TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: UHLAND #1 | Test No.: 1 | Date: 12/5/93

Company: ABERCROMBIE DRILLING INC | Zone: KS CITY

Address: 150 N MAIN #801 WICHITA KS 67202 | Elevation: 3147

Co. Rep./Geo.: MARK GALYON | Cont.: ABERCROMBIE RIG #8 | Est. Ft. of Pay:

Location: Sec.: 25 | Twp.: 20S | Rge.: 35W | Co.: WICHITA | State: KS

Interval Tested: 4228-4247 | Drill Pipe Size: 4.5" XH

Anchor Length: 19 | Wt. Pipe I.D. - 2.7 Ft. Run: 521

Top Packer Depth: 4223-4228 | Drill Collar – 2.25 Ft. Run:

Bottom Packer Depth: 4247 | Mud Wt.: 9.2 lb/Gal.

Total Depth: 4317 | Viscosity: 40 | Filtrate: 12

Tool Open @: 5:01 PM | Initial Blow: WEAK SURFACE TO NO BLOW IN 11 MINUTES

FLUSHED TOOL-WEAK SURFACE FOR 30 SECONDS-NO BLOW

Final Blow: NO BLOW

Recovery - Total Feet: 10 | Flush Tool?: YES

Rec. 10 | Feet of: OIL STAINED MUD

Rec. | Feet of:

Rec. | Feet of:

Rec. | Feet of:

Rec. | Feet of:

BHT: 109 °F | Gravity: °API | @ °F | Corrected Gravity: °API

RW: | @ °F | Chlorides: ppm Recovery | Chlorides: 4500 ppm System

(A) Initial Hydrostatic Mud: 2036.7 PSI | AK1 Recorder No.: 13308 | Range: 4700

(B) First Initial Flow Pressure: 26.7 PSI | @ (depth): 4230 | w / Clock No.: 7452

(C) First Final Flow Pressure: 26.7 PSI | AK1 Recorder No.: 11057 | Range: 4500

(D) Initial Shut-in Pressure: 859.1 PSI | @ (depth): 4240 | w / Clock No.: 27366

(E) Second Initial Flow Pressure: 24.5 PSI | AK1 Recorder No.: 2023 | Range: 4000

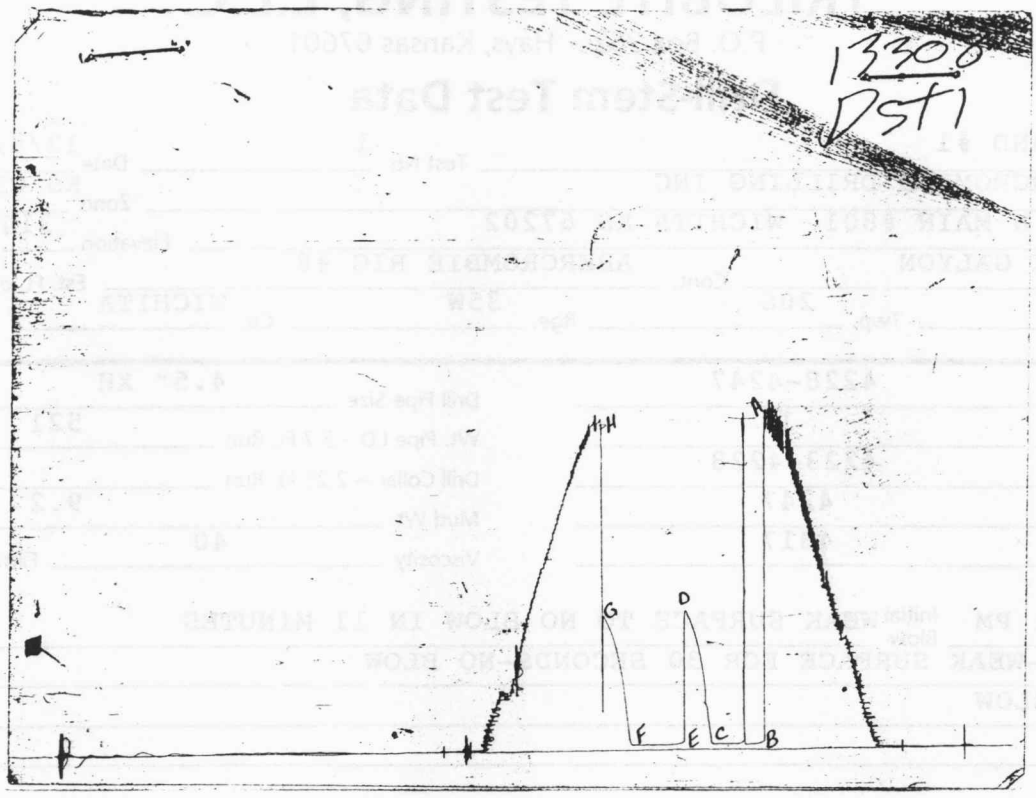
(F) Second Final Flow Pressure: 24.5 PSI | @ (depth): 4312 | w / Clock No.: 20272

(G) Final Shut-in Pressure: 822.3 PSI | Initial Opening: 30 | Final Flow: 30

(H) Final Hydrostatic Mud: 1998.9 PSI | Initial Shut-in: 30 | Final Shut-in: 30

Our Representative: MARK HERSKOWITZ

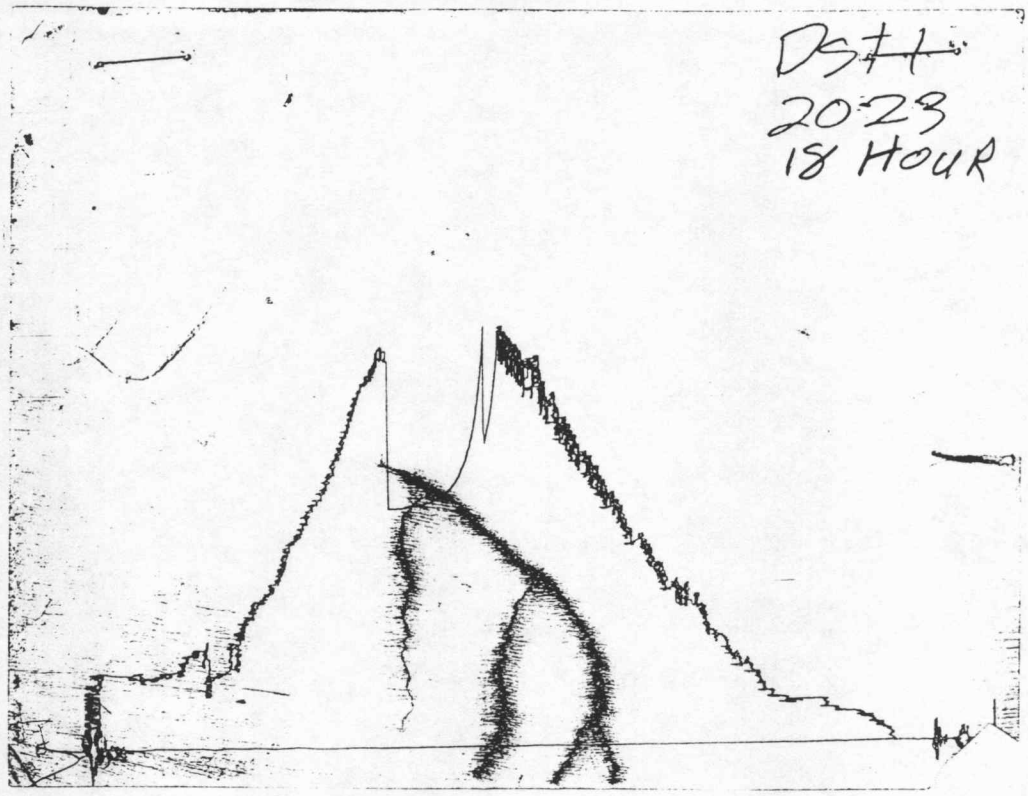
CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2033	2036.7
(B) FIRST INITIAL FLOW PRESSURE	24	26.7
(C) FIRST FINAL FLOW PRESSURE	24	26.7
(D) INITIAL CLOSED-IN PRESSURE	853	859.1
(E) SECOND INITIAL FLOW PRESSURE	24	24.5
(F) SECOND FINAL FLOW PRESSURE	24	24.5
(G) FINAL CLOSED-IN PRESSURE	818	822.3
(H) FINAL HYDROSTATIC MUD	1997	1998.9

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD		
(B) FIRST INITIAL FLOW PRESSURE		
(C) FIRST FINAL FLOW PRESSURE		
(D) INITIAL CLOSED-IN PRESSURE		
(E) SECOND INITIAL FLOW PRESSURE		
(F) SECOND FINAL FLOW PRESSURE		
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD		

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6796

Well Name & No. Uhland 1st Test No. 1 Date 12-5-93

Company Abercrombie Drilling Zone Tested KC

Address 150 N. Main Ste 601 Wichita Elevation 3147 KB

Co. Rep./Geo. Mark Galyon cont. A.K.A. Rig 8 Est. Ft. of Pay

Location: Sec. 25 Twp. 30s Rge. 35w Co. Wichita State Ks

No. of Copies 1 Distribution Sheet ____ Yes ____ No Turnkey ____ Yes ____ No ____ Evaluation

Interval Tested 4228-4247 Drill Pipe Size 4½ XH

Anchor Length 19' 70 T.P. Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4223 4228 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4247 Wt. Pipe I.D. — 2.7 Ft. Run 521

Total Depth 4317 Drill Collar — 2.25 Ft. Run ____

Mud Wt. 9.2 LCM — lb/gal. Viscosity 40 Filtrate 12.0

Tool Open @ 5:01 PM Initial Blow WEAK SUR to No Blow in 11 MIN

Plus Tool WEAK SUR 30 SEC No Blow

Final Blow No Blow

Recovery — Total Feet 10 Feet of Gas in Pipe ____ Flush Tool? Yes

Rec. 10	Feet Of Oil & Mud	%gas	2 %oil	%water	96	%mud	
Rec. ____	Feet Of ____	%gas	%oil	%water		%mud	
Rec. ____	Feet Of ____	%gas	%oil	%water		%mud	
Rec. ____	Feet Of ____	%gas	%oil	%water		%mud	
Rec. ____	Feet Of ____	%gas	%oil	%water		%mud	

BHT 109 °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 4500 ppm System

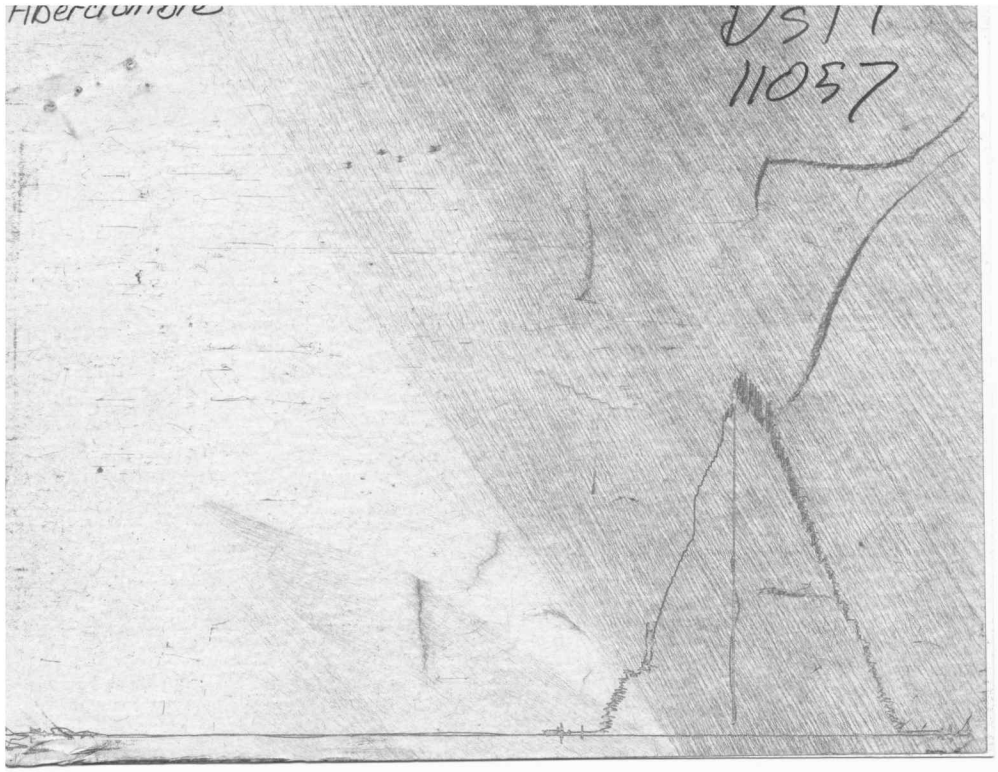
(A) Initial Hydrostatic Mud	2033 PSI	AK1 Recorder No.	13308	Range	4700
(B) First Initial Flow Pressure	24 PSI	@ (depth)	4230	w/Clock No.	7452
(C) First Final Flow Pressure	24 PSI	AK1 Recorder No.	11057	Range	4500
(D) Initial Shut-In Pressure	853 PSI	@ (depth)	4240	w/Clock No.	27346
(E) Second Initial Flow Pressure	24 PSI	AK1 Recorder No.	2023	Range	4000
(F) Second Final Flow Pressure	24 PSI	@ (depth)	4312	w/Clock No.	20272 48 hour
(G) Final Shut-In Pressure	818 PSI	Initial Opening	30	Test ✓	600.00
(H) Final Hydrostatic Mud	1997 PSI	Initial Shut-In	30	Jars	
		Final Flow	30	Safety Joint	
		Final Shut-In	30	Straddle ✓	250.00
				Circ. Sub ✓	NC
				Sampler	
				Extra Packer ✓	150.00
				Other	
				TOTAL PRICE $	1000.00

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 Galyon

Our Representative Mark Hershberger

Printcraft Printers - Hays, KS


Aberdeenshire
USIT
11057

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: UHLAND #1 | Test No.: 2 | Date: 12/6/93

Company: ABERCROMBIE DRILLING INC | Zone: MARMATON

Address: 150 N MAIN #801 WICHITA KS 67202 | Elevation: 3147

Co. Rep./Geo.: MARK GALYON | Cont.: ABERCROMBIE RIG #8 | Est. Ft. of Pay: 15

Location: Sec.: 25 | Twp.: 20S | Rge.: 35W | Co.: WICHITA | State: KS

Interval Tested: 4454-4519 | Drill Pipe Size: 4.5" XH

Anchor Length: 65 | Wt. Pipe I.D. - 2.7 Ft. Run: 583

Top Packer Depth: 4449 | Drill Collar – 2.25 Ft. Run:

Bottom Packer Depth: 4454 | Mud Wt.: 9.3 lb/Gal.

Total Depth: 4519 | Viscosity: 45 | Filtrate: 9.6

Tool Open @: 6:22 PM | Initial Blow: GOOD BLOW OFF BOTTOM IN 2 MINUTES 15 SECONDS

Final Blow: GOOD BLOW OFF BOTTOM IN 1 MINUTE 30 SECONDS
GAS TO SURFACE 40 MINUTES INTO FINAL SHUTIN

Recovery - Total Feet: 1696 | Flush Tool?: NO

Rec. 2738	Feet of	GAS IN PIPE
Rec. 1255	Feet of	CLEAN GASSY OIL-15%GAS/ 85% OIL
Rec. 189	Feet of	SLTLY MUD & GAS CUT OIL-10%GAS/75%OIL/15%MUD
Rec. 252	Feet of	GSY OIL & WTR CUT MUD-10%GAS/10%OIL/15%WTR/65%MUD
Rec.	Feet of	

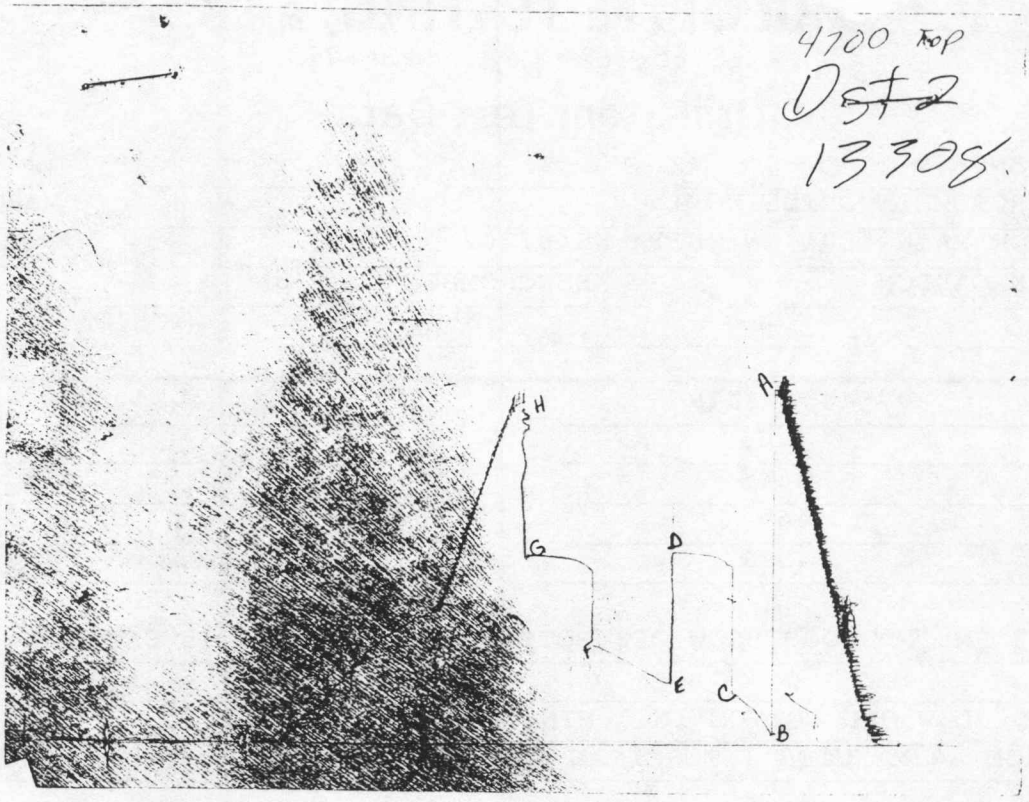
BHT: 111 °F | Gravity: 35 °API | @: 70 °F | Corrected Gravity: 34 °API

RW: @ °F | Chlorides: ppm Recovery | Chlorides: 8000 ppm System

(A) Initial Hydrostatic Mud	1939.6 PSI	AK1 Recorder No. 13308	Range 4700
(B) First Initial Flow Pressure	62.0 PSI	@ (depth) 4456	w / Clock No. 7452
(C) First Final Flow Pressure	321.7 PSI	AK1 Recorder No. 11057	Range 4500
(D) Initial Shut-in Pressure	1184.4 PSI	@ (depth) 4514	w / Clock No. 27566
(E) Second Initial Flow Pressure	388.1 PSI	AK1 Recorder No.	Range
(F) Second Final Flow Pressure	616.7 PSI	@ (depth)	w / Clock No.
(G) Final Shut-in Pressure	1164.5 PSI	Initial Opening 30	Final Flow 60
(H) Final Hydrostatic Mud	1926.8 PSI	Initial Shut-in 45	Final Shut-in 45

Our Representative: MARK HERSKOWITZ

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1918	1939.6
(B) FIRST INITIAL FLOW PRESSURE	76	62
(C) FIRST FINAL FLOW PRESSURE	328	321.7
(D) INITIAL CLOSED-IN PRESSURE	1167	1184.4
(E) SECOND INITIAL FLOW PRESSURE	359	388.1
(F) SECOND FINAL FLOW PRESSURE	587	616.7
(G) FINAL CLOSED-IN PRESSURE	1147	1164.5
(H) FINAL HYDROSTATIC MUD	1898	1926.8

COMPUTER OIL EVALUATION BY TRILOBITE TESTING, L.L.C.

ABERCROMBIE DRILLING INC

UHLAND #1 DST 2

25 20S 35W WICHITA KS

ELEVATION:	3147	KB	EST. PAY	15	FT
DATUM:	-1310		ZONE TESTED:	MARMATON	
TEST INTERVAL:	4454-4519		TIME INTERVALS:	30-45-60-45	
RECORDER DEPTH:	4456		VISCOSITY:	8.63	CP
BOTTOM HOLE TEMP:	111		HOLE SIZE:	7.875	IN

CUBIC FEET OF GAS IN PIPE:	219			
TOTAL FEET OF RECOVERY:	1696.00	CORRECTED PIPE FILLUP:	1666.757	
TOTAL BARRELS OF RECOVERY:	18.68	CORR. BARRELS OF RECOVERY:	18.265	BBL
BARRELS IN DRILL PIPE:	15.83	API GRAVITY:	34	
BARRELS IN WEIGHT PIPE:	0.00	FLUID GRADIENT:	0.370	
BARRELS IN DRILL COLLARS:	2.85			
GAS OIL RATIO:	11.70	CU.FT/BBL		
BUBBLE POINT PRESSURE:	103			
UNCORRECTED INITIAL PRODUCTION:			298.84	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			292.25	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			232.695	

INITIAL SLOPE	79.69	PSI/CYCL	FINAL SLOPE	81.58	PSI/CYCLE
INITIAL P*	1202.08	PSI	FINAL P*	1201.91	PSI

TRANSMISSIBILITY	582.50	(MD.-FT./CP.)
PERMEABILITY	335.05	(MD.)
INDICATED FLOW CAPACITY	5025.72	(MD.FT)
PRODUCTIVITY INDEX	0.66	(BARREL/DAY/PSI)
DAMAGE RATIO	1.31	
RADIUS OF INVESTIGATION	173.65	(FT,)
POTENTIOMETRIC SURFACE	1478.24	(FT.)
DRAWDOWN FACTOR	0.014	(%)
THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE	383.66	
THEORETICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE	305.48	

INITIAL FLOW

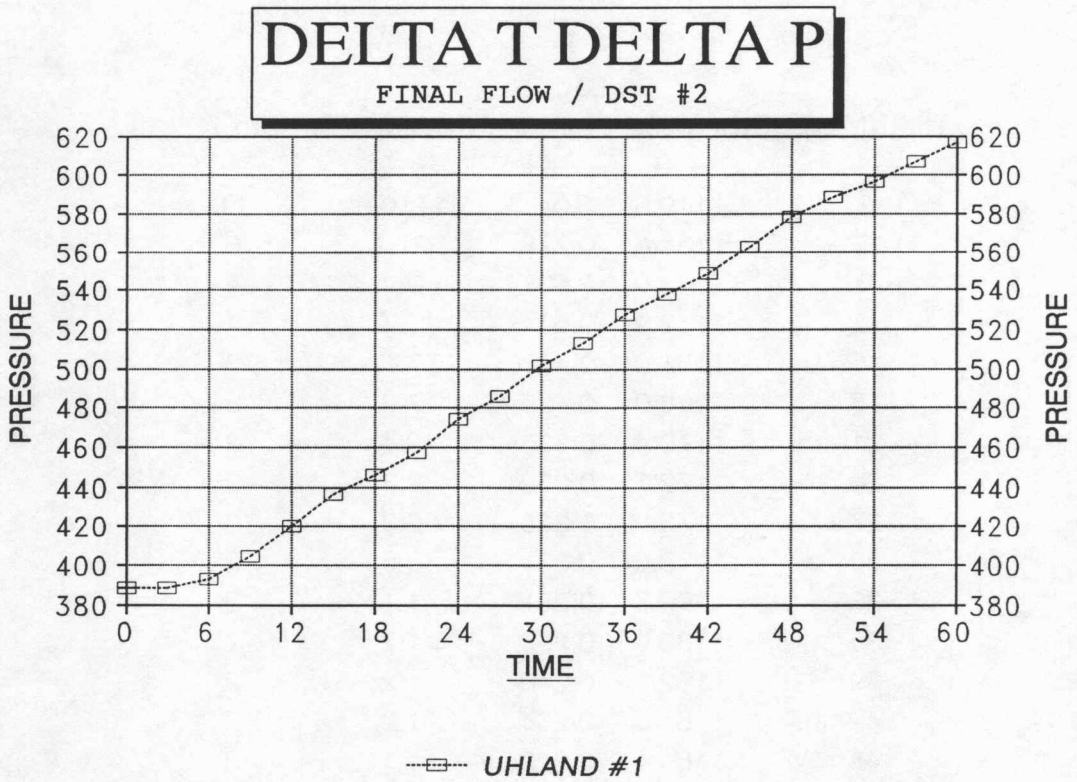
RECORDER 13308 DST # 2

TIME(MIN)	PRESSURE	<> PRESSURE
0	62.0	62.0
3	112.6	50.6
6	145.1	32.5
9	184.6	39.5
12	214.5	29.9
15	233.6	19.1
18	252.7	19.1
21	270.6	17.9
24	288.4	17.8
27	313.4	25.0
30	321.7	8.3

FINAL FLOW

RECORDER 13308 DST # 2

TIME(MIN)	PRESSURE	<> PRESSURE
0	388.1	388.1
3	388.1	0.0
6	392.8	4.7
9	404.6	11.8
12	420.0	15.4
15	436.5	16.5
18	446.0	9.5
21	457.8	11.8
24	474.3	16.5
27	486.1	11.8
30	501.4	15.3
33	513.2	11.8
36	527.4	14.2
39	538.0	10.6
42	548.5	10.5
45	562.7	14.2
48	577.9	15.2
51	588.5	10.6
54	596.7	8.2
57	607.3	10.6
60	616.7	9.4



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE: 232.695

UHLAND #1 DST #2
INITIAL SHUTIN

30 INITIAL FLOW TIME

SLOPE 79.7 PSI/CYCLE
P* 1202.08 PSI

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	3	1110.5	1.041	1110.5	11
	6	1131.6	0.778	21.1	6
	9	1141.0	0.637	9.4	4
	12	1153.9	0.544	12.9	4
	15	1161.0	0.477	7.1	3
	18	1168.0	0.426	7.0	3
	21	1170.4	0.385	2.4	2
	24	1172.7	0.352	2.3	2
	27	1175.0	0.325	2.3	2
	30	1178.6	0.301	3.6	2
X	33	1179.7	0.281	1.1	2
	36	1180.9	0.263	1.2	2
	39	1182.1	0.248	1.2	2
	42	1183.3	0.234	1.2	2
X	45	1184.4	0.222	1.1	2

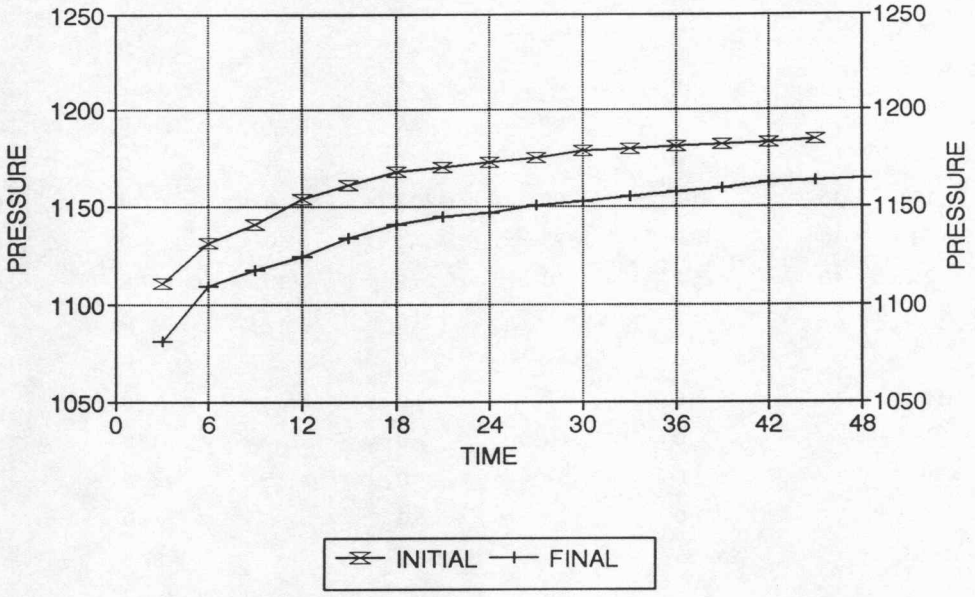
UHLAND #1 DST #2
FINAL SHUTIN

90 TOTAL FLOW TIME

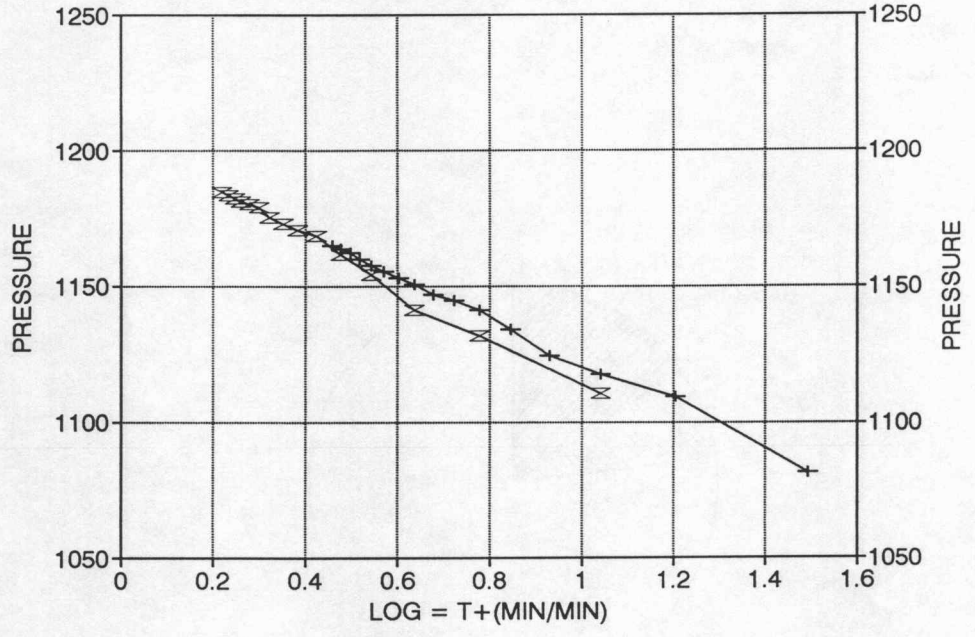
SLOPE 81.6 PSI/CYCLE
P* 1201.9 PSI

			Log Horn T	<> PRESSURE	Horn T
	3	1081.1	1.491	1081.1	31
	6	1109.3	1.204	28.2	16
	9	1117.5	1.041	8.2	11
	12	1124.6	0.929	7.1	9
	15	1134.0	0.845	9.4	7
	18	1141.0	0.778	7.0	6
	21	1144.5	0.723	3.5	5
	24	1146.9	0.677	2.4	5
	27	1150.4	0.637	3.5	4
X	30	1152.8	0.602	2.4	4
	33	1155.1	0.571	2.3	4
	36	1157.4	0.544	2.3	4
	39	1159.8	0.520	2.4	3
	42	1162.1	0.497	2.3	3
	45	1163.3	0.477	1.2	3
X	48	1164.5	0.459	1.2	3

UHLAND #1 / DST #2
DELTA T DELTA P



HORNER PLOT

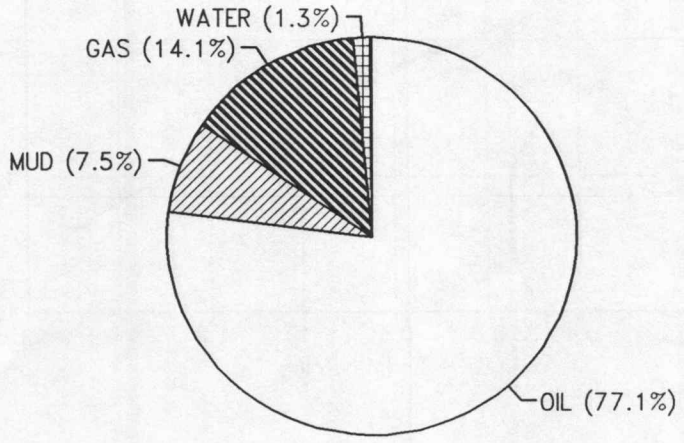


CALCULATED RECOVERY ANALYSIS

DST 2 TICKET # 6797

SAMPLE #	TOTAL FEET	%	GAS FEET	%	OIL FEET	%	WATER FEET	%	MUD FEET
DRILL 1	1113	15	166.95	85	946.05	0	0	0	0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1	142	15	21.3	85	120.7	0	0	0	0
PIPE 2	189	10	18.9	75	141.75	0	0	15	28.35
3	252	10	25.2	10	25.2	15	37.8	65	163.8
4			0		0		0		0
DRILL 1			0		0		0		0
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1696		232.35		1233.7		37.8		192.15

			HRS OPEN	BBL/DAY
BBL OIL=	15.466381	*	1.5	247.4621
BBL WATER=	0.2646	*		4.2336
BBL MUD=	1.49877			
BBL GAS =	2.831829			



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6797

Well Name & No. Uhland 1-H Test No. 2 Date 12-6-93

Company Abercrombie Drilling Zone Tested Marmaton

Address 150 N Main Ste 801 Wichita Elevation 3147 KB

Co. Rep./Geo. Mark Galyon Cont. A.K.A. Rig 8 Est. Ft. of Pay 15

Location: Sec. 25 Twp. 20 S Rge. 35 W Co. Wichita State KS

No. of Copies 1 Distribution Sheet ____ Yes ✓ No Turnkey ____ Yes ____ No X Evaluation

Interval Tested 4454 - 4519 Drill Pipe Size 4½ XH

Anchor Length 65 Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4449 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4454 Wt. Pipe I.D. — 2.7 Ft. Run 583

Total Depth 4519 Drill Collar — 2.25 Ft. Run ____

Mud Wt. 9.3 LCM 1# lb/gal. Viscosity 45 Filtrate 9.6

Tool Open @ 6:22 PM Initial Blow Good Blow off Bottom 2 min 15 sec

Final Blow Good Blow off in 1 min 30 sec

Gas to Surface 40 min into Final Shut-in.

Recovery — Total Feet 696 Feet of Gas in Pipe 2738 Flush Tool? ____

Rec. 1255	Feet Of	SGC Oil	15 %gas	85 %oil	%water	%mud
Rec. 189	Feet Of	SMG Oil	10 %gas	75 %oil	%water 15	%mud
Rec. 252	Feet Of	SWG [redacted] Oil Mud	10 %gas	10 %oil	15 %water	65 %mud
Rec. ____	Feet Of	____	%gas	%oil	%water	%mud
Rec. ____	Feet Of	____	%gas	%oil	%water	%mud

BHT 111 °F Gravity 35 °API @ 70 °F Corrected Gravity 34 °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud	1918 PSI	AK1 Recorder No.	13308	Range	4700
(B) First Initial Flow Pressure	76 PSI	@ (depth)	4456	w/Clock No.	7452
(C) First Final Flow Pressure	328 PSI	AK1 Recorder No.	11057	Range	4500
(D) Initial Shut-In Pressure	1167 PSI	@ (depth)	4514	w/Clock No.	27566
(E) Second Initial Flow Pressure	359 PSI	AK1 Recorder No.	____	Range	____
(F) Second Final Flow Pressure	587 PSI	@ (depth)	____	w/Clock No.	____
(G) Final Shut-In Pressure	1147 PSI	Initial Opening	30	Test	✓
(H) Final Hydrostatic Mud	1898 PSI	Initial Shut-In	45	Jars	____
		Final Flow	60	Safety Joint	____
		Final Shut-In	45	Straddle	____
				Circ. Sub	✓ NC
				Sampler	____
				Extra Packer	____
				Other	oil evaluation
				TOTAL PRICE $	____

Approved By Mark Galyon

Our Representative Mark Henshaw

Printcraft Printers - Hays, KS

Tight Hole !!

WELL NAME Abercrombie DST # 2 RECORDER # 13308

INIT. HYD. MUD. _____ _____ FINAL HYD. MUD _____ _____

INITIAL FLOW MINUTES 30 INTERVAL		INITIAL SHUTIN MINUTES 45 INTERVAL			FINAL FLOW MINUTES 60 INTERVAL		FINAL SHUTIN MINUTES 45 INTERVAL	
.051	62.0	—	—	1	.324	388.1	—	—
.093		.939		2	"		.914	
.120		.957		3	328		938	
.153		.965		4	338		945	
.178		.976		5	.351		951	
.194		.982		6	365		959	
.210		.988		7	373		965	
.225		989		8	383		968	
.240		.992		9	397		970	
261		.994		10	407		973	
.268	321.7	.997		11	420		975	
		998		12	430		977	
		999		13	442		~~980~~ 979	
		1.000		14	451		.981	
		1.001		15	460		.983	
		1.002	1184.4	16	472		984	
				17	.485		.985	1164.5
				18	.494			
				19	.501			
				20	510			
				21	518	616.7		
				22				
				23				
				24				
				25				
				26				
				27				

Tight Hole

Recorder # 13308

DSD

1	0.939	1110.55
2	0.957	1131.679
3	0.965	1141.068
4	0.976	1153.976
5	0.982	1161.015
6	0.988	1168.054
7	0.99	1170.4
8	0.992	1172.746
9	0.994	1175.092
10	0.997	1178.611
11	0.998	1179.784
12	0.999	1180.957
13	1	1182.13
14	1.001	1183.306
15	1.002	1184.483

DSD - 1200.6

FSD 1202.9

FSD

1	0.914	1081.194
2	0.938	1109.376
3	0.945	1117.594
4	0.951	1124.637
5	0.959	1134.027
6	0.965	1141.068
7	0.968	1144.589
8	0.97	1146.935
9	0.973	1150.456
10	0.975	1152.802
11	0.977	1155.149
12	0.979	1157.496
13	0.981	1159.842
14	0.983	1162.188
15	0.984	1163.362
16	0.985	1164.535

C - 16

A25 . . A40

D1 . . D.31

IF

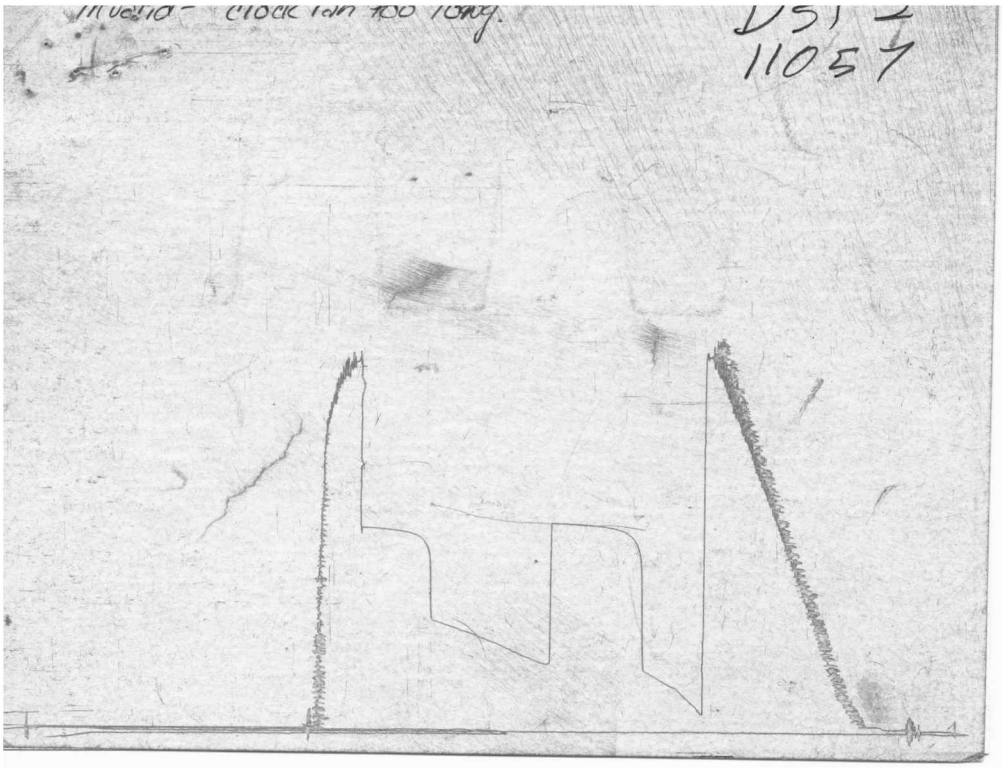
1	0.051	62.09862
2	0.093	112.6982
3	0.12	145.1416
4	0.153	184.6626
5	0.178	214.5574
6	0.194	233.6489
7	0.21	252.7322
8	0.225	270.6113
9	0.24	288.4672
10	0.261	313.4267
11	0.268	321.7365

FF

1	0.324	388.1069
2	0.324	388.1069
3	0.328	392.8433
4	0.338	404.6786
5	0.351	420.0518
6	0.365	436.5919
7	0.373	446.0359
8	0.383	457.8334
9	0.397	474.3359
10	0.407	486.1343
11	0.42	501.4733
12	0.43	513.2646
13	0.442	527.405
14	0.451	538.0037
15	0.46	548.5969
16	0.472	562.7125
17	0.485	577.9931
18	0.494	588.5651
19	0.501	596.7871
20	0.51	607.3784
21	0.518	616.789

Invalid - Clock ran too long.

DST 2
11057



TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: UHLAND #1 | Test No.: 3 | Date: 12/7/93

Company: ABERCROMBIE DRILLING INC | Zone: MARMATON

Address: 150 N MAIN #801 WICHITA KS 67202 | Elevation: 3147

Co. Rep./Geo.: MARK GALYON | Cont.: ABERCROMBIE RIG #8 | Est. Ft. of Pay:

Location: Sec.: 25 | Twp.: 20S | Rge.: 35W | Co.: WICHITA | State: KS

Interval Tested: 4525-4560 | Drill Pipe Size: 4.5" XH

Anchor Length: 35 | Wt. Pipe I.D. - 2.7 Ft. Run: 583

Top Packer Depth: 4520 | Drill Collar – 2.25 Ft. Run:

Bottom Packer Depth: 4525 | Mud Wt.: 9 lb/Gal.

Total Depth: 4560 | Viscosity: 44 | Filtrate: 8.8

Tool Open @: 1:57 PM | Initial Blow: WEAK SURFACE BLOW FOR 21 MINUTES TO NO BLOW

Final Blow: NO BLOW - FLUSHED TOOL - WEAK SURFACE BLOW 30 SECONDS

FSI: NO BLOW

Recovery - Total Feet: 10 | Flush Tool?: YES

Rec. 10 | Feet of: OIL STAINED MUD

Rec. | Feet of

Rec. | Feet of

Rec. | Feet of

Rec. | Feet of

BHT: 113 °F | Gravity: °API | @ °F | Corrected Gravity: °API

RW: @ °F | Chlorides: ppm Recovery | Chlorides: 8000 ppm System

(A) Initial Hydrostatic Mud: 1980.7 PSI | AK1 Recorder No.: 13308 | Range: 4700

(B) First Initial Flow Pressure: 49.3 PSI | @ (depth): 4529 | w / Clock No.: 7452

(C) First Final Flow Pressure: 43.7 PSI | AK1 Recorder No.: 11057 | Range: 4500

(D) Initial Shut-in Pressure: 582.6 PSI | @ (depth): 4555 | w / Clock No.: 25828

(E) Second Initial Flow Pressure: 54.9 PSI | AK1 Recorder No.: | Range:

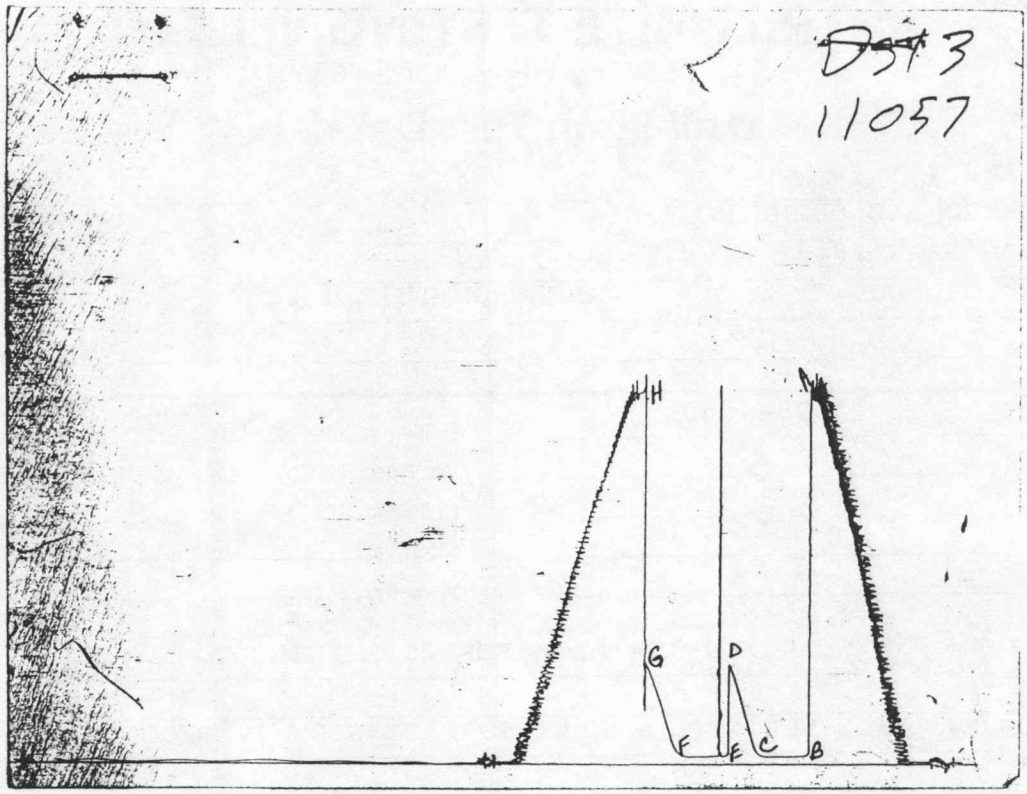
(F) Second Final Flow Pressure: 43.7 PSI | @ (depth): | w / Clock No.:

(G) Final Shut-in Pressure: 575.9 PSI | Initial Opening: 30 | Final Flow: 30

(H) Final Hydrostatic Mud: 1950.7 PSI | Initial Shut-in: 30 | Final Shut-in: 30

Our Representative: MARK HERSKOWITZ

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1938	1980.7
(B) FIRST INITIAL FLOW PRESSURE	33	49.3
(C) FIRST FINAL FLOW PRESSURE	33	43.7
(D) INITIAL CLOSED-IN PRESSURE	528	582.6
(E) SECOND INITIAL FLOW PRESSURE	33	54.9
(F) SECOND FINAL FLOW PRESSURE	33	43.7
(G) FINAL CLOSED-IN PRESSURE	538	575.9
(H) FINAL HYDROSTATIC MUD	1918	1950.7

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6798

Well Name & No. Uhland 1-H Test No. 3 Date 12-7-93

Company Abercrombie Drilling Zone Tested Marmaton

Address 150 N Main Ste 800 Wichita Elevation 3147 KB

Co. Rep./Geo. Mark Galyon Cont. A.K.A. Rig 8 Est. Ft. of Pay

Location: Sec. 25 Twp. 20s Rge. 35w Co. Wichita State KS

No. of Copies Distribution Sheet Yes No Turnkey Yes No Evaluation

Interval Tested 4525 4560 Drill Pipe Size 4 1/2 XH

Anchor Length 35 Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4520 Hole Size — 7 7/8" Rubber Size — 6 3/4"

Bottom Packer Depth 4525 Wt. Pipe I.D. — 2.7 Ft. Run 583

Total Depth 4560 Drill Collar — 2.25 Ft. Run

Mud Wt. 9.0 LCM 1 lb/gal. Viscosity 44 Filtrate 8.8

Tool Open @ 1:57 PM Initial Blow WEAK SUR FOR 21 MIN TO NO BLOW

Final Blow No Blow Flush tool WEAK SUR Blow 30 SEC No Blow

Recovery — Total Feet 10 Feet of Gas in Pipe — Flush Tool? Yes

Rec. 10	Feet Of MOS Mud	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 113 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud	1938 PSI	AK1 Recorder No.	13308	Range	4700
(B) First Initial Flow Pressure	33 PSI	@ (depth)	4529	w/Clock No.	7452
(C) First Final Flow Pressure	33 PSI	AK1 Recorder No.	11057	Range	4500
(D) Initial Shut-In Pressure	528 PSI	@ (depth)	4555	w/Clock No.	2828
(E) Second Initial Flow Pressure	33 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	33 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	538 PSI	Initial Opening	30	Test	600.00
(H) Final Hydrostatic Mud	1918 PSI	Initial Shut-In	30	Jars	
		Final Flow	30	Safety Joint	
		Final Shut-In	30	Straddle	
				Circ. Sub	NC
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	600.00

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

Our Representative Mark Hershey

Printcraft Printers - Hays, KS

Abercrombie

Dst 3
13308