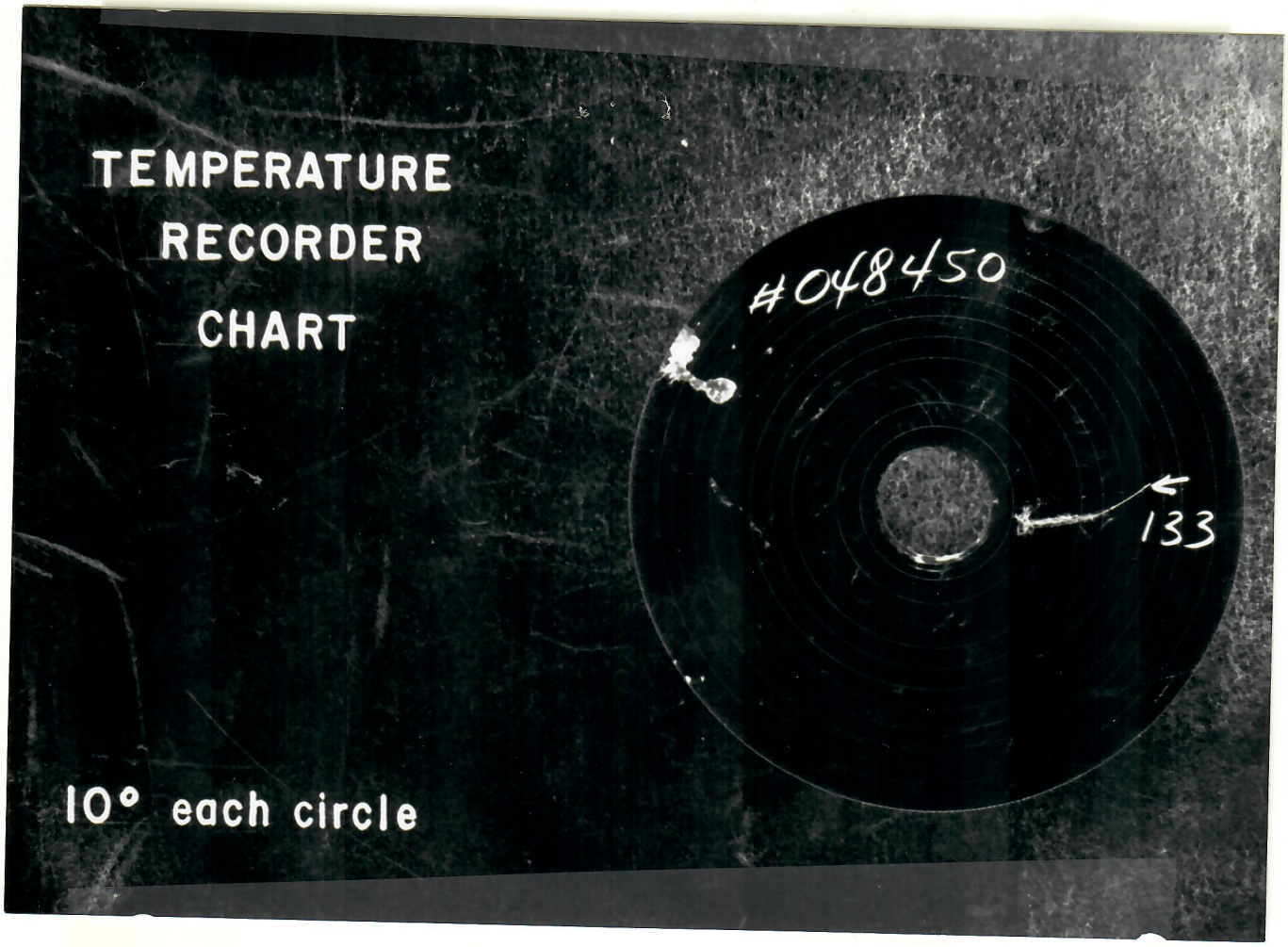
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
					ON LOCATION FROM DST#1
1030					TOOL OUT OF HOLE
1115					STARTED IN HOLE
1255					ON BOTTOM
1258					OPENED TOOL WITH VERY WEAK
					BLOW
1307					WELL DEAD -NO BLOW
1328					CLOSED TOOL-NO BLOW
1428					OPENED TOOL WITH NO BLOW
1433					BYPASSED TOOL WITH WEAK BLOW
					AND THEN DEAD-NO BLOW
1528					CLOSED TOOL WITH NO BLOW
1728					PULLED LOOSE AND TRIPPED OUT

TICKET NO. 04845000

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	0.00	
3	DRILL COLLARS.....	6.250	2.250	0.00	
5	CROSSOVER.....	5.750	2.380	1.00	
50	IMPACT REVERSING SUB.....	5.750	2.750	2.00	5052.00
11	HANDLING SUB & CHOKE ASSEMBLY...	4.500	3.826	4.00	
13	DUAL CIP SAMPLER.....	5.000	0.870	7.00	
60	HYDROSPRING TESTER.....	5.000	0.750	5.00	5066.00
80	AP RUNNING CASE.....	5.000	1.000	4.00	5070.00
15	JAR.....	5.030	1.750	5.00	
16	VR SAFETY JOINT.....	5.000	1.000	3.00	
70	OPEN HOLE PACKER.....	6.750	1.530	6.00	5086.00
70	OPEN HOLE PACKER.....	6.750	1.530	6.00	5092.00
20	FLUSH JOINT ANCHOR.....	5.000	3.240	13.00	
83	HT-500 TEMPERATURE CASE.....	5.000	0.000	1.50	5107.00
81	BLANKED-OFF RUNNING CASE.....	5.000	2.240	4.00	5109.00

TOTAL DEPTH 5112.00

EQUIPMENT DATA



EQUATIONS FOR DST LIQUID WELL ANALYSIS

Transmissibility	$\frac{kh}{\mu} = \frac{162.6\ QB}{m}$	$\frac{\text{md-ft}}{\text{cp}}$
Indicated Flow Capacity	$kh = \frac{kh}{\mu}\ \mu$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Damage Ratio	$DR = .183\ \frac{P^* - P_f}{m}$	—
Theoretical Potential w / Damage Removed	$Q_1 = Q\ DR$	BPD
Approx. Radius of Investigation	$r_i = 4.63\ \sqrt{kt}$	ft

EQUATIONS FOR DST GAS WELL ANALYSIS

Indicated Flow Capacity	$kh = \frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151\left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG}\ \frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23\right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}}$	ft