

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Computer Inventories

Drill-Stem Test Data

Well Name BRANDENBURG #12 Test No. 1 Date 7/31/92
Company HALLWOOD PETROLEUM INC. Zone PLATTSMOUTH
Address P.O. BOX 378111 DENVER CO 80237 Elevation 1835
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN DRLG RIG #3 Est. Ft. of Pay _____
Location: Sec. 20 Twp. 14S Rge. 14W Co. RUSSELL State KS

Interval Tested 2864-2884 Drill Pipe Size 4.5 XH
Anchor Length 20 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2859 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 2564 Mud Wt. 9.1 lb/Gal.
Total Depth 2884 Viscosity 51 Filtrate 10

Tool Open @ 11:51 AM Initial Blow WEAK 1/4" BLOW BUILDING TO 4"

Final Blow VERY WEAK SURFACE BLOW BUILDING TO 5.5"

Recovery - Total Feet 55

Flush Tool? _____

Rec. 125 Feet of GAS IN PIPE
Rec. 55 Feet of SLTLY OIL CUT MUD 3%OIL/97%MUD
Rec. _____ Feet of GOOD SHOW OF OIL IN TOP OF TOOL
Rec. _____ Feet of _____
Rec. _____ Feet of _____

RECEIVED
KANSAS CORPORATION COMMISSION
OCT 27 1992
CONSERVATION DIVISION
WICHITA, KS

BHT 96 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1460.9 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 41.2 PSI @ (depth) 2868 w / Clock No. 27501

(C) First Final Flow Pressure 45.8 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 740.6 PSI @ (depth) 2883 w / Clock No. 27573

(E) Second Initial Flow Pressure 45.8 PSI AK1 Recorder No. _____ Range _____

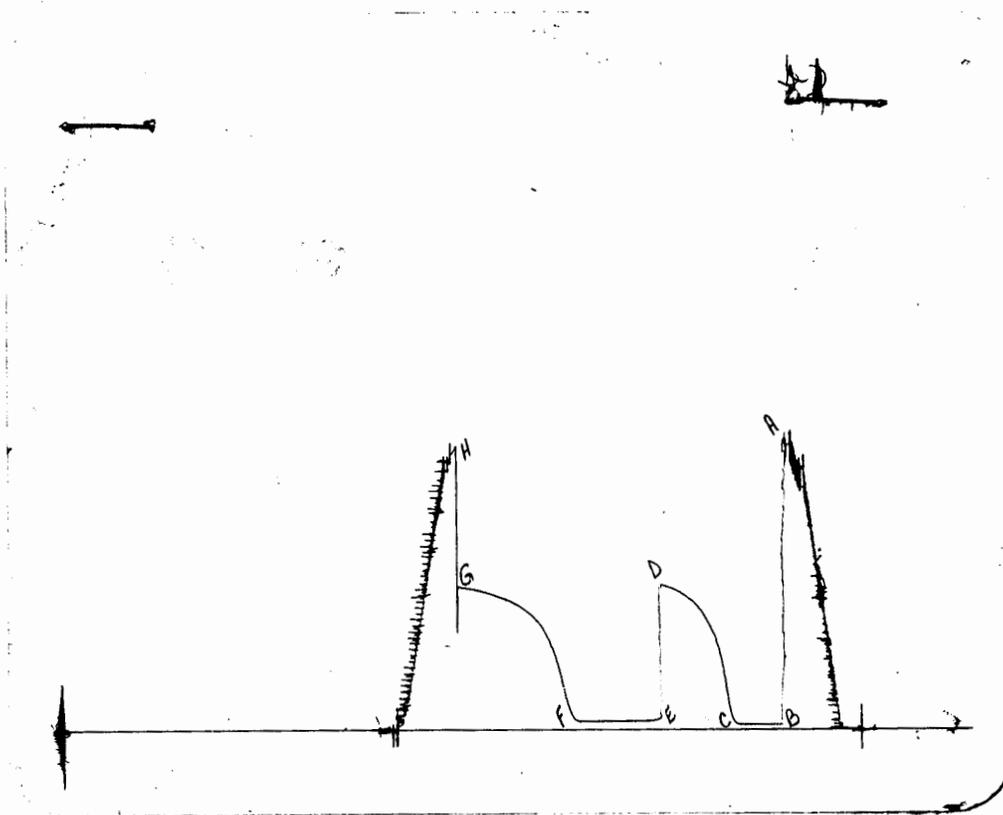
(F) Second Final Flow Pressure 52.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 740.6 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1410.7 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1462	1460.9
(B) FIRST INITIAL FLOW PRESSURE	37	41.2
(C) FIRST FINAL FLOW PRESSURE	44	45.8
(D) INITIAL CLOSED-IN PRESSURE	736	740.6
(E) SECOND INITIAL FLOW PRESSURE	44	45.8
(F) SECOND FINAL FLOW PRESSURE	51	52.3
(G) FINAL CLOSED-IN PRESSURE	736	740.6
(H) FINAL HYDROSTATIC MUD	1416	1410.7

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5145

Well Name & No. Brandenburg #12 Test No. 1 Date 7-31-92
 Company Hallwood Petroleum Inc Zone Tested Plattsmouth
 Address 4582 S. Ulster St Elevation 1835
 Co. Rep./Geo. Jim Musgrave cont. Allen #3 Est. Ft. of Pay _____
 Location: Sec. 20 Twp. 14 Rge. 14 Co. Russell State KS
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 2864-2884 Drill Pipe Size 4 1/2 XH
 Anchor Length 20 Top Choke — 1" Bottom Choke — 1/4"
 Top Packer Depth 2859 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 2864 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 2884 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.1 lb/gal. Viscosity 51 Filtrate 100
 Tool Open @ 11:51 AM Initial Blow weak 1/2" blow building to 4"

Final Blow very weak surface blow building to 5 1/2"

Recovery — Total Feet	Feet of Gas In Pipe	Flush Tool?
Rec. <u>55</u> Feet Of <u>SOLM</u> %gas <u>3</u> %oil _____ %water <u>97</u> %mud _____	<u>125</u>	
Rec. _____ Feet Of <u>good show of oil</u> %gas _____ %oil _____ %water _____ %mud _____		
Rec. _____ Feet Of <u>in top of tool</u> %gas _____ %oil _____ %water _____ %mud _____		
Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____		
Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____		

BHT 96 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1462 PSI Ak1 Recorder No. 22150 Range 3925
 (B) First Initial Flow Pressure 37 PSI @ (depth) 2868 w/Clock No. 275d
 (C) First Final Flow Pressure 44 PSI Ak1 Recorder No. 24174 Range 3050
 (D) Initial Shut-In Pressure 736 PSI @ (depth) 2883 w/Clock No. 27573
 (E) Second Initial Flow Pressure 44 PSI Ak1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 51 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 736 PSI Initial Opening 30 Test X
 (H) Final Hydrostatic Mud 1416 PSI Initial Shut-In 60 Jars _____

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.

Final Flow 60 Safety Joint X

Final Shut-In 90 Straddle _____

Approved By Jim Musgrave

Our Representative Paul Simpson

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ 600.00

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name BRANDENBURG #12 Test No. 2 Date 8/1/92
Company HALLWOOD PETROLEUM INC. Zone LKC
Address P.O. BOX 378111 DENVER CO 80237 Elevation 1835
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN DRLG RIG #3 Est. Ft. of Pay _____
Location: Sec. 20 Twp. 14S Rge. 14W Co. RUSSELL State KS

Interval Tested 2983-3028 Drill Pipe Size 4.5 XH
Anchor Length 45 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2978 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 2983 Mud Wt. 9.3 lb/Gal.
Total Depth 3028 Viscosity 47 Filtrate 11.2

Tool Open @ 9:00 AM Initial Blow GOOD THROUGHOUT - BOTTOM OF BUCKET IN 3 MINUTES

Final Blow GOOD THROUGHOUT - BOTTOM OF BUCKET IN 5 MINUTES

Recovery - Total Feet 1560 Flush Tool? NO

Rec. 120 Feet of GAS IN PIPE
Rec. 240 Feet of OIL & GAS CUT MUD & WTR-5%GAS/10%OIL/40%WTR/45%MUD
Rec. 120 Feet of OIL & GAS CUT MUD & WTR-25%GAS/5%OIL/40%WTR/30%MUD
Rec. 120 Feet of OIL, GAS & MUD CUT WTR-25%GAS/5%OIL/60%WTR/10%MUD
Rec. 1080 Feet of OIL & GAS CUT WTR-5%GAS/1%OIL/94%WTR

BHT 101 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.17 @ 90 °F Chlorides 32000 ppm Recovery Chlorides 7000 ppm System

(A) Initial Hydrostatic Mud 1560.9 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 114.5 PSI @ (depth) 2988 w / Clock No. 2756

(C) First Final Flow Pressure 275.8 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 822.3 PSI @ (depth) 3028 w / Clock No. 27573

(E) Second Initial Flow Pressure 336.7 PSI AK1 Recorder No. _____ Range _____

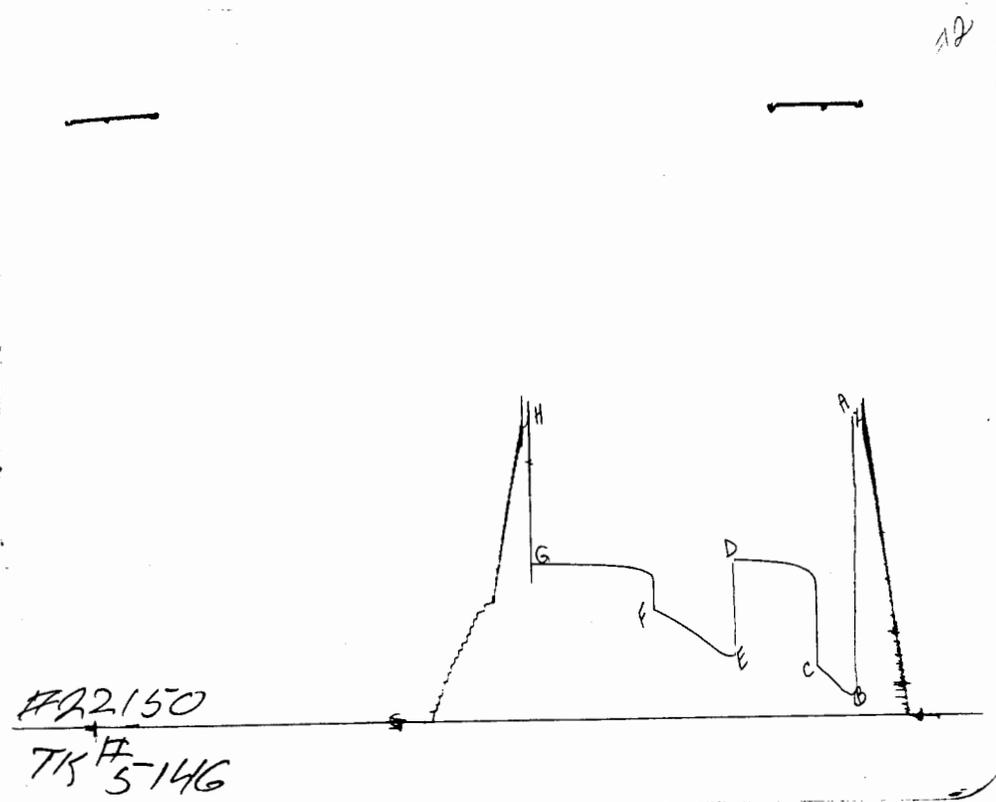
(F) Second Final Flow Pressure 566.9 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 812.4 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1555.6 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative HARRY SCHMIDT

CHART PAGE

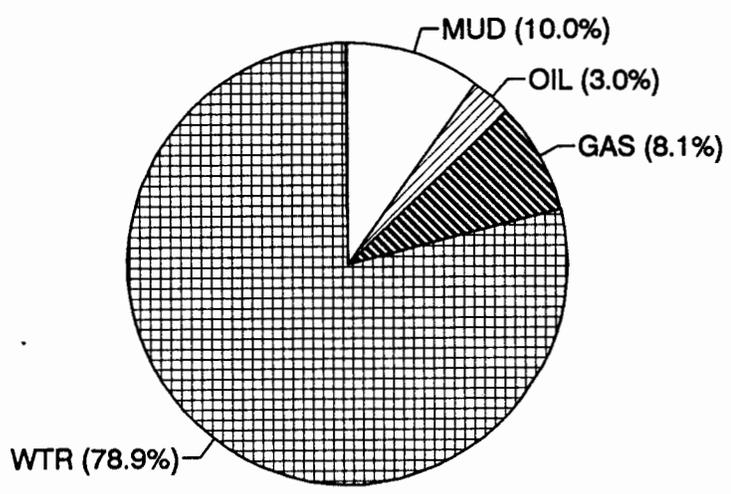


This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1567	1560.9
(B) FIRST INITIAL FLOW PRESSURE	111	114.5
(C) FIRST FINAL FLOW PRESSURE	270	275.8
(D) INITIAL CLOSED-IN PRESSURE	827	822.3
(E) SECOND INITIAL FLOW PRESSURE	338	336.7
(F) SECOND FINAL FLOW PRESSURE	567	566.9
(G) FINAL CLOSED-IN PRESSURE	811	812.4
(H) FINAL HYDROSTATIC MUD	1560	1555.6

DST #	CALCULATED RECOVERY ANALYSIS						DRILL	PIPE
	2	TICKET				5146		
SAMPLE #	TOTAL FEET	GAS %	OIL FEET	OIL %	WATER FEET	WATER %	MUD FEET	MUD %
1	240	5	12	10	24	40	96	45
2	120	25	30	5	6	40	48	30
3	120	25	30	5	6	60	72	10
4	1080	5	54	1	10.8	94	1015.2	0
5			0		0		0	0
TOTAL	1560	8.0769231	126	3	46.8	78.923077	1231.2	10

		HRS	BBL/DAY
BBL OIL=	0.665496	*	1.5 10.648
BBL WATER=	17.507664	*	280.12
BBL MUD=	2.21832		
BBL GAS	1.79172		



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5146

Well Name & No. BRANDENBURG #12 Test No. TWO Date 8-1-92
 Company HALLWOOD PETROLEUM INC Zone Tested LKC
 Address 4582 S. ULSTER ST. DENVER CO. 80237 Elevation 1835
 Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN #7 Est. Ft. of Pay _____
 Location: Sec. 20 Twp. 14 S Rge. 14 W Co. RUSSELL State KS
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 2983 TO 3028 Drill Pipe Size 4 1/2" X 14
 Anchor Length 45' Top Choke — 1" _____ Bottom Choke — 1/4" _____
 Top Packer Depth 2978 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 2983 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 3028 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.3 lb/gal. Viscosity 47 Filtrate 11.2
 Tool Open @ 9:00 AM Initial Blow GOOD THROUGHOUT BOT. BUCKET IN 3 MIN.

Final Blow GOOD THROUGHOUT BOT. BUCKET IN 5 MIN.

Recovery — Total Feet	Feet of Gas In Pipe	Flush Tool?
<u>1560</u>	<u>120</u>	<u>NO</u>
Rec. <u>240</u> Feet Of <u>O.G.C.M.+W.</u>	<u>5% gas 10% oil 40% water 45% mud</u>	
Rec. <u>120</u> Feet Of <u>"</u>	<u>25% gas 5% oil 40% water 30% mud</u>	
Rec. <u>120</u> Feet Of <u>O.G.+M.C.W.</u>	<u>25% gas 5% oil 60% water 10% mud</u>	
Rec. <u>1080</u> Feet Of <u>O.G.C.W.</u>	<u>5% gas 1% oil 94% water %mud</u>	
Rec. _____ Feet Of _____	<u>% gas % oil % water % mud</u>	

BHT 101 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW 0.17 @ 90 °F Chlorides 32,000 ppm Recovery Chlorides 7,000 ppm System
 (A) Initial Hydrostatic Mud 1567 PSI Ak1 Recorder No. 22150 Range 3925
 (B) First Initial Flow Pressure 111 PSI @ (depth) 2988 w/Clock No. 2756
 (C) First Final Flow Pressure 270 PSI AK1 Recorder No. 24174 Range 3050
 (D) Initial Shut-In Pressure 827 PSI @ (depth) 3028 w/Clock No. 27583
 (E) Second Initial Flow Pressure ~~338~~ 338 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 567 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 811 PSI Initial Opening 30 Test 550
 (H) Final Hydrostatic Mud 1560 PSI Initial Shut-In 60 Jars _____

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.

Final Flow 60 Safety Joint 50
 Final Shut-In 90 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ 600

Approved By _____
 Our Representative _____
 Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name BRANDENBURG #12 Test No. 3 Date 8/1/92
Company HALLWOOD PETROLEUM INC. Zone LKC-"D&F"
Address P.O. BOX 378111 DENVER CO 80237 Elevation 1835
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN DRLG RIG #3 Est. Ft. of Pay _____
Location: Sec. 20 Twp. 14S Rge. 14W Co. RUSSELL State KS

Interval Tested	<u>3030-3071</u>	Drill Pipe Size	<u>4.5 XH</u>
Anchor Length	<u>41</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>3025</u>	Drill Collar - 2.25 Ft. Run	_____
Bottom Packer Depth	<u>3030</u>	Mud Wt.	<u>9.3</u> lb/Gal.
Total Depth	<u>3071</u>	Viscosity	<u>47</u> Filtrate <u>11.2</u>

Tool Open @ 10:45 PM Initial Blow VERY GOOD THROUGHOUT-BOTTOM OF BUCKET IN 1 MINUTE

Final Blow SAME AS INITIAL

Recovery - Total Feet 1620 Flush Tool? NO

Rec. <u>120</u>	Feet of	<u>GAS IN PIPE</u>
Rec. <u>120</u>	Feet of	<u>OIL, GAS & MUD CUT WATER-20%GAS/20%OIL/40%WTR/20%MUD</u>
Rec. <u>220</u>	Feet of	<u>OIL, GAS & MUD CUT WATER-15%GAS/10%OIL/40%WTR/35%MUD</u>
Rec. <u>120</u>	Feet of	<u>OIL, GAS & MUD CUT WATER-20%GAS/10%OIL/65%WTR/5%MUD</u>
Rec. <u>1160</u>	Feet of	<u>OIL & MUD CUT WTR-5%OIL/90%WTR/5%MUD</u>

BHT 101 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.19 @ 68 °F Chlorides 40000 ppm Recovery Chlorides 7000 ppm System

(A) Initial Hydrostatic Mud 1560.9 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 102.3 PSI @ (depth) 3035 w / Clock No. 2756

(C) First Final Flow Pressure 416.9 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 850.9 PSI @ (depth) 3028 w / Clock No. 27573

(E) Second Initial Flow Pressure 490.2 PSI AK1 Recorder No. _____ Range _____

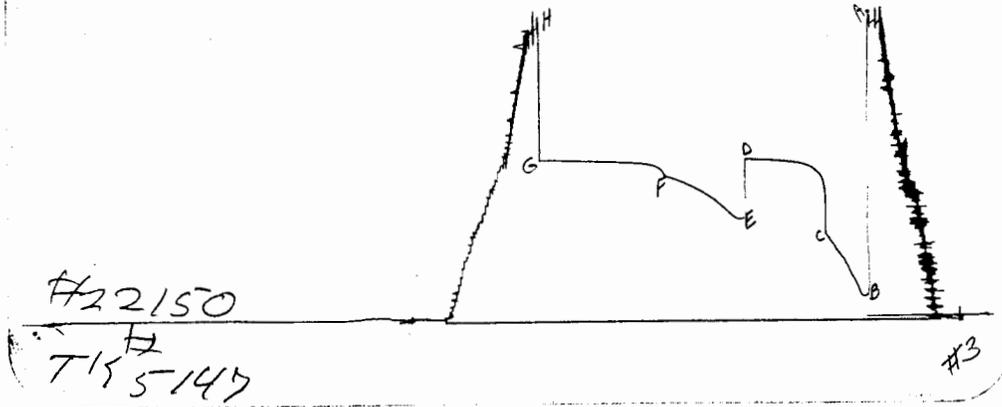
(F) Second Final Flow Pressure 695.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 850.9 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1559.8 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative HARRY SCHMIDT

CHART PAGE

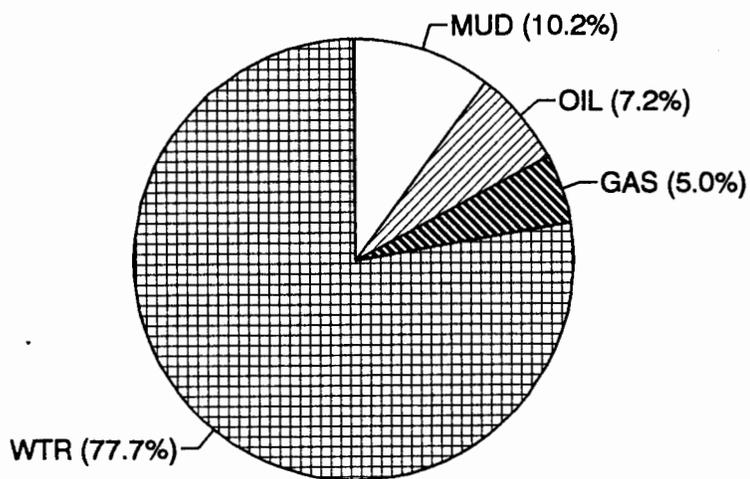


This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1560	1560.9
(B) FIRST INITIAL FLOW PRESSURE	95	102.3
(C) FIRST FINAL FLOW PRESSURE	411	416.9
(D) INITIAL CLOSED-IN PRESSURE	846	850.9
(E) SECOND INITIAL FLOW PRESSURE	488	490.2
(F) SECOND FINAL FLOW PRESSURE	701	695.3
(G) FINAL CLOSED-IN PRESSURE	846	850.9
(H) FINAL HYDROSTATIC MUD	1560	1559.8

DST #	CALCULATED RECOVERY ANALYSIS					DRILL	PIPE		
	3	TICKET					5147		
SAMPLE #	TOTAL FEET	GAS %	OIL FEET	OIL %	WATER FEET	WATER %	MUD %	FEET	FEET
1	120	20	24	20	24	40	20	48	24
2	220	15	33	10	22	40	35	88	77
3	120	20	24	10	12	65	5	78	6
4	1160	0	0	5	58	90	5	1044	58
5			0		0			0	0
TOTAL	1620	5	81	7.16	116	77.654321	10.2	1258	165

		HRS	BBL/DAY
BBL OIL=	1.64952	*	1.5 26.392
BBL WATER=	17.88876	*	286.22
BBL MUD=	2.3463		
BBL GAS	1.15182		



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5147

Well Name & No. <u>BRANDENBURG #12</u>	Test No. <u>THREE</u>	Date <u>8-1-92</u>
Company <u>HALL WOOD PET. INC.</u>	Zone Tested <u>LKC-DHF</u>	
Address <u>4582 S. ULSTER ST. DENVER CO. 80231</u>	Elevation <u>1835</u>	
Co. Rep./Geo. <u>JIM MUSGROVE</u>	Cont. <u>ALLEN #3</u>	Est. Ft. of Pay _____
Location: Sec. <u>20</u>	Twp. <u>14 S</u>	Rge. <u>14 W</u> Co. <u>RS</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3030 TO 3071</u>	Drill Pipe Size <u>4 1/2" x 14</u>
Anchor Length <u>41'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3025</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3030</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>3071</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.3</u> lb/gal.	Viscosity <u>47</u> Filtrate <u>11.2</u>
Tool Open @ <u>10:45 PM</u>	Initial Blow <u>VERY GOOD THROUGHOUT BOT. BUCKET IN 1 MIN.</u>
Final Blow <u>SAME AS INITIAL</u>	

Recovery — Total Feet <u>1620</u>	Feet of Gas in Pipe <u>120</u>	Flush Tool? <u>NO</u>
Rec. <u>120</u> Feet Of <u>O.G. + M.C.W.</u>	<u>20</u> % gas <u>20</u> % oil <u>40</u> % water <u>20</u> % mud	
Rec. <u>220</u> Feet Of <u>"</u>	<u>15</u> % gas <u>10</u> % oil <u>40</u> % water <u>35</u> % mud	
Rec. <u>120</u> Feet Of <u>"</u>	<u>20</u> % gas <u>10</u> % oil <u>65</u> % water <u>5</u> % mud	
Rec. <u>1160</u> Feet Of <u>O. + M. C. W.</u>	<u>5</u> % gas <u>5</u> % oil <u>90</u> % water <u>5</u> % mud	
Rec. _____ Feet Of _____	_____ % gas _____ % oil _____ % water _____ % mud	

BHT <u>101</u> °F	Gravity _____ °API @ _____ °F	Corrected Gravity _____ °API
RW <u>0.19</u> @ <u>68</u> °F	Chlorides <u>40000</u> ppm	Recovery Chlorides <u>7000</u> ppm
(A) Initial Hydrostatic Mud <u>1560</u> PSI	AK1 Recorder No. <u>22150</u>	Range <u>3925</u>
(B) First Initial Flow Pressure <u>95</u> PSI	@ (depth) <u>3035</u>	w/Clock No. <u>2256</u>
(C) First Final Flow Pressure <u>411</u> PSI	AK1 Recorder No. <u>24174</u>	Range <u>3050</u>
(D) Initial Shut-In Pressure <u>846</u> PSI	@ (depth) <u>3028</u>	w/Clock No. <u>22573</u>
(E) Second Initial Flow Pressure <u>488</u> PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>701</u> PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>846</u> PSI	Initial Opening <u>30</u>	Test <u>550</u>
(H) Final Hydrostatic Mud <u>1560</u> PSI	Initial Shut-In <u>60</u>	Jars _____

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Final Flow <u>60</u>	Safety Joint <u>50</u>
Final Shut-In <u>90</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ <u>600.00</u>

Approved By _____

Our Representative _____

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name BRANDENBURG #12 Test No. 4 Date 8/2/92
Company HALLWOOD PETROLEUM INC. Zone LKC
Address P.O. BOX 378111 DENVER CO 80237 Elevation 1835
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN DRLG RIG #3 Est. Ft. of Pay _____
Location: Sec. 20 Twp. 14S Rge. 14W Co. RUSSELL State KS

Interval Tested 3077-3094 Drill Pipe Size 4.5 XH
Anchor Length 17 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3072 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3077 Mud Wt. 9.1 lb/Gal.
Total Depth 3094 Viscosity 48 Filtrate 12

Tool Open @ 10:45 AM Initial Blow VERY GOOD THROUGHOUT -BOTTOM OF BUCKET IN 1 MINUTE

Final Blow FAIR THROUGHOUT-BOTTOM OF BUCKET IN 9 MINUTES

Recovery - Total Feet 560 Flush Tool? NO

Rec. 900 Feet of GAS IN PIPE
Rec. 90 Feet of CLEAN OIL
Rec. 120 Feet of MUD & OIL CUT WATER-5%OIL/55%WTR/40%MUD
Rec. 350 Feet of OIL CUT WATER-5%OIL/95%WATER
Rec. _____ Feet of _____

BHT 102 °F Gravity 38 °API @ 80 °F Corrected Gravity 36 °API
RW 0.19 @ 90 °F Chlorides 28000 ppm Recovery Chlorides 11000 ppm System

(A) Initial Hydrostatic Mud 1594.3 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 41.2 PSI @ (depth) 3082 w / Clock No. 2756

(C) First Final Flow Pressure 101.2 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 533.4 PSI @ (depth) 3094 w / Clock No. 27573

(E) Second Initial Flow Pressure 139.8 PSI AK1 Recorder No. _____ Range _____

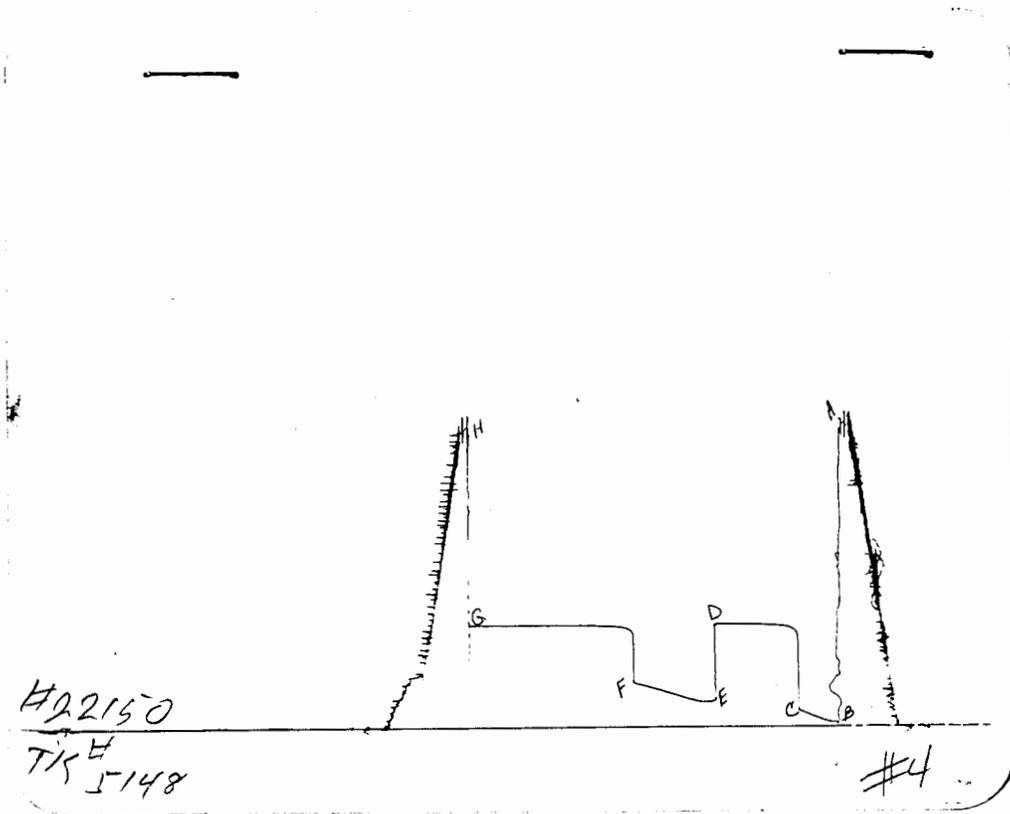
(F) Second Final Flow Pressure 230.7 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 532.3 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1588.6 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative HARRY SCHMIDT

CHART PAGE

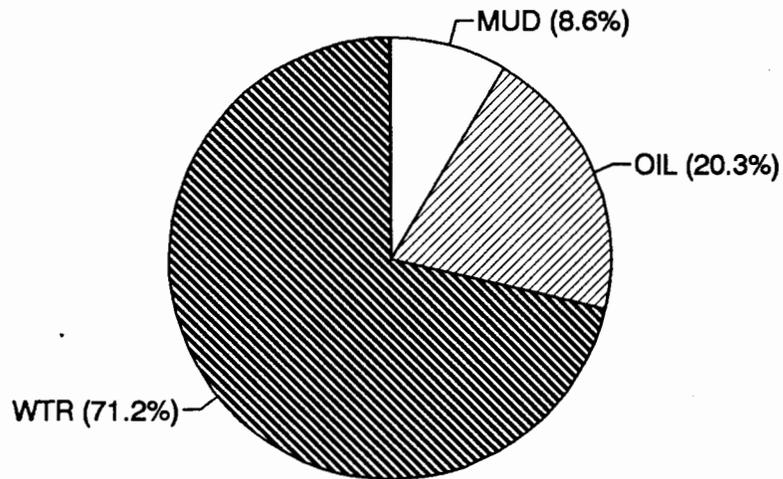


This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1590	1594.3
(B) FIRST INITIAL FLOW PRESSURE	37	41.2
(C) FIRST FINAL FLOW PRESSURE	96	101.2
(D) INITIAL CLOSED-IN PRESSURE	529	533.4
(E) SECOND INITIAL FLOW PRESSURE	141	139.8
(F) SECOND FINAL FLOW PRESSURE	232	230.7
(G) FINAL CLOSED-IN PRESSURE	529	532.3
(H) FINAL HYDROSTATIC MUD	1590	1588.6

DST #	CALCULATED RECOVERY ANALYSIS					DRILL	PIPE		
	4	TICKET					5148		
SAMPLE #	TOTAL FEET	GAS %	OIL FEET	OIL %	WATER FEET	WATER %	MUD %	MUD FEET	
1	90	0	0	100	90	0	0	0	0
2	120	0	0	5	6	55	66	40	48
3	350	0	0	5	17.5	95	332.5	0	0
4			0		0		0		0
5			0		0		0		0
TOTAL	560	0	0	20.3	113.5	71.160714	398.5	8.57	48

			HRS	BBL/DAY
BBL OIL=	1.61397	*	1.5	25.824
BBL WATER=	5.66667	*		90.667
BBL MUD=	0.68256			
BBL GAS	0			



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5148

Well Name & No. <u>BRANDENBURG #12</u>	Test No. <u>FOUR</u>	Date <u>8-2-92</u>
Company <u>HALLWOOD PET. INC.</u>	Zone Tested <u>LKC</u>	
Address <u>4582 S. ULSTER ST. DENVER CO. 80237</u>	Elevation <u>1835</u>	
Co. Rep./Geo. <u>JIM MUSGROVE</u>	Cont. <u>ALLEN #3</u>	Est. Ft. of Pay _____
Location: Sec. <u>20</u>	Twp. <u>14S</u>	Rge. <u>14W</u> Co. <u>RS</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3077 TO 3094</u>	Drill Pipe Size <u>4 1/2" X 14</u>
Anchor Length <u>17'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3072</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3077</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>3094</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.1</u> lb/gal.	Viscosity <u>48</u> Filtrate <u>12.0</u>
Tool Open @ <u>10:45 AM</u> Initial Blow <u>VERY GOOD THROUGHOUT POT. BUCKET IN 1 MIN.</u>	

Final Blow FAIR THROUGHOUT POT. BUCKET IN 9 MIN.

Recovery — Total Feet	Feet of Gas In Pipe	Flush Tool?
<u>510</u>	<u>900</u>	<u>NO</u>
Rec. <u>90</u> Feet Of <u>OIL</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. <u>120</u> Feet Of <u>M + O.C.W.</u>	%gas <u>5</u> %oil <u>55</u> %water <u>40</u> %mud _____	
Rec. <u>350</u> Feet Of <u>O.C.W.</u>	%gas <u>5</u> %oil <u>95</u> %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT 102 °F Gravity 38 °API @ 80 °F Corrected Gravity 36 °API
 RW 0.19 @ 90 °F Chlorides 28000 ppm Recovery Chlorides 11,000 ppm System

(A) Initial Hydrostatic Mud <u>1590</u> PSI	AK1 Recorder No. <u>22150</u>	Range <u>3925</u>
(B) First Initial Flow Pressure <u>37</u> PSI	@ (depth) <u>3082</u>	w/Clock No. <u>2756</u>
(C) First Final Flow Pressure <u>96</u> PSI	AK1 Recorder No. <u>24174</u>	Range <u>3050</u>
(D) Initial Shut-In Pressure <u>529</u> PSI	@ (depth) <u>3094</u>	w/Clock No. <u>2757?</u>
(E) Second Initial Flow Pressure <u>141</u> PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>232</u> PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>529</u> PSI	Initial Opening <u>30</u>	Test <u>550⁰⁰</u>
(H) Final Hydrostatic Mud <u>1590</u> PSI	Initial Shut-In <u>60</u>	Jars _____

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.

Final Flow <u>60</u>	Safety Joint <u>50⁰⁰</u>
Final Shut-In <u>120</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ <u>600⁰⁰</u>

Approved By _____

Our Representative _____

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name BRANDENBURG #12 Test No. 5 Date 8/3/92
Company HALLWOOD PETROLEUM INC. Zone LKC
Address P.O. BOX 378111 DENVER CO 80237 Elevation 1835
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN DRLG RIG #3 Est. Ft. of Pay 4
Location: Sec. 20 Twp. 14S Rge. 14W Co. RUSSELL State KS

Interval Tested 3116-3165 Drill Pipe Size 4.5 XH
Anchor Length 49 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3111 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3116 Mud Wt. 9.3 lb/Gal.
Total Depth 3165 Viscosity 45 Filtrate 12

Tool Open @ 4:15 AM Initial Blow VERY WEAK BLOW FOR 5 MINUTES

Final Blow WEAK TO FAIR 6" IN 60 MINUTES

Recovery - Total Feet 30 Flush Tool? NO

Rec. 210 Feet of GAS IN PIPE
Rec. 30 Feet of OIL CUT MUD-10%OIL/90%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 102 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 11000 ppm System

(A) Initial Hydrostatic Mud 1630.4 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 41.2 PSI @ (depth) 3121 w / Clock No. 2756

(C) First Final Flow Pressure 41.2 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 151.6 PSI @ (depth) 3165 w / Clock No. 27573

(E) Second Initial Flow Pressure 45.8 PSI AK1 Recorder No. _____ Range _____

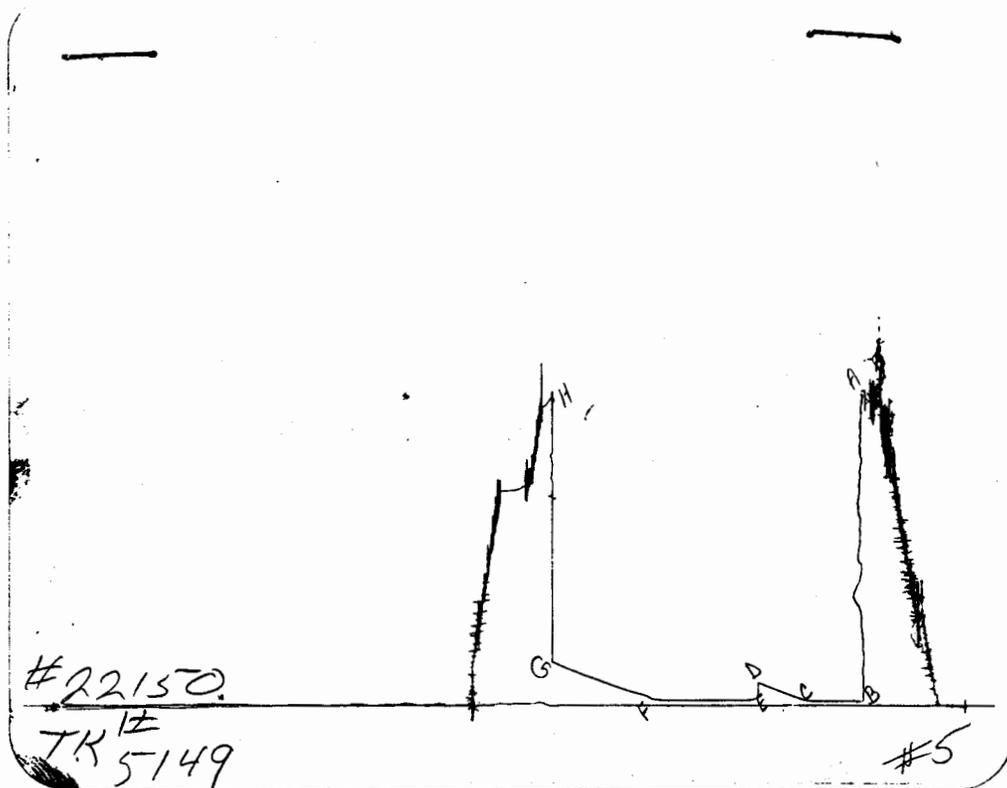
(F) Second Final Flow Pressure 45.8 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 250.6 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1620.9 PSI Initial Shut-in 45 Final Shut-in 90

Our Representative HARRY SCHMIDT

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1628	1630.4
(B) FIRST INITIAL FLOW PRESSURE	37	41.2
(C) FIRST FINAL FLOW PRESSURE	37	41.2
(D) INITIAL CLOSED-IN PRESSURE	149	151.6
(E) SECOND INITIAL FLOW PRESSURE	44	45.8
(F) SECOND FINAL FLOW PRESSURE	44	45.8
(G) FINAL CLOSED-IN PRESSURE	247	250.6
(H) FINAL HYDROSTATIC MUD	1620	1620.9

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

N^o 5149

Well Name & No. BRANDENBURG #12 Test No. FIVE Date 8-3-92
 Company HALLWOOD PET. INC. Zone Tested LKC
 Address 4582 S. VILSTER DENVER CO. 80237 Elevation 1835
 Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN #3 Est. Ft. of Pay 4
 Location: Sec. 20 Twp. 14S Rge. 14W Co. RS State KS
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 3116 TO 3165 Drill Pipe Size 4 1/2" X 14
 Anchor Length 49 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 3111 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 3116 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 3165 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.3 lb/gal. Viscosity 45 Filtrate 12.0
 Tool Open @ 4:15 AM Initial Blow VERY WEAR FOR 5 MIN.

Final Blow WEAR TO FAIR 6" IN 60 MIN.

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
<u>30</u>	<u>210</u>	<u>NO</u>
Rec. <u>30</u> Feet Of <u>O.C.M.</u>	% gas _____ % Oil _____	% water _____ % mud _____
Rec. _____ Feet Of _____	% gas <u>10</u> % Oil _____	% water _____ % mud <u>90</u>
Rec. _____ Feet Of _____	% gas _____ % Oil _____	% water _____ % mud _____
Rec. _____ Feet Of _____	% gas _____ % Oil _____	% water _____ % mud _____
Rec. _____ Feet Of _____	% gas _____ % Oil _____	% water _____ % mud _____

BHT 102 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 11,000 ppm System

- (A) Initial Hydrostatic Mud 1628 PSI Ak1 Recorder No. 22150 Range 3925
- (B) First Initial Flow Pressure 37 PSI @ (depth) 3124 w/Clock No. 2756
- (C) First Final Flow Pressure 37 PSI AK1 Recorder No. 24174 Range 3050
- (D) Initial Shut-in Pressure 149 PSI @ (depth) 3165 w/Clock No. 27573
- (E) Second Initial Flow Pressure 44 PSI AK1 Recorder No. _____ Range _____
- (F) Second Final Flow Pressure 44 PSI @ (depth) _____ w/Clock No. _____
- (G) Final Shut-in Pressure 247 PSI Initial Opening 30 Test 550
- (H) Final Hydrostatic Mud 1620 PSI Initial Shut-in 45 Jars _____

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Final Flow 60 Safety Joint 50
 Final Shut-in 90 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ 600

Approved By [Signature]
 Our Representative [Signature]
 Printcraft Printers - Hays, KS