HANSON OPERATING COMPANY, INCORPORATED

LEASE : LADSON STATE

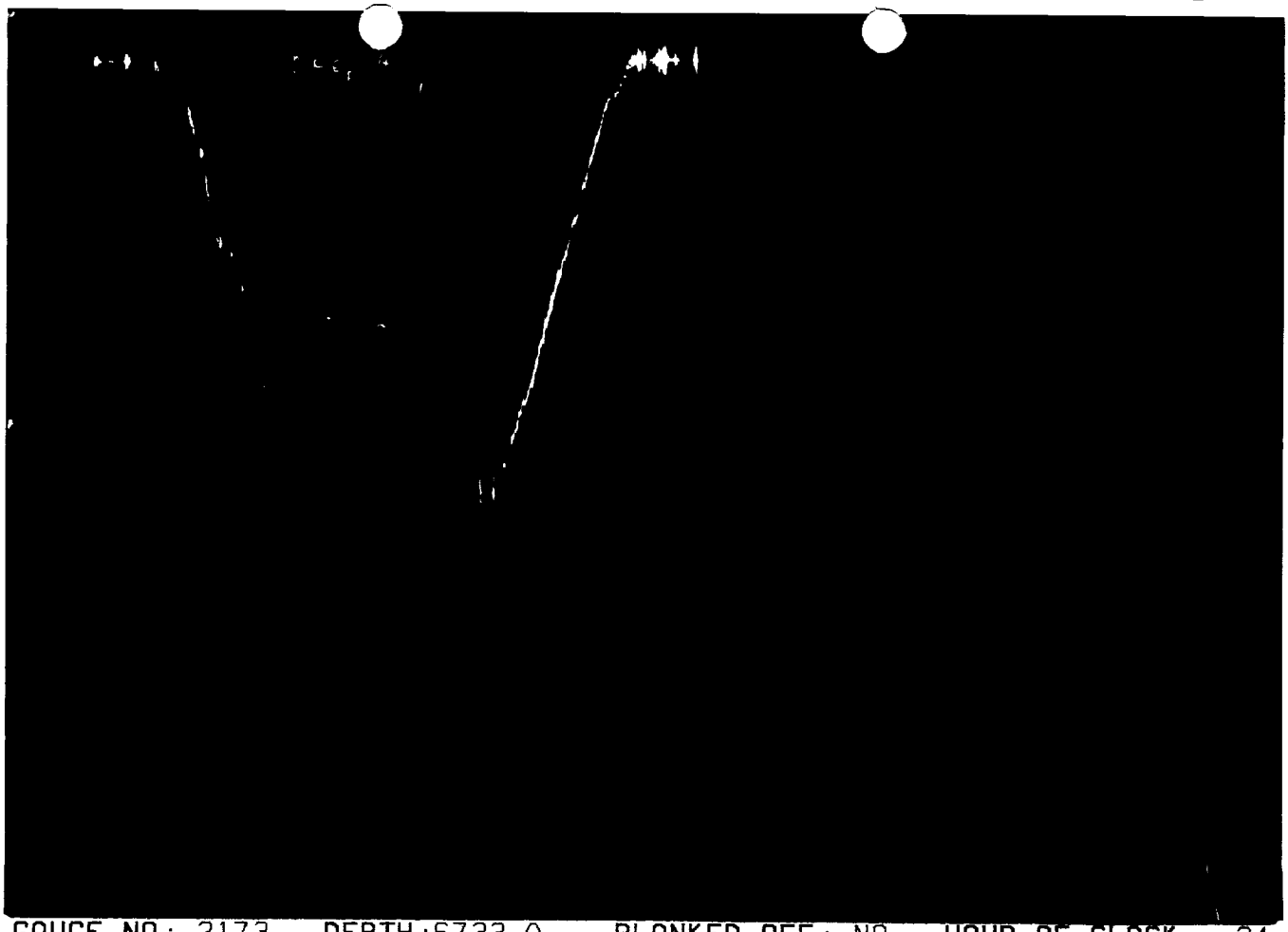
WELL NO.: 1

TEST NO.: 1

TICKET NO. 00546600
01-MAY-90
HOBBS.

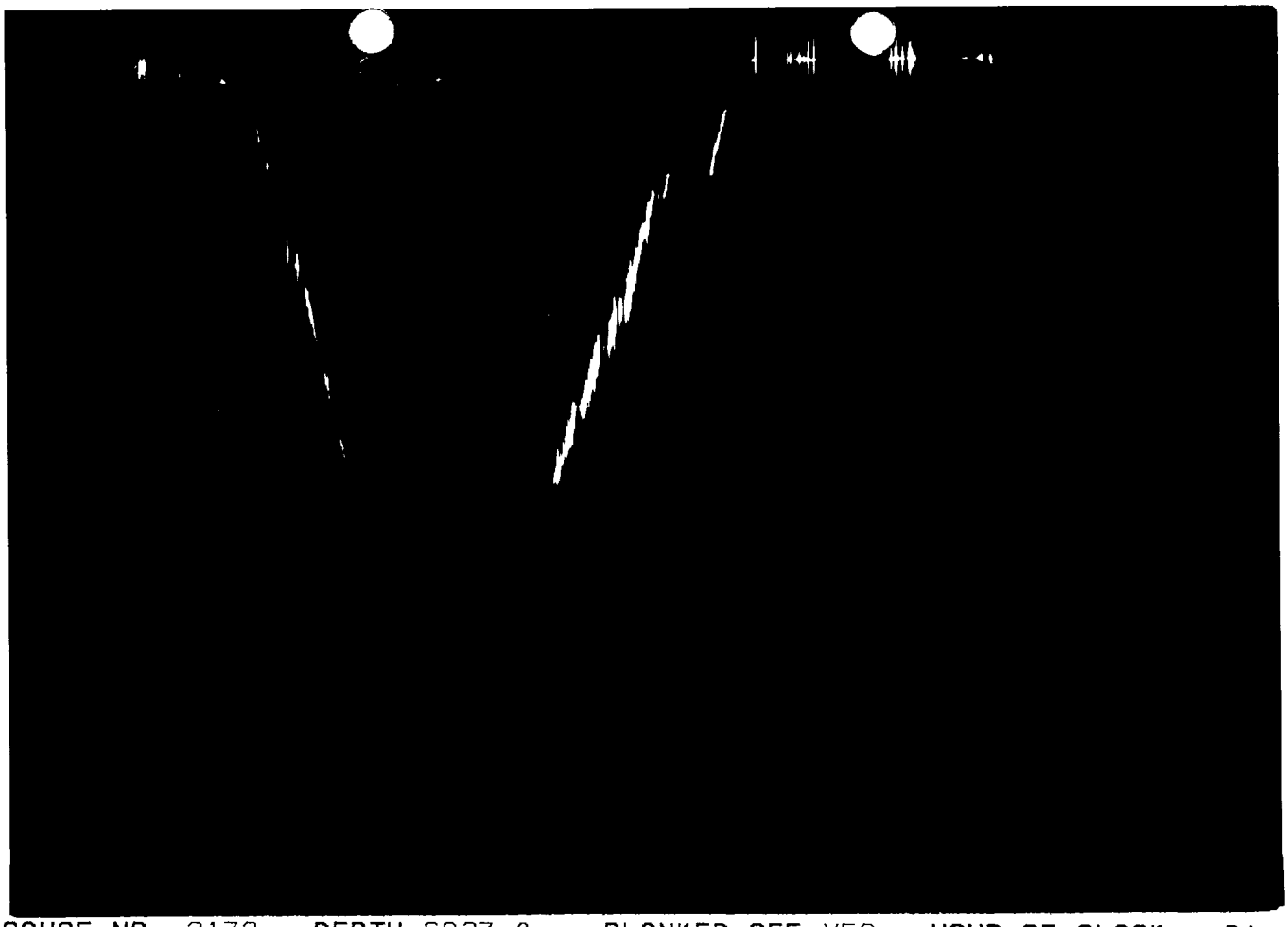
DST REPORT PRODUCED BY HRS
A DIVISION OF HALLIBURTON COMPANY

LADSON STATE	1	1	6751.0 - 6940.0	HANSON OPERATING COMPANY, INCORPORATED	
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE		
24-18-31E	WILDCAT	ROOSEVELT	NEW MEXICO		



GAUGE NO: 2173 DEPTH: 6733.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3665	3676.3			
B	INITIAL FIRST FLOW	127	35.6	8.0	7.9	F
C	FINAL FIRST FLOW		93.0			
C	INITIAL FIRST CLOSED-IN		93.0	9.0	7.2	C
D	FINAL FIRST CLOSED-IN		1940.6			
E	INITIAL SECOND FLOW		112.6	15.0	14.6	F
F	FINAL SECOND FLOW	169	170.0			
F	INITIAL SECOND CLOSED-IN	169	170.0	30.0	30.1	C
G	FINAL SECOND CLOSED-IN	2061	2106.2			
H	INITIAL THIRD FLOW	211	223.4	35.0	35.9	F
I	FINAL THIRD FLOW	253	298.7			
I	INITIAL THIRD CLOSED-IN	253	298.7	91.0	90.5	C
J	FINAL THIRD CLOSED-IN	2145	2190.2			
K	FINAL HYDROSTATIC	3623	3676.5			



GAUGE NO: 2172 DEPTH: 6937.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3772	3770.6			
B	INITIAL FIRST FLOW	172	139.9	8.0	7.9	F
C	FINAL FIRST FLOW		196.9			
C	INITIAL FIRST CLOSED-IN		196.9	9.0	7.2	C
D	FINAL FIRST CLOSED-IN		2022.2			
E	INITIAL SECOND FLOW		208.4	15.0	14.6	F
F	FINAL SECOND FLOW	215	273.0			
F	INITIAL SECOND CLOSED-IN	215	273.0	30.0	30.1	C
G	FINAL SECOND CLOSED-IN	2186	2200.2			
H	INITIAL THIRD FLOW	258	281.9	35.0	35.9	F
I	FINAL THIRD FLOW	387	398.3			
I	INITIAL THIRD CLOSED-IN	387	398.3	91.0	90.5	C
J	FINAL THIRD CLOSED-IN	2272	2287.4			
K	FINAL HYDROSTATIC	3772	3770.4			

EQUIPMENT & HOLE DATA

FORMATION TESTED: GRANITE WASH
NET PAY (ft): 180.0
GROSS TESTED FOOTAGE: 189.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.900
ELEVATION (ft): 4246.0 KELLY BUSHING
TOTAL DEPTH (ft): 6940.0
PACKER DEPTH(S) (ft): 6746, 6751
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 10.20
MUD VISCOSITY (sec): 45
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 128 @ 6936.0 ft

TICKET NUMBER: 00546600

DATE: 4-26-90 TEST NO: 1

TYPE DST: OPEN HOLE

FIELD CAMP: HOBBS.

TESTER: HERB SMITH

WITNESS: DAVID SWEENEY

DRILLING CONTRACTOR: WEK RIG #3

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
SAMPLER	0.057	@ 70 °F	129000 ppm
TOP RECOVERY	0.057	@ 70 °F	131500 ppm
MIDDLE RECOVERY	0.057	@ 70 °F	130000 ppm
PIT	0.057	@ 70 °F	132500 ppm
TOOL TOP	0.057	@ 70 °F	127000 ppm
		@ °F	ppm

SAMPLER DATA

Psig AT SURFACE: 40.0
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD: 2400.0
TOTAL LIQUID cc: 2400.0

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

510 FEET OF MUD/WATER CUT

MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____					TICKET NO: 00546600
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
4-26-90					
1200					WENT IN HOLE WITH DST #1
1500					SET ON BOTTOM, TOOL DID NOT OPEN
1508					STROKED TOOL
1516					STROKED TOOL
1517					OPENED TOOL WITH 5" BLOW
1519	BH	3.5 OZ.			INCREASING
1525	BH	4.0 OZ.			INCREASING
1532	BH	4.0 OZ.			CLOSED TOOL
1602	BH				OPENED TOOL, 2" BLOW
1612	BH	1.5 OZ.			SLIGHT INCREASE
1622	BH	1.5 OZ.			STABLE
1637	BH	1.0 OZ.			DECREASING, CLOSED TOOL
1808					OPENED BYPASS AND PULLED OUT
					OF HOLE

TICKET NO: 00546600

CLOCK NO: 16511 HOUR: 24

GAUGE NO: 2173

DEPTH: 6733.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	35.6			
2	1.0	38.8	3.2		
3	2.0	49.1	10.3		
4	3.0	56.7	7.6		
5	4.0	64.5	7.8		
6	5.0	73.0	8.4		
7	6.0	80.8	7.8		
8	7.0	87.1	6.3		
C 9	7.9	93.0	5.9		
FIRST CLOSED-IN					
C 1	0.0	93.0			
2	1.0	766.1	673.0	0.9	0.942
3	2.0	1368.8	1275.8	1.6	0.688
4	3.0	1634.0	1541.0	2.2	0.560
5	4.0	1770.5	1677.5	2.6	0.472
6	5.0	1839.9	1746.9	3.1	0.408
7	6.0	1886.0	1793.0	3.4	0.363
D 8	7.2	1940.6	1847.5	3.8	0.320
SECOND FLOW					
E 1	0.0	112.6			
2	1.0	116.4	3.8		
3	2.0	122.9	6.5		
4	3.0	129.9	7.0		
5	4.0	134.5	4.6		
6	5.0	140.0	5.5		
7	6.0	143.6	3.6		
8	7.0	147.4	3.8		
9	8.0	151.4	4.0		
10	9.0	155.6	4.2		
11	10.0	159.9	4.2		
12	11.0	163.4	3.6		
13	12.0	166.2	2.7		
14	13.0	167.9	1.7		
15	14.0	169.4	1.5		
F 16	14.6	170.0	0.6		
SECOND CLOSED-IN					
F 1	0.0	170.0			
2	2.0	1209.0	1039.0	1.8	1.094
3	4.0	1515.5	1345.5	3.4	0.821
4	6.0	1634.0	1464.0	4.7	0.675
5	8.0	1699.2	1529.2	5.9	0.580
6	10.0	1757.9	1587.9	6.9	0.510
7	12.0	1813.5	1643.5	7.8	0.458

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
8	14.0	1870.9	1701.0	8.6	0.417
9	16.0	1926.7	1756.7	9.3	0.381
10	18.0	1971.4	1801.4	10.0	0.352
11	20.0	2009.6	1839.6	10.6	0.327
12	22.0	2038.8	1868.9	11.1	0.306
13	24.0	2060.1	1890.1	11.6	0.287
14	26.0	2078.4	1908.4	12.1	0.271
15	28.0	2094.8	1924.9	12.5	0.256
G 16	30.1	2106.2	1936.2	12.9	0.242
THIRD FLOW					
H 1	0.0	223.4			
2	2.0	227.0	3.6		
3	4.0	227.4	0.4		
4	6.0	228.2	0.8		
5	8.0	229.1	0.8		
6	10.0	229.9	0.8		
7	12.0	238.6	8.7		
8	14.0	246.0	7.4		
9	16.0	252.9	7.0		
10	18.0	257.6	4.6		
11	20.0	262.0	4.4		
12	22.0	265.8	3.8		
13	24.0	269.4	3.6		
14	26.0	274.0	4.6		
15	28.0	277.8	3.8		
16	30.0	281.9	4.0		
17	32.0	286.7	4.9		
18	34.0	293.5	6.8		
I 19	35.9	298.7	5.3		
THIRD CLOSED-IN					
I 1	0.0	298.7			
2	2.0	857.2	558.5	2.0	1.470
3	4.0	1206.7	907.9	3.7	1.195
4	6.0	1334.0	1035.2	5.5	1.029
5	8.0	1409.5	1110.7	7.0	0.921
6	10.0	1486.0	1187.3	8.5	0.836
7	12.0	1578.3	1279.6	10.0	0.768
8	14.0	1654.2	1355.5	11.3	0.713
9	16.0	1720.7	1422.0	12.6	0.667
10	18.0	1773.3	1474.6	13.8	0.627
11	20.0	1815.7	1517.0	14.9	0.593
12	22.0	1852.2	1553.5	16.0	0.563
13	24.0	1880.9	1582.2	17.0	0.535
14	26.0	1904.6	1605.9	18.0	0.511
15	28.0	1927.7	1629.0	18.9	0.490
16	30.0	1947.2	1648.5	19.8	0.469
17	35.0	1983.1	1684.3	21.9	0.426
18	40.0	2009.3	1710.6	23.7	0.391

REMARKS:

TICKET NO: 00546600	
CLOCK NO: 16511	HOUR: 24

GAUGE NO: 2173	
DEPTH: 6733.0	

	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
	THIRD CLOSED-IN - CONTINUED					
	19	45.0	2031.7	1732.9	25.4	0.361
	20	50.0	2055.7	1756.9	27.0	0.336
	21	55.0	2079.7	1780.9	28.3	0.314
	22	60.0	2102.8	1804.1	29.6	0.295
	23	70.0	2141.2	1842.4	31.8	0.263
	24	80.0	2169.0	1870.2	33.8	0.238
J	25	90.5	2190.2	1891.5	35.5	0.216

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

TICKET NO: 00546600
CLOCK NO: 26460 HOUR: 24

GAUGE NO: 2172
DEPTH: 6937.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	139.9			
	2	1.0	145.2	5.4		
	3	2.0	154.3	9.0		
	4	3.0	163.3	9.0		
	5	4.0	171.0	7.7		
	6	5.0	177.9	6.9		
	7	6.0	185.5	7.5		
	8	7.0	192.1	6.7		
C	9	7.9	196.9	4.7		
			FIRST CLOSED-IN			
C	1	0.0	196.9			
	2	1.0	1209.8	1012.9	0.9	0.951
	3	2.0	1602.4	1405.5	1.6	0.686
	4	3.0	1775.1	1578.2	2.2	0.559
	5	4.0	1873.8	1677.0	2.7	0.471
	6	5.0	1947.4	1750.5	3.1	0.408
	7	6.0	1991.0	1794.1	3.4	0.365
D	8	7.2	2022.2	1825.4	3.8	0.320
			SECOND FLOW			
E	1	0.0	208.4			
	2	1.0	213.8	5.4		
	3	2.0	221.4	7.5		
	4	3.0	228.7	7.3		
	5	4.0	233.2	4.5		
	6	5.0	238.1	4.9		
	7	6.0	242.2	4.1		
	8	7.0	246.1	3.9		
	9	8.0	251.3	5.2		
	10	9.0	255.1	3.9		
	11	10.0	259.2	4.1		
	12	11.0	264.0	4.7		
	13	11.9	266.8	2.8		
	14	13.0	269.8	3.0		
	15	14.0	271.9	2.2		
F	16	14.6	273.0	1.1		
			SECOND CLOSED-IN			
F	1	0.0	273.0			
	2	2.0	1283.4	1010.4	1.8	1.098
	3	4.0	1610.0	1337.0	3.4	0.819
	4	6.0	1727.0	1454.0	4.7	0.676
	5	8.0	1801.1	1528.1	5.9	0.583
	6	10.0	1858.6	1585.6	6.9	0.512
	7	12.0	1916.8	1643.8	7.8	0.458

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	8	14.0	1981.8	1708.8	8.6	0.416
	9	16.0	2030.6	1757.6	9.4	0.381
	10	18.0	2067.2	1794.2	10.0	0.352
	11	20.0	2098.3	1825.3	10.6	0.327
	12	22.0	2128.0	1855.0	11.1	0.305
	13	24.0	2148.4	1875.4	11.6	0.287
	14	26.0	2164.4	1891.4	12.1	0.270
	15	28.0	2182.2	1909.2	12.5	0.256
G	16	30.1	2200.2	1927.2	12.9	0.242
			THIRD FLOW			
H	1	0.0	281.9			
	2	2.0	286.7	4.7		
	3	4.0	297.2	10.5		
	4	6.0	307.3	10.1		
	5	8.0	315.7	8.4		
	6	10.0	322.8	7.1		
	7	12.0	329.7	6.9		
	8	14.0	337.2	7.5		
	9	16.0	343.9	6.7		
	10	18.0	351.2	7.3		
	11	20.0	357.7	6.5		
	12	22.0	362.4	4.7		
	13	24.0	366.3	3.9		
	14	26.0	370.8	4.5		
	15	28.0	376.8	6.0		
	16	30.0	381.4	4.5		
	17	32.0	387.2	5.8		
	18	34.0	393.2	6.0		
I	19	35.9	398.3	5.2		
			THIRD CLOSED-IN			
I	1	0.0	398.3			
	2	2.0	1086.6	688.2	1.9	1.491
	3	4.0	1352.9	954.6	3.7	1.194
	4	6.0	1459.8	1061.5	5.5	1.029
	5	8.0	1533.8	1135.5	7.0	0.919
	6	10.0	1617.4	1219.1	8.5	0.835
	7	12.0	1701.9	1303.5	10.0	0.768
	8	14.0	1769.6	1371.3	11.3	0.713
	9	16.0	1825.2	1426.9	12.6	0.668
	10	18.0	1870.5	1472.2	13.8	0.628
	11	20.0	1906.5	1508.1	14.9	0.593
	12	22.0	1939.6	1541.2	16.0	0.563
	13	24.0	1970.8	1572.5	17.0	0.535
	14	26.0	1996.2	1597.9	18.0	0.511
	15	28.0	2018.5	1620.2	18.9	0.489
	16	30.0	2039.5	1641.2	19.8	0.469
	17	35.0	2078.3	1679.9	21.9	0.426
	18	40.0	2108.5	1710.2	23.7	0.391

REMARKS:

TICKET NO: 00546600
CLOCK NO: 26460 HOUR: 24

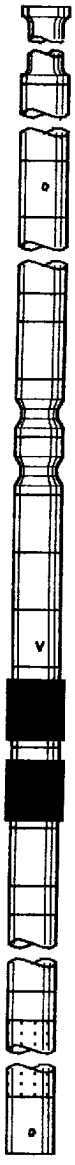
GAUGE NO: 2172
DEPTH: 6937.0

	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
	THIRD CLOSED-IN - CONTINUED					
	19	45.0	2133.4	1735.0	25.4	0.361
	20	50.0	2157.4	1759.0	26.9	0.336
	21	55.0	2181.1	1782.8	28.3	0.314
	22	60.0	2202.8	1804.4	29.6	0.295
	23	70.0	2236.0	1837.6	31.8	0.264
	24	80.0	2262.3	1864.0	33.8	0.238
J	25	90.5	2287.4	1889.0	35.5	0.216

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

REMARKS:

TICKET NO. 00546600



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE	4.000	3.340	6122.0	
3	DRILL COLLARS	6.250	2.500	529.0	
50	IMPACT REVERSING SUB	6.000	2.750	1.0	6651.5
3	DRILL COLLARS	6.250	2.500	60.0	
5	CROSSOVER	5.750	2.250	1.0	
62	MULTIPLE CIP SAMPLER	5.000	0.750	9.0	6721.0
14	EXTENSION JOINT	5.000	0.870	5.0	
14	EXTENSION JOINT	5.000	0.870	5.0	
80	AP RUNNING CASE	5.000	2.250	4.0	6733.0
15	JAR	5.000	1.750	5.0	
16	VR SAFETY JOINT	5.000	1.000	3.0	
70	OPEN HOLE PACKER	7.000	1.530	5.0	6746.0
70	OPEN HOLE PACKER	7.000	1.530	5.0	6751.0
19	ANCHOR PIPE SAFETY JOINT	5.750	1.500	4.0	
5	CROSSOVER	5.750	2.750	1.0	
3	DRILL COLLARS	6.250	2.500	151.0	
5	CROSSOVER	5.875	2.750	1.0	
20	FLUSH JOINT ANCHOR	5.750	3.000	25.0	
81	BLANKED-OFF RUNNING CASE	5.750		4.0	6937.0
	TOTAL DEPTH				6940.0

EQUIPMENT DATA