DRILL-STEM TEST DATA

Well Name:	ARMBRISTER #2				
Company :	KENMARK CORP				
Location - Sec:	31	**Twp:**	12S	**Rge:**	19W
County:	ELLIS	**State:**	KS		
Date:	8/22/95				

TRILOBITE TESTING L.L.C.

OPERATOR : KENMARK CORP
WELL NAME: ARMBRISTER #2
LOCATION : 31-12S-19W
INTERVAL : 3770.00 To 3797.00 ft

DATE 8/19/95
KB 2145.00 ft
GR 0.00 ft
TD 3797.00 ft

TICKET NO: 7950 DST #1
FORMATION: MARMATON
TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins			Field	1	2	3	4
PF	30	Rec.	13849	13849	13754		
SI	30	Range(Psi)	4375.0	4375.0	4000.0	0.0	0.0
SF	45	Clock(hrs)	25810	25810	23858		
FS	60	Depth(ft)	3793.0	3793.0	3774.0	0.0	0.0

TIME DATA----------
PF Fr. to 30 hr
IS Fr. to 30 hr
SF Fr. to 45 hr
FS Fr. to 60 hr

	Field	1	2	3	4
A. Init Hydro	1928.0	1934.0	0.0	0.0	0.0
B. First Flow	88.0	85.0	0.0	0.0	0.0
B1. Final Flow	111.0	106.0	0.0	0.0	0.0
C. In Shut-in	819.0	830.0	0.0	0.0	0.0
D. Init Flow	155.0	145.0	0.0	0.0	0.0
E. Final Flow	200.0	196.0	0.0	0.0	0.0
F. Fl Shut-in	819.0	817.0	0.0	0.0	0.0
G. Final Hydro	1873.0	1890.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED hr
T ON BOTM 0910 hr
T OPEN 0917 hr
T PULLED 1202 hr
T OUT hr

TOOL DATA----------

Tool Wt.	0.00 lbs
Wt Set On Packer	0.00 lbs
Wt Pulled Loose	0.00 lbs
Initial Str Wt	0.00 lbs
Unseated Str Wt	0.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	0.00 in
D. Pipe ID	0.00 in
D.C. Length	0.00 ft
D.P. Length	0.00 ft

RECOVERY
Tot Fluid 588.00 ft of 0.00 ft in DC and 588.00 ft in DP
340.00 ft of GAS IN PIPE
0.00 ft of
496.00 ft of CLEAN GASSY OIL 20%GAS - 80%OIL
0.00 ft of
92.00 ft of MUD CUT GASSY OIL 20%GAS - 40%OIL - 40%MUD
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA----------

Mud Type	CHEMICAL
Weight	9.40 lb/cf
Vis.	45.00 S/L
W.L.	10.00 in3
F.C.	0.00 in
Mud Drop	

BLOW DESCRIPTION
IF: STRONG - BOTTOM OF BUCKET IN 5 MIN

FF: STRONG - BOTTOM OF BUCKET IN 11 MIN

Amt. of fill	0.00 ft
Btm. H. Temp.	124.00 F
Hole Condition	GOOD
% Porosity	15.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	DAN BANGLE
Co. Rep.	MARK KILIAN
Contr.	DUKE
Rig #	1
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

Operator.....: KENMARK CORP
Well Name.....: ARMBRISTER #2
DST Number.....: 1

Location.: 31-12S-19W
Test Type: CONVENTIONAL
Formation: MARMATON

Recorder No...: 13849
Recorder Depth: 3793
Test Interval.: 3770-3797

RESERVOIR CALCULATIONS: Fluid calculations based on shut-in #2

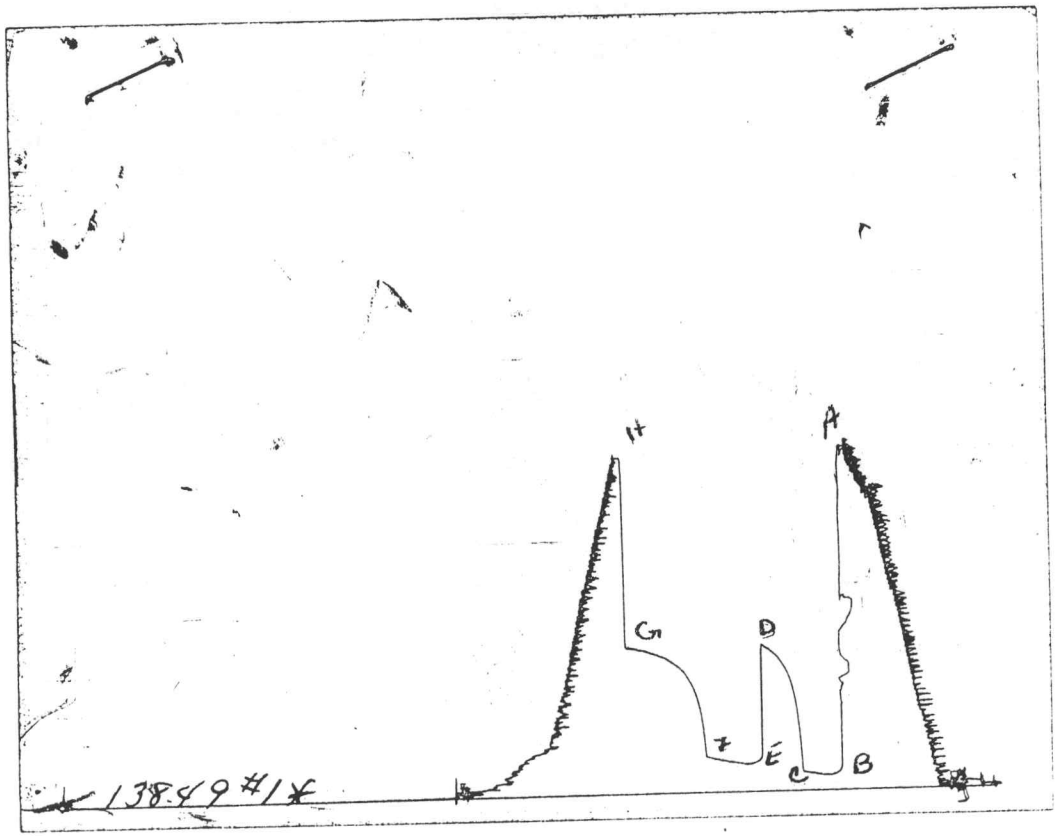
RESERVOIR PARAMETERS USED:

Net Pay	16.00 ft
Porosity	15.00 %
Bottom Hole Temp	124.00 F
Specific Gravity	0.845
API Gravity	36.00
Compressibility	0.000001 /psi
Viscosity	6.0210 cp
Total Recovery	588.00 ft
Total Flowing Time	75.00 min.
Flow Rate	118.38 bbls/d
Final Flowing Pressure	196.70 psi
Horner Slope	244.1000 psi/cycle
Extrapolated Pressure	903.16 psi
Formation Volume Factor	1.03 Reservoir/Surface
Well Bore Radius	3.94 in

RESULTS:

Effective Permeability	30.611956 md
Flow Capacity	489.7913 md.ft
Transmissibility	81.3472 md.ft/cp
Skin Factor	-2.4611
Radius of Investigation	198.97446 ft
Damage Ratio	0.5751
Productivity Index	0.1676 bbls/psi.d
Productivity Index W/O Damage.	0.0964 bbls/psi.d

CHART PAGE



This is an actual photograph of recorder chart

INITIAL FLOW

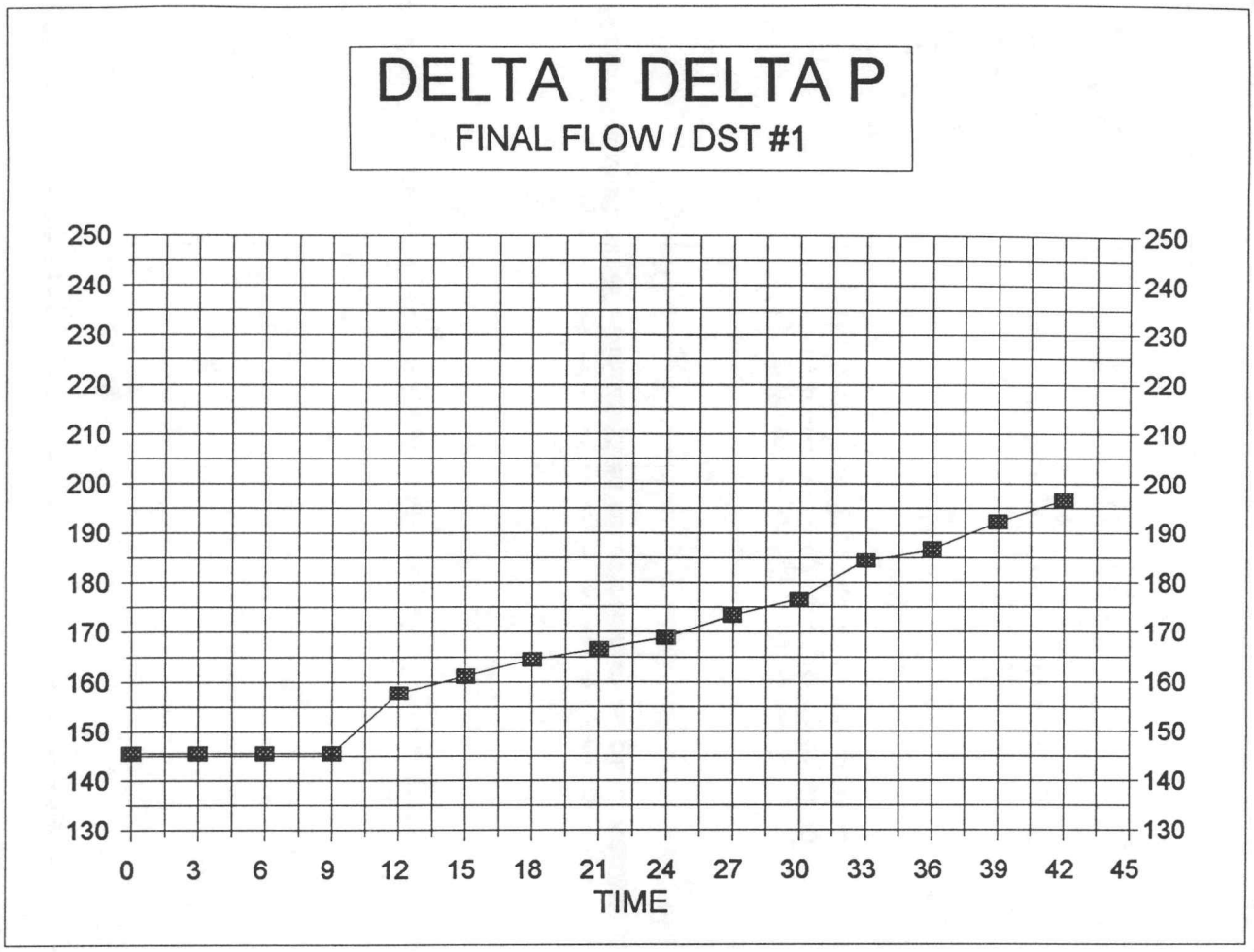
DST # 1
RECORDER 13849

TIME(MIN)	PRESSURE	<> PRESSURE
0	85.6	85.6
3	85.6	0.0
6	85.6	0.0
9	85.6	0.0
12	85.6	0.0
15	85.6	0.0
18	91.1	5.6
21	97.8	6.7
24	100.0	2.2
27	103.3	3.3
30	106.7	3.3

FINAL FLOW

DST # 1
RECORDER 13849

TIME(MIN)	PRESSURE	<> PRESSURE
0	145.6	145.6
3	145.6	0.0
6	145.6	0.0
9	145.6	0.0
12	157.8	12.2
15	161.1	3.3
18	164.4	3.3
21	166.7	2.2
24	168.9	2.2
27	173.3	4.4
30	176.7	3.3
33	184.4	7.8
36	186.7	2.2
39	192.2	5.6
42	196.7	4.4



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE: 88.24563

INITIAL SHUT-IN

ARMBRISTER #2

DST # 1	SLOPE	797.4	PSI/CYCLE
INITIAL FLOW TIME 30	P*	1070.46	PSI

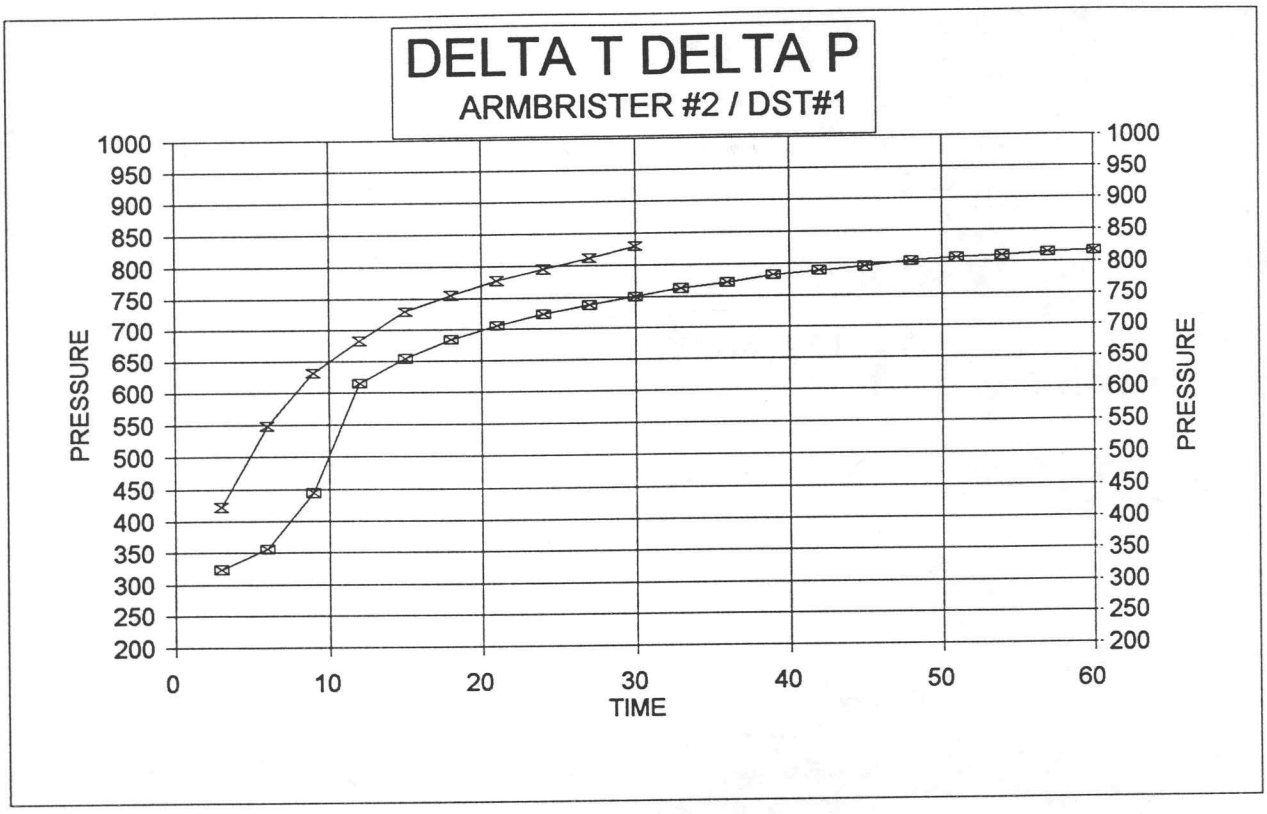
	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	3	422.2	1.041	422.2	11
	6	548.4	0.778	126.2	6
	9	631.1	0.637	82.7	4
	12	682.8	0.544	51.7	4
	15	729.1	0.477	46.3	3
	18	755.5	0.426	26.4	3
	21	777.5	0.385	22.0	2
	24	795.2	0.352	17.6	2
Q	27	811.7	0.325	16.5	2
X	30	830.4	0.301	18.7	2

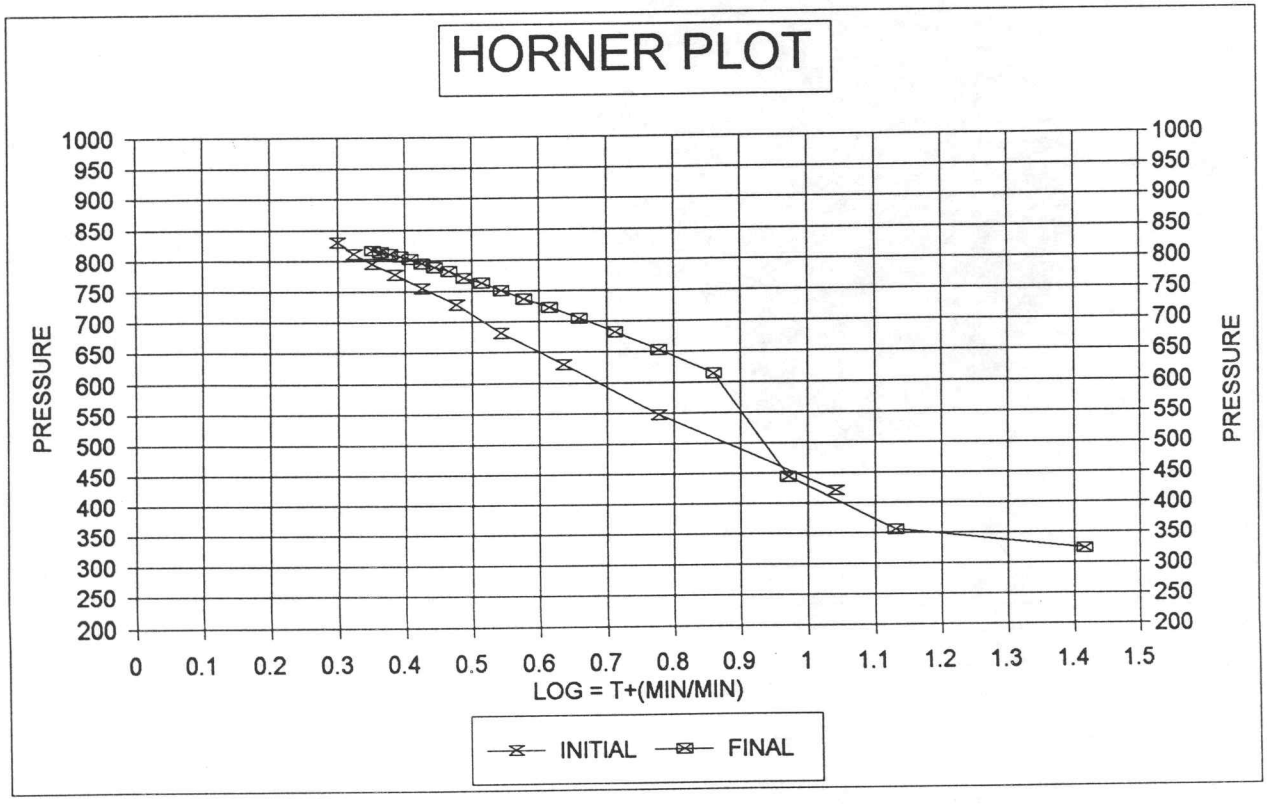
FINAL SHUT-IN

ARMBRISTER #2

DST # 1	SLOPE	244.1	PSI/CYCLE
TOTAL FLOW TIME 75	P*	903.16	PSI

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	3	324.4	1.415	324.4	26
	6	356.7	1.130	32.2	14
	9	444.4	0.970	87.8	9
	12	614.6	0.860	170.1	7
	15	654.2	0.778	39.6	6
	18	683.9	0.713	29.7	5
	21	706.0	0.660	22.0	5
	24	723.6	0.615	17.6	4
	27	737.9	0.577	14.3	4
	30	751.1	0.544	13.2	4
	33	763.2	0.515	12.1	3
	36	772.0	0.489	8.8	3
	39	783.0	0.466	11.0	3
	42	789.7	0.445	6.6	3
	45	795.2	0.426	5.5	3
	48	802.9	0.409	7.7	3
Q	51	807.3	0.393	4.4	2
	54	810.6	0.378	3.3	2
	57	815.0	0.365	4.4	2
X	60	817.2	0.352	2.2	2


DELTA T DELTA P
ARMBRISTER #2 / DST#1
PRESSURE
TIME
1000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
0
10
20
30
40
50
60


HORNER PLOT
PRESSURE
LOG = T+(MIN/MIN)
INITIAL
FINAL
1000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5

CALCULATED RECOVERY ANALYSI DRILL PIPE

)ST # 1 TICKET # 7950

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SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
1	496	20	99.2	80	396.8		0		0
2	92	20	18.4	40	36.8		0	40	36.8
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
TOTAL	588	20.00	117.6	73.74	433.6	0	0	6.26	36.8

			HRS OPEN	BBL/DAY
BL OIL=	6.165792	*	1.25	118.38
BL WATER=	0	*		0.00
BL MUD=	0.523296			
BL GAS	1.672272