

DST REPORT

GENERAL INFORMATION

DATE	: 10-3-94	TICKET	: 20961
CUSTOMER	: PICKRELL DRLG COMPANY INC	LEASE	: DONOVAN H
WELL	: #1	TEST: 1	GEOLOGIST: KLAVER
ELEVATION	: 1660 GL	FORMATION	: ELGIN SAND
SECTION	: 11	TOWNSHIP	: 34S
RANGE	: 13W	COUNTY: BARBER	STATE : KS
GAUGE SN#	: 4339	RANGE : 4300	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3660.00 ft	TO:	3677.00 ft	TVD:	3677.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3665.0 ft		3677.0 ft		
TEMPERATURE:	109.0				
DRILL COLLAR LENGTH:	123.0 ft	I.D.:		2.250 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3509.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	28.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	17.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	3655.0 ft	SIZE:		6.625 in	
PACKER DEPTH:	3660.0 ft	SIZE:		6.625 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	PICKRELL	VISCOSITY :	58.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	12.000 cc
WEIGHT :	8.700 ppg	SERIAL NUMBER:	
CHLORIDES :	2000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

GAS TO SURFACE IN 3 MINUTES.
SEE ATTACHED SHEET FOR GAS FLOW INFORMATION.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	0.0	0.0	100.0	DRILLING MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.1475	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.1475	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1809.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	181.00	345.00
INITIAL SHUT-IN	60.00		1463.00
FINAL FLOW	60.00	465.00	443.00
FINAL SHUT-IN	90.00		1452.00

FINAL HYDROSTATIC PRESSURE: 1809.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1788.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	178.00	336.00
INITIAL SHUT-IN	63.00		1437.00
FINAL FLOW	60.00	453.00	451.00
FINAL SHUT-IN	93.00		1429.00

FINAL HYDROSTATIC PRESSURE: 1696.00

GAS FLOW REPORT

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RANGE : 13W COUNTY: BARBER	STATE : KS
GAUGE SN#: 4339 RANGE : 4300	CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10	MERLA	1.000	19 PSIG	699000 SCF/D
20	MERLA	1.000	41 PSIG	1184000 SCF/D
30	MERLA	1.000	45 PSIG	1269000 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D
20 MIN	MERLA	1.250	35 PSIG	1797000 SCF/D
30 MIN	MERLA	1.250	37 PSIG	1872000 SCF/D
40 MIN	MERLA	1.250	38 PSIG	1911000 SCF/D
50 MIN	MERLA	1.250	39 PSIG	1948000 SCF/D
60 MIN	MERLA	1.250	40 PSIG	1980000 SCF/D

PRESSURE TRANSIENT REPORT

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ELEVATION: 1660 GL	FORMATION: ELGIN SAND
SECTION : 11	TOWNSHIP : 34S
RANGE : 13W	STATE : KS
GAUGE SN#: 4339	CLOCK : 12
COUNTY: BARBER	
RANGE : 4300	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	178.00	178.00
5.00	181.00	3.00
10.00	227.00	46.00
15.00	281.00	54.00
20.00	308.00	27.00
25.00	328.00	20.00
30.00	336.00	8.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1333.00	1333.00	11.00
6.00	1368.00	35.00	6.00
9.00	1380.00	12.00	4.33
12.00	1387.00	7.00	3.50
15.00	1394.00	7.00	3.00
18.00	1400.00	6.00	2.67
21.00	1408.00	8.00	2.43
24.00	1414.00	6.00	2.25
27.00	1421.00	7.00	2.11
30.00	1425.00	4.00	2.00
33.00	1427.00	2.00	1.91
36.00	1430.00	3.00	1.83
39.00	1431.00	1.00	1.77
42.00	1432.00	1.00	1.71
45.00	1432.00	0.00	1.67
48.00	1433.00	1.00	1.63
51.00	1433.00	0.00	1.59
54.00	1434.00	1.00	1.56
57.00	1435.00	1.00	1.53

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
60.00	1436.00	1.00	1.50
63.00	1437.00	1.00	1.48

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	453.00	453.00
5.00	453.00	0.00
10.00	453.00	0.00
15.00	453.00	0.00
20.00	453.00	0.00
25.00	453.00	0.00
30.00	451.00	-2.00
35.00	451.00	0.00
40.00	451.00	0.00
45.00	451.00	0.00
50.00	451.00	0.00
55.00	451.00	0.00
60.00	451.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1303.00	1303.00	21.00
6.00	1354.00	51.00	11.00
9.00	1369.00	15.00	7.67
12.00	1382.00	13.00	6.00
15.00	1387.00	5.00	5.00
18.00	1394.00	7.00	4.33
21.00	1397.00	3.00	3.86
24.00	1398.00	1.00	3.50
27.00	1401.00	3.00	3.22
30.00	1402.00	1.00	3.00
33.00	1404.00	2.00	2.82
36.00	1406.00	2.00	2.67
39.00	1408.00	2.00	2.54
42.00	1410.00	2.00	2.43
45.00	1412.00	2.00	2.33

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
48.00	1414.00	2.00	2.25
51.00	1417.00	3.00	2.18
54.00	1419.00	2.00	2.11
57.00	1421.00	2.00	2.05
60.00	1422.00	1.00	2.00
63.00	1422.00	0.00	1.95
66.00	1422.00	0.00	1.91
69.00	1422.00	0.00	1.87
72.00	1423.00	1.00	1.83
75.00	1423.00	0.00	1.80
78.00	1424.00	1.00	1.77
81.00	1425.00	1.00	1.74
84.00	1426.00	1.00	1.71
87.00	1427.00	1.00	1.69
90.00	1428.00	1.00	1.67
93.00	1429.00	1.00	1.65

HORNER ANALYSIS REPORT

GENERAL INFORMATION

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WELL : #1	TEST: 1
ELEVATION: 1660 GL	GEOLOGIST: KLAVER
SECTION : 11	FORMATION: ELGIN SAND
RANGE : 13W	TOWNSHIP : 34S
COUNTY: BARBER	STATE : KS
GAUGE SN#: 4339	RANGE : 4300
	CLOCK : 12

Input Data

Porosity 0.340 Rw: 0.328 ft h: 5.000 ft

qg 1980000.0 STB

Pvt Data

Evalutation Pressure : 218.0
 Evalutation Temperature: 109.0

Gas Grav 0.65 API
 Bg 0.013 RBL/STB Vis 0.012 cp Ct 4.7229E-003 1/PSI

Horner Results

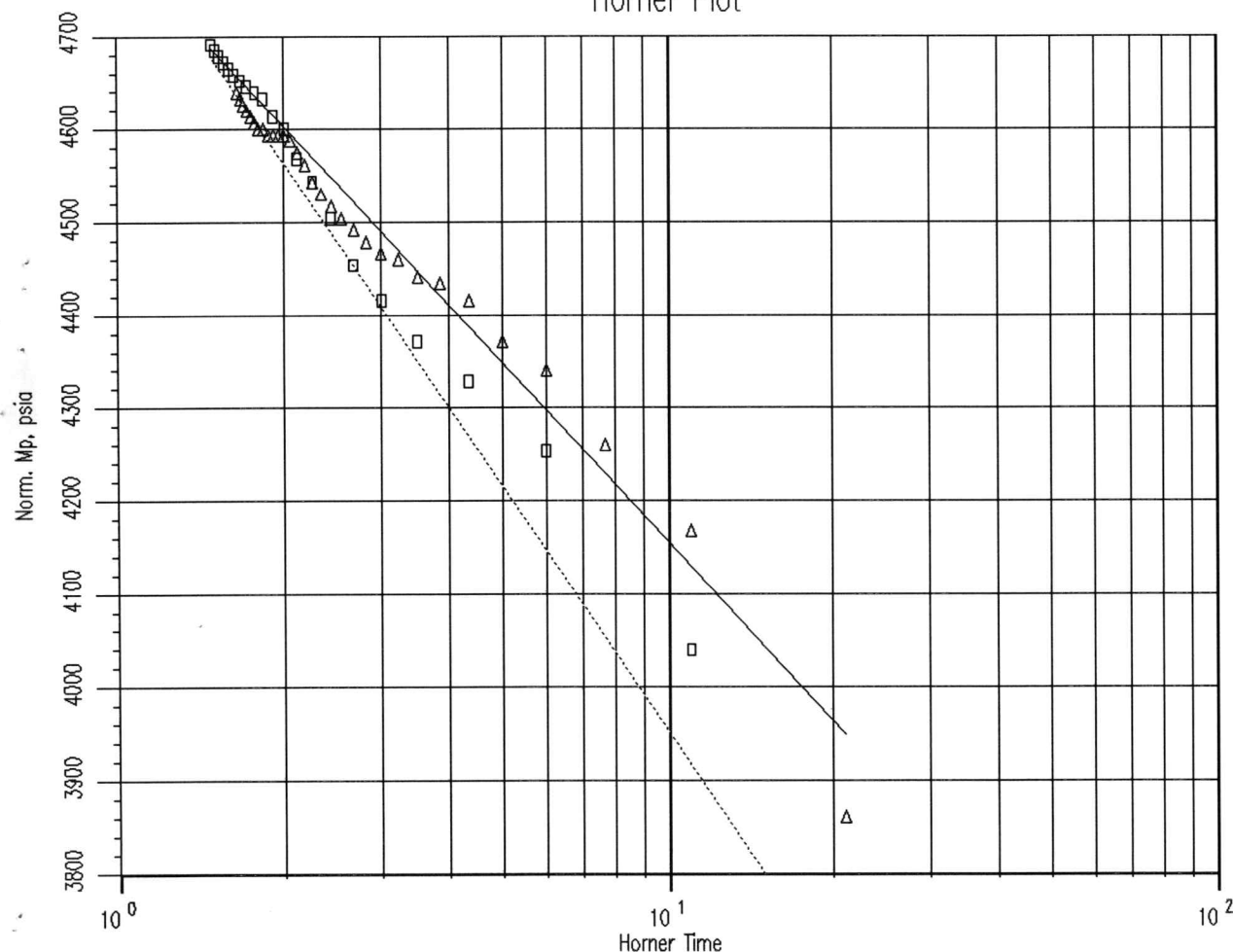
	Inital Shut-In	Final Shut-In
pseudo pressure time	0.50 hrs	1.00 hrs
slope	-640.15	-873.56
pstar	1453.07 psig	1457.59 psig
plhr	4683.23 psig	4562.69 psig
skin	4.32	1.71
permeability	15.02 md	11.00 md
transmisability	6400.68 md-ft/cp	4690.47 md-ft/cp
radius of investigation	20.51 ft	24.82 ft
Damage-Ratio	1.9 percent	1.3 percent
Drawdown Factor		0.006 percent
Drawdown P*		-0.003 percent

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 CUSTOMER PICKRELL DRLG COMPANY INC
 WELL #1
 ELEVATION 1660 GL
 SECTION 11
 RANGE 13W
 GAUGE SN# 4339

TEST 1
 COUNTY BARBER
 RANGE 4300

TICKET 20961
 LEASE DONOVAN H
 GEOLOGIST KLAVER
 FORMATION ELGIN SAND
 TOWNSHIP 34S
 STATE KS
 CLOCK 12

Horner Plot



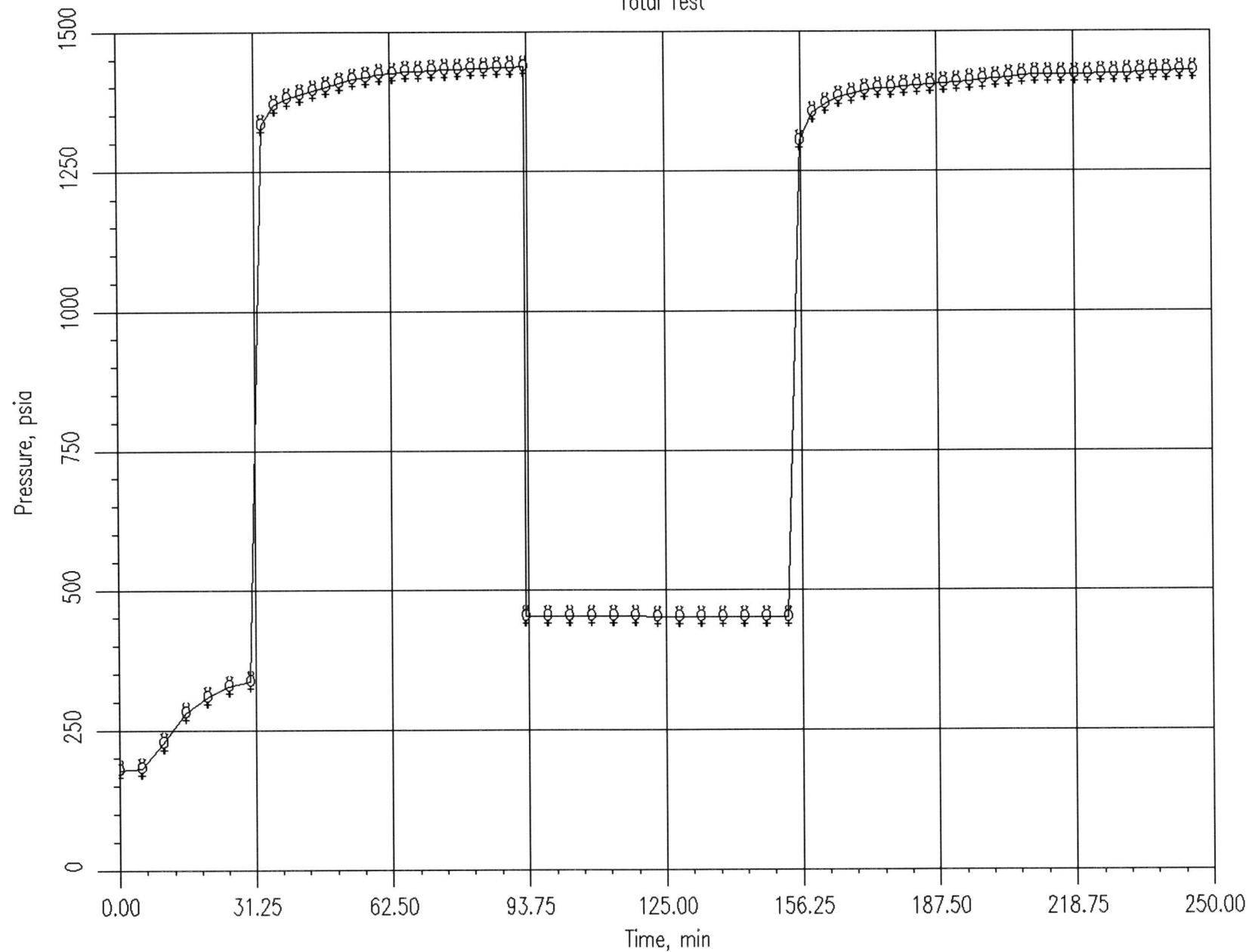
Result

	#1	#2
tp, hrs	0.50	1.00
Slope	-640.15	-873.56
Pstar, psig	1453.07	1457.59
P1hr, psig	4683.23	4562.69
Skin	4.32	1.71
k, md	15.02	11.00
kh/u, md-ft/cp	6400.68	4690.47
ri, ft	20.51	24.82
DR, %	1.90	1.34
Drawdown Factor, %		0.006
Drawdown P*		-0.003

— BUILD 1
 BUILD 2

Profile Plot

Total Test

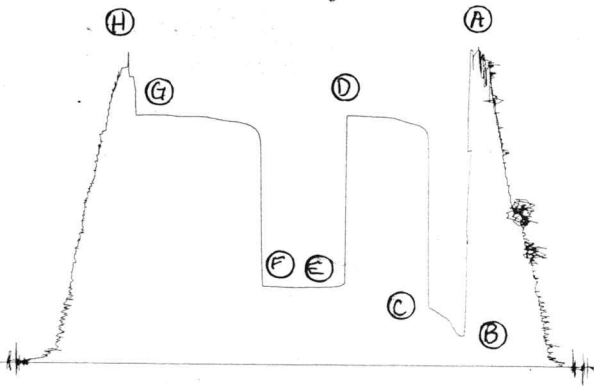


Kit # 20961

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Skt # 20961

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