

**WELL NAME:** Amrein A-1  
**COMPANY:** Kenmark Corporation  
**LOCATION:** 32-12S-19W  
Ellis County, Kansas  
**DATE:** 6/26/98

TRILOBITE TESTING L.L.C.

OPERATOR : Kenmark  
 WELL NAME: Amrein A-1  
 LOCATION : 32-12S-19W Ellis co. KS  
 INTERVAL : 3790.00 To 3839.00 ft

DATE 6-25-98  
 KB 2150.00 ft  
 GR 2142.00 ft  
 TD 3839.00 ft

TICKET NO: 11042  
 FORMATION: Conglomerate  
 TEST TYPE: CONV

DST #1

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11084	11084	24174			PF Fr. 0431 to 0501 hr
SI 30 Range(Psi )	4300.0	4300.0	3925.0	0.0	0.0	IS Fr. 0501 to 0531 hr
SF 15 Clock(hrs)	12 hr	12 hr	12 hr			SF Fr. 0531 to 0546 hr
FS 15 Depth(ft )	3802.0	3802.0	3834.0	0.0	0.0	FS Fr. 0546 to 0601 hr

	Field	1	2	3	4	
A. Init Hydro	1950.0	1934.0	0.0	0.0	0.0	T STARTED 0317 hr
B. First Flow	22.0	15.0	0.0	0.0	0.0	T ON BOTM 0425 hr
B1. Final Flow	22.0	15.0	0.0	0.0	0.0	T OPEN 0435 hr
C. In Shut-in	699.0	690.0	0.0	0.0	0.0	T PULLED 0601 hr
D. Init Flow	22.0	15.0	0.0	0.0	0.0	T OUT 0713 hr
E. Final Flow	22.0	15.0	0.0	0.0	0.0	
F. Fl Shut-in	164.0	171.0	0.0	0.0	0.0	
G. Final Hydro	1907.0	1907.0	0.0	0.0	0.0	TOOL DATA-----
Inside/Outside	0	0	I			Tool Wt. 2200.00 lbs
						Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 0.00 lbs
						Initial Str Wt 36000.00 lbs
						Unseated Str Wt 0.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 30.00 ft
						D.P. Length 3750.00 ft

RECOVERY

Tot Fluid 20.00 ft of 20.00 ft in DC and 0.00 ft in DP  
 2.00 ft of Clean oil  
 18.00 ft of Slight oil cut mud 5% oil 95% mud  
 0.00 ft of  
 0.00 ft of  
 0.00 ft of  
 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/c
Vis.	56.00 S/L
W.L.	12.00 in3
F.C.	0.00 in
Mud Drop	

BLOW DESCRIPTION

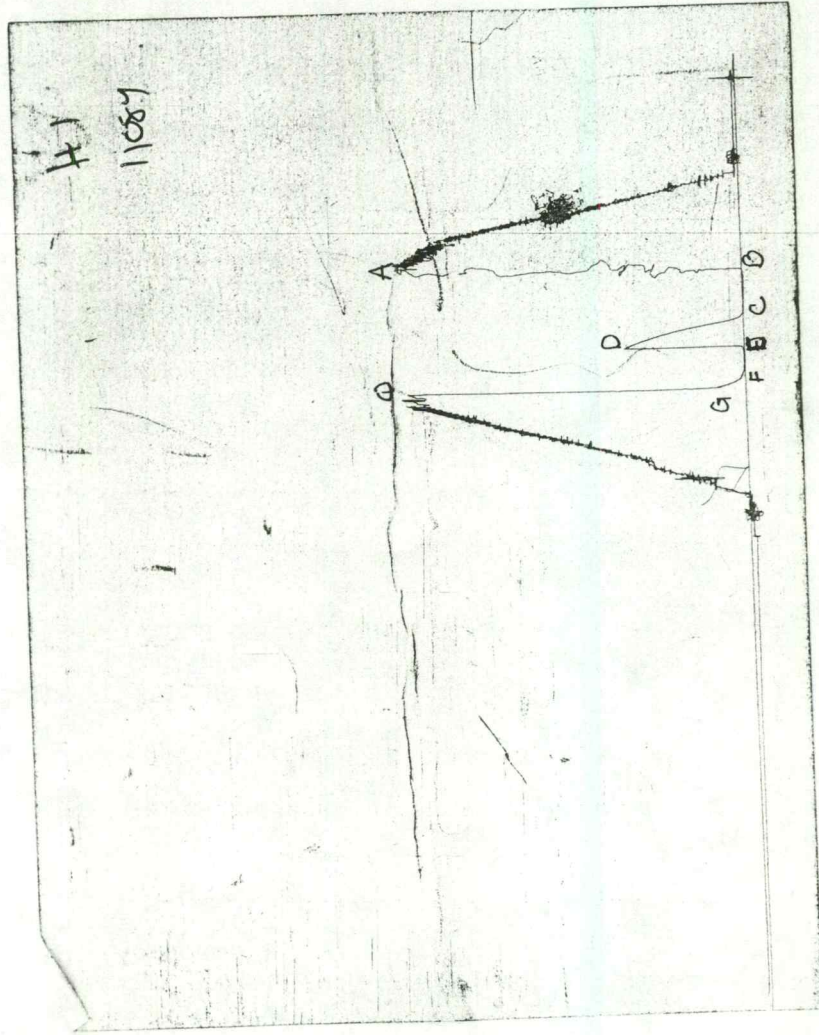
Initial Flow:  
 Weak 1/4" blow building to 1"  
 Final Flow:  
 No blow

Amt. of fill	0.00 ft
Btm. H. Temp.	118.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Paul Simpson
Co. Rep.	Mark Kilien
Contr.	Discovery
Rig #	1
Unit #	
Pump T.	

SAMPLES:  
 SENT TO:

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

No 11042

Well Name & No. Amrein A-1 Test No. 1 Date 6-25-98  
Company Kenmark Zone Tested Conglomerate  
Address Box 576 Hays Ks 67601 Elevation 2150 KB 2142 GL  
Co. Rep / Geo. Mark Kilian Cont. Discovery #1 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
Location: Sec. 32 Twp. 12s Rge. 19w Co. Ellis State Ks  
No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3790-3839 Initial Str Wt./Lbs. 36,000 Unseated Str Wt./Lbs. \_\_\_\_\_  
Anchor Length 49 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. \_\_\_\_\_  
Top Packer Depth 3785 Tool Weight 2200  
Bottom Packer Depth 3790 Hole Size — 7 7/8" Rubber Size — 6 3/4"  
Total Depth 3839 Wt. Pipe Run \_\_\_\_\_ Drill Collar Run 30  
Mud Wt. 9.4 LCM \_\_\_\_\_ Vis. 56 WL 12 Drill Pipe Size 4 1/2 XH Ft. Run 3780  
Blow Description weak 1/2" blow building to 1"

ff. - no blow

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP	%gas	%oil	%water	%mud
<u>20</u>		<u>20</u>					
Rec. <u>2</u>	Feet Of <u>clean oil</u>						
Rec. <u>18</u>	Feet Of <u>SOLM</u>			%gas <u>5</u>	%oil	%water <u>95</u>	%mud
Rec. _____	Feet Of _____			%gas	%oil	%water	%mud
Rec. _____	Feet Of _____			%gas	%oil	%water	%mud
Rec. _____	Feet Of _____			%gas	%oil	%water	%mud

BHT 118 °F Gravity \_\_\_\_\_ °API D@ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API

RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides \_\_\_\_\_ ppm System

(A) Initial Hydrostatic Mud 1950 PSI Recorder No. 11084 T-Started 0317  
(B) First Initial Flow Pressure 22 PSI (depth) 3802 T-Open 0431  
(C) First Final Flow Pressure 22 PSI Recorder No. 24174 T-Pulled 0601  
(D) Initial Shut-in Pressure 699 PSI (depth) 3834 T-Out 0713  
(E) Second Initial Flow Pressure 22 PSI Recorder No. \_\_\_\_\_  
(F) Second Final Flow Pressure 22 PSI (depth) \_\_\_\_\_  
(G) Final Shut-in Pressure 164 PSI Initial Opening 30 Test 600  
(H) Final Hydrostatic Mud 1907 PSI Initial Shut-in 30 Jars \_\_\_\_\_  
Final Flow 15 Safety Joint \_\_\_\_\_  
Final Shut-in 15 Straddle \_\_\_\_\_  
Circ. Sub \_\_\_\_\_  
Sampler \_\_\_\_\_  
Extra Packer \_\_\_\_\_  
Elect. Rec. \_\_\_\_\_  
Other \_\_\_\_\_

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Mark Kilian  
Our Representative Paul Simpson

TOTAL PRICE \$ 600

TRILOBITE TESTING L.L.C.

OPERATOR : Kenmark Corporation  
 WELL NAME: Amrein A-1  
 LOCATION : 32-12S-19W Ellis co KS  
 INTERVAL : 3840.00 To 3871.00 ft

DATE 6/25/98

KB 2150.00 ft TICKET NO: 11043 DST #2  
 GR 2142.00 ft FORMATION: Arbuckle  
 TD 3771.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11084	11084	24174			PF Fr. 1438 to 1508 hr
SI 30	Range(Psi )	4300.0	4300.0	3925.0	0.0	0.0	IS Fr. 1508 to 1538 hr
SF 30	Clock(hrs)	12 hr	12 hr	12 hr			SF Fr. 1538 to 1608 hr
FS 30	Depth(ft )	3846.0	3846.0	3866.0	0.0	0.0	FS Fr. 1608 to 1638 hr

	Field	1	2	3	4	
A. Init Hydro	2069.0	2057.0	0.0	0.0	0.0	T STARTED 1340 hr
B. First Flow	143.0	84.0	0.0	0.0	0.0	T ON BOTM 1430 hr
B1. Final Flow	307.0	256.0	0.0	0.0	0.0	T OPEN 1438 hr
C. In Shut-in	1261.0	1212.0	0.0	0.0	0.0	T PULLED 1638 hr
D. Init Flow	362.0	321.0	0.0	0.0	0.0	T OUT 1858 hr
E. Final Flow	471.0	424.0	0.0	0.0	0.0	
F. Fl Shut-in	1261.0	1211.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1994.0	2010.0	0.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 40000.00 lbs
						Initial Str Wt 36000.00 lbs
						Unseated Str Wt 40000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 30.00 ft
						D.P. Length 3812.00 ft

RECOVERY

Tot Fluid 1050.00 ft of 30.00 ft in DC and 1020.00 ft in DP  
 20.00 ft of Gas in pipe  
 750.00 ft of Slightly water & mud cut oil  
 0.00 ft of 5%gas - 80%oil - 10%water - 5% mud  
 120.00 ft of Oil stained muddy water  
 0.00 ft of 5% oil - 90% water - 5% mud  
 180.00 ft of Muddy water  
 0.00 ft of 95% water - 5% mud  
 0.00 ft of  
 SALINITY 23000.00 P.P.M. A.P.I. Gravity 27.80

BLOW DESCRIPTION

Initial Flow:  
 1" blow - building to bottom of bucket in 3 minutes

Initial Shutin:  
 Surface blow - building to 4 1/2"

Final Flow:  
 2" blow - building to bottom of bucket in 7 minutes

Final Shutin:  
 Weak surface blow - died in 5 minutes

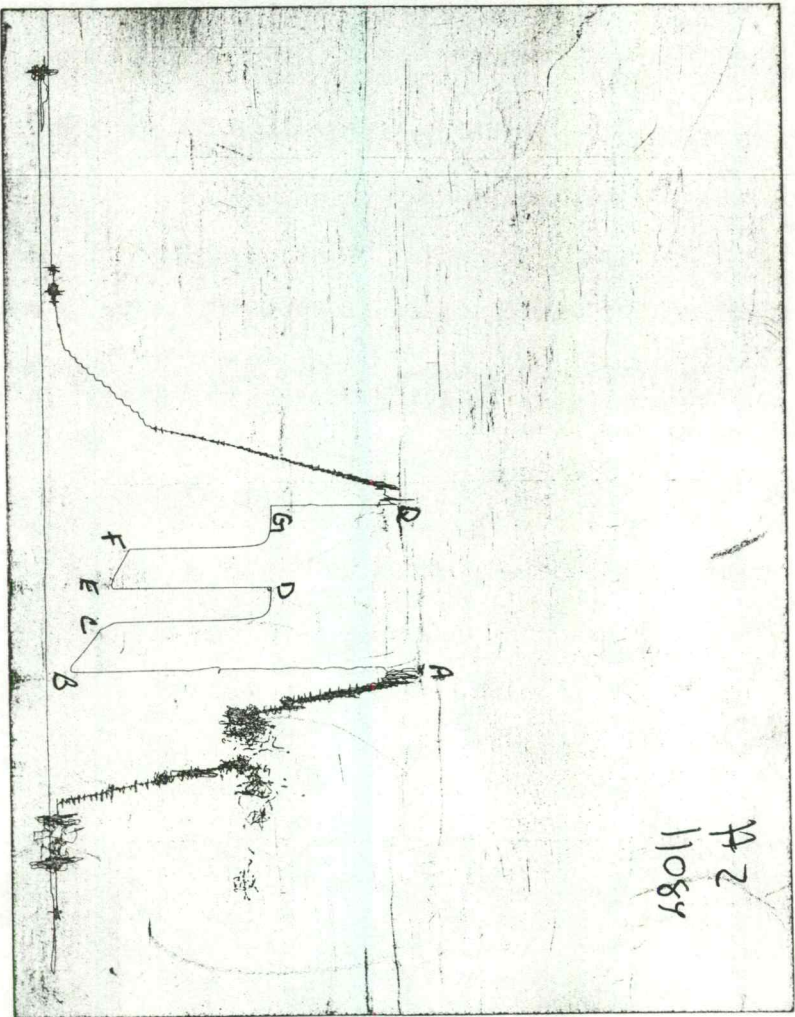
SAMPLES:  
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.50 lb/c
Vis.	48.00 S/L
W.L.	9.60 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	129.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Paul Simpson
Co. Rep.	Mark Kilian
Contr.	Discovery
Rig #	1
Unit #	
Pump T.	

Test Successful: Y

CHART PAGE



A 2  
11084

This is a photocopy of the actual AK-1 recorder chart

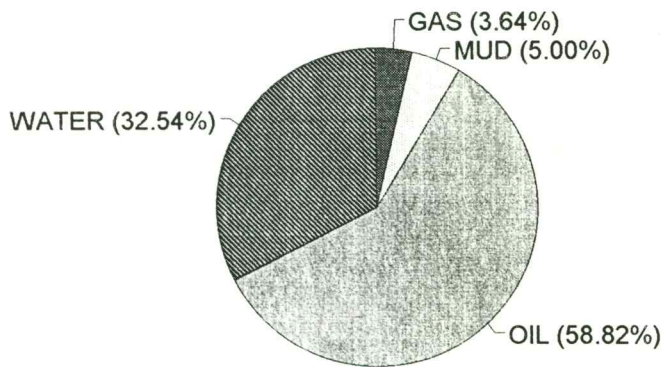
CALCULATED RECOVERY ANALYSIS

DST 2

TICKET 11043

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	750	5	37.5	80	600	10	75	5	37.5
PIPE 2	120		0	5	6	90	108	5	6
3	150		0		0	95	142.5	5	7.5
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	30		0		0	95	28.5	5	1.5
COLLARS 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1050		37.5		606		354		52.5

BBL OIL =	8.61732	*	HRS OPEN	1	=	BBL/DAY	206.8157
BBL WATER =	4.767975	*			=		114.4314
BBL MUD =	0.732555						
BBL GAS =	0.53325						



# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

No 11043

Well Name & No. Ampex A-1 Test No. 2 Date 6-25-98  
Company Kenmark Corporation Zone Tested Arbuckle  
Address \_\_\_\_\_ Elevation 2150 KB 2142 GL  
Co. Rep / Geo. Mark Kilian Cont. Discovery #1 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
Location: Sec. 32 Twp. 12S Rge. 19W Co. Ellis State Ks  
No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3840-3871 Initial Str Wt./Lbs. 36,000 Unseated Str Wt./Lbs. 40,000  
Anchor Length 31 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 40,000  
Top Packer Depth 3835 Tool Weight 2100  
Bottom Packer Depth 3840 Hole Size — 7 7/8" Rubber Size — 6 3/4"  
Total Depth 3871 Wt. Pipe Run \_\_\_\_\_ Drill Collar Run 30  
Mud Wt. 9.5 LCM \_\_\_\_\_ Vis. 48 WL 9.6 Drill Pipe Size 4 1/2" H Ft. Run 3812  
Blow Description 1" blow building to bottom of bucket in 3 minutes  
PSI - surface blow building to 4 1/2"  
ff - 2" blow building to bottom of bucket in 7 minutes  
PSI - weak surface blow died in 5 minutes

Recovery — Total Feet 1050 GIP 20 Ft. in DC 30 Ft. in DP 1020  
Rec. 750 Feet Of sl w + m w 5 % gas 80 % oil 10 % water 5 % mud  
Rec. 120 Feet Of OSM W % gas 5 % oil 90 % water 5 % mud  
Rec. 180 Feet Of MW % gas % oil 95 % water 5 % mud  
Rec. \_\_\_\_\_ Feet Of \_\_\_\_\_ % gas % oil % water % mud  
Rec. \_\_\_\_\_ Feet Of \_\_\_\_\_ % gas % oil % water % mud

BHT 129 °F Gravity 30 °API D@ 95 °F Corrected Gravity 27.5 °API  
RW .2 @ 104 °F Chlorides 23,000 ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 2069 PSI Recorder No. 11084 T-Started 1340  
(B) First Initial Flow Pressure 143 PSI (depth) 3846 T-Open 1438  
(C) First Final Flow Pressure 307 PSI Recorder No. 24174 T-Pulled 1638  
(D) Initial Shut-in Pressure 1261 PSI (depth) 3866 T-Out 1858  
(E) Second Initial Flow Pressure 362 PSI Recorder No. \_\_\_\_\_  
(F) Second Final Flow Pressure 471 PSI (depth) \_\_\_\_\_  
(G) Final Shut-in Pressure 1261 PSI Initial Opening 30 Test 1000  
(H) Final Hydrostatic Mud 1994 PSI Initial Shut-in 30 Jars \_\_\_\_\_

Final Flow 30 Safety Joint \_\_\_\_\_  
Final Shut-in 30 Straddle \_\_\_\_\_

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Approved By Mark Kilian  
Our Representative Paul Simpson

Circ. Sub \_\_\_\_\_  
Sampler \_\_\_\_\_  
Extra Packer \_\_\_\_\_  
Elect. Rec. \_\_\_\_\_  
Other \_\_\_\_\_  
TOTAL PRICE \$ 1000