

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name F. DINKEL Test No. 1 Date 4/22/93
Company STAAB ENERGY & LEASING Zone TOPEKA
Address 2514 HANEY DRIVE HAYS KS 67601 Elevation 2328
Co. Rep./Geo. RON NELSON Cont. MURFIN RIG #3 Est. Ft. of Pay _____
Location: Sec. 25 Twp. 13S Rge. 21W Co. TREGO State KS

Interval Tested	<u>3358-3415</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>57</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>682</u>
Top Packer Depth	<u>3353</u>	Drill Collar - 2.25 Ft. Run	<u>180</u>
Bottom Packer Depth	<u>3358</u>	Mud Wt.	<u>8.8</u> lb/Gal.
Total Depth	<u>3415</u>	Viscosity	<u>36</u>
		Filtrate	<u>19.2</u>

Tool Open @ 10:15 PM Initial Blow STRONG - BOTTOM OF BUCKET IN 13 MINUTES

Final Blow STRONG - BOTTOM OF BUCKET IN 40 MINUTES

Recovery - Total Feet 675 Flush Tool? NO

Rec. 675 Feet of MUDDY WATER 75%WATER/25%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.06 @ 75 °F Chlorides 125000 ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 1651.6 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 62.3 PSI @ (depth) 3362 w / Clock No. 27501

(C) First Final Flow Pressure 221.9 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 1062.3 PSI @ (depth) 3411 w / Clock No. 27567

(E) Second Initial Flow Pressure 251.9 PSI AK1 Recorder No. _____ Range _____

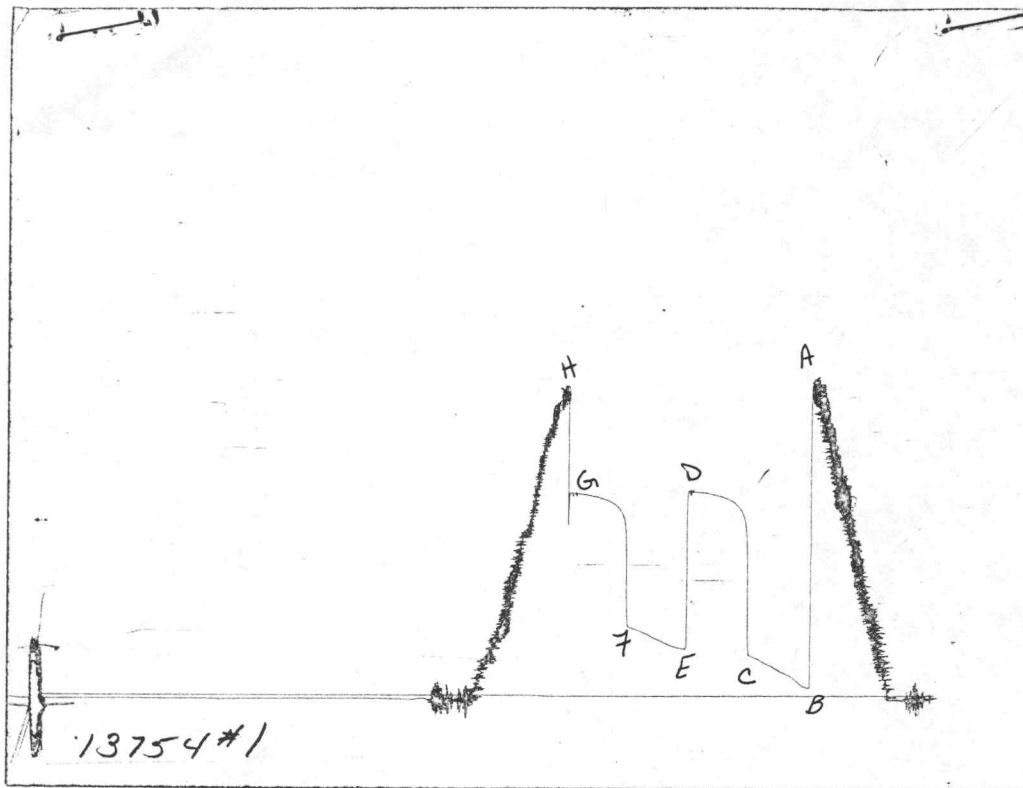
(F) Second Final Flow Pressure 369.1 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1052.3 PSI Initial Opening 45 Final Flow 45

(H) Final Hydrostatic Mud 1592.4 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1646	1651.6
(B) FIRST INITIAL FLOW PRESSURE	59	62.3
(C) FIRST FINAL FLOW PRESSURE	216	221.9
(D) INITIAL CLOSED-IN PRESSURE	1056	1062.3
(E) SECOND INITIAL FLOW PRESSURE	246	251.9
(F) SECOND FINAL FLOW PRESSURE	364	369.1
(G) FINAL CLOSED-IN PRESSURE	1046	1052.3
(H) FINAL HYDROSTATIC MUD	1586	1592.4

TRILOBITE TESTING L.L.C.

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Test Ticket

№ 5988

Well Name & No. <u>F. Dinkel #3</u>	Test No. <u>1</u>	Date <u>4-22-93</u>
Company <u>Staab Energy & Leasing</u>	Zone Tested <u>Topcka</u>	
Address <u>2514 Haney Dr. Hays, Ks. 67601</u>	Elevation <u>2328 K.B.</u>	
Co. Rep./Geo. <u>Ron Nelson</u>	Cont. <u>Murfin #3</u>	Est. Ft. of Pay _____
Location: Sec. <u>25</u> Twp. <u>13</u> Rge. <u>21</u>	Co. <u>Trego</u> State <u>Ks.</u>	
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3358-3415</u>	Drill Pipe Size <u>4.5 XH</u>
Anchor Length <u>57</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3353</u>	Hole Size — 77/8" _____ Rubber Size — 63/4" _____
Bottom Packer Depth <u>3358</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>682'</u>
Total Depth <u>3415</u>	Drill Collar — 2.25 Ft. Run <u>180'</u>
Mud Wt. <u>8.8</u> lb/gal.	Viscosity <u>36</u> Filtrate <u>19.2</u>
Tool Open @ <u>10:15 p.m.</u> Initial Blow <u>Strong - B.O.B. in 13 min.</u>	
Final Blow <u>Strong - B.O.B. in 40 min.</u>	

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?			
Rec. <u>675</u> Feet Of <u>mdy wtr.</u>		%gas	%oil	<u>75</u> %water	<u>25</u> %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 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW .060 @ 75 °F Chlorides 125,000 ppm Recovery Chlorides 6,000 ppm System

(A) Initial Hydrostatic Mud 1646 PSI Ak1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 59 PSI @ (depth) 3362 w/Clock No. 27501

(C) First Final Flow Pressure 216 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 1056 PSI @ (depth) 3411 w/Clock No. 27567

(E) Second Initial Flow Pressure 246 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 364 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-in Pressure 1046 PSI Initial Opening 45 Test 000

(H) Final Hydrostatic Mud 1586 PSI Initial Shut-in 45 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 45 Safety Joint _____

Final Shut-in 45 Straddle _____

Circ. Sub _____

Sampler _____

Approved By _____

Our Representative Dan Bangler

Printcraft Printers - Hays, KS

Extra Packer _____

Other _____

TOTAL PRICE \$ 000

1	0.112	110.2407
2	0.13	127.9564
3	0.146	143.7033
4	0.164	161.419
5	0.176	173.2294
6	0.187	184.0556
7	0.191	187.9923
8	0.195	191.9291
9	0.198	194.8816
10	0.204	200.7871
11	0.206	202.7557
12		0
13	0.242	238.1902
14	0.24	236.2216
15	0.24	236.2216
16	0.242	238.1902
17	0.243	239.1745
18	0.244	240.1588
19	0.246	242.1274
20	0.249	245.0803
21	0.249	245.0803
22	0.25	246.0646
23	0.251	247.0489

1	0.247	243.1117
2	0.272	267.7193
3	0.287	282.4839
4	0.299	294.2957
5	0.312	307.0906
6	0.322	316.9327
7	0.332	326.7748
8	0.341	335.6326
9	0.348	342.522
10	0.355	349.4114
11	0.362	356.3008
12	0.369	363.1902
13	0.374	368.1111
14	0.381	375.0005
15	0.386	379.9214
16	0.392	385.8265

1	0.26	255.9076
2	0.268	263.782
3	0.274	269.6879
4	0.281	276.578
5	0.286	281.4996
6	0.293	288.3898
7	0.298	293.3114
8	0.302	297.2484
9	0.309	304.1379
10	0.315	310.0432
11	0.32	314.9643
12	0.324	318.9011
13	0.328	322.8379
14	0.333	327.759
15	0.337	331.6958
16	0.343	337.601

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name F. DINKEL #3 Test No. 2 Date 4/23/93
Company STAAB ENERGY & LEASING Zone LKC 'C-D'
Address 2514 HANEY DRIVE HAYS KS 67601 Elevation 2328
Co. Rep./Geo. RON NELSON Cont. MURFIN RIG #3 Est. Ft. of Pay _____
Location: Sec. 25 Twp. 13S Rge. 21W Co. TREGO State KS

Interval Tested	<u>3638-3690</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>52</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>682</u>
Top Packer Depth	<u>3633</u>	Drill Collar - 2.25 Ft. Run	<u>180</u>
Bottom Packer Depth	<u>3638</u>	Mud Wt.	<u>8.8</u> lb/Gal.
Total Depth	<u>3690</u>	Viscosity	<u>44</u> Filtrate <u>8.8</u>

Tool Open @ 5:31 PM Initial Blow WEAK BUILDING TO 1"

Final Blow WEAK - SURFACE BLOW

Recovery - Total Feet 90 Flush Tool? NO

Rec. <u>60</u>	Feet of	<u>GAS IN PIPE</u>
Rec. <u>90</u>	Feet of	<u>HEAVY OIL CUT MUD 20%OIL/80%MUD</u>
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT 111 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 1810.3 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 41.2 PSI @ (depth) 3642 w / Clock No. 27501

(C) First Final Flow Pressure 53.2 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 615.3 PSI @ (depth) 3686 w / Clock No. 27567

(E) Second Initial Flow Pressure 71.5 PSI AK1 Recorder No. _____ Range _____

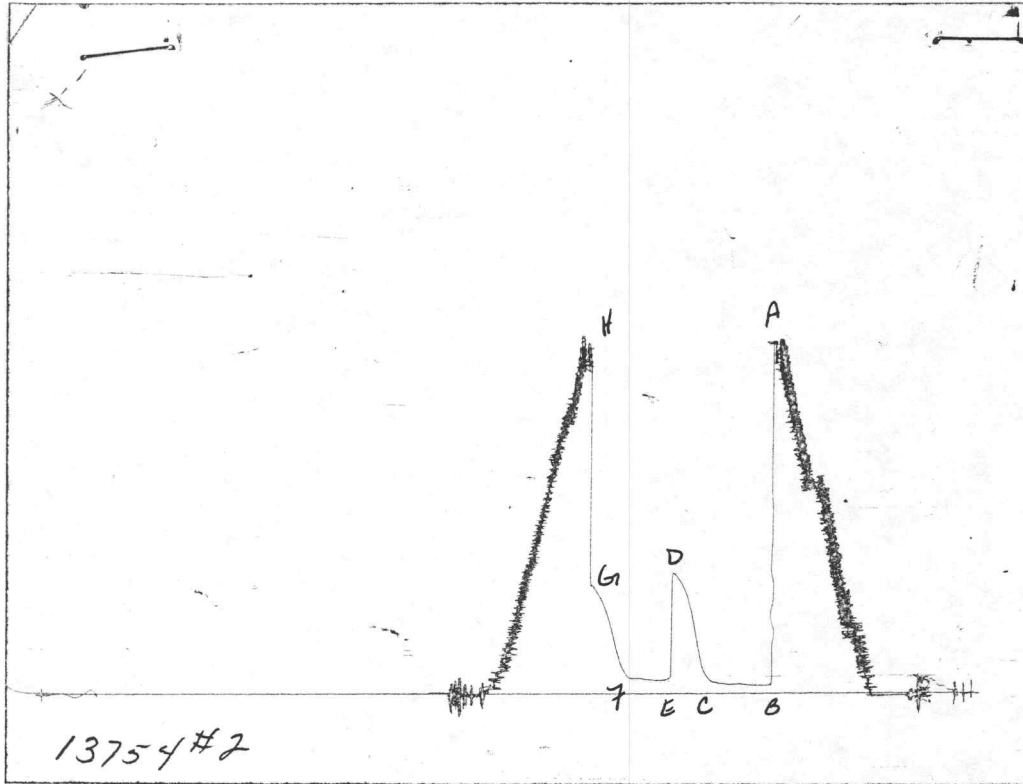
(F) Second Final Flow Pressure 82.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 546.5 PSI Initial Opening 45 Final Flow 30

(H) Final Hydrostatic Mud 1769.3 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1806	1810.3
(B) FIRST INITIAL FLOW PRESSURE	39	41.2
(C) FIRST FINAL FLOW PRESSURE	49	53.2
(D) INITIAL CLOSED-IN PRESSURE	610	615.3
(E) SECOND INITIAL FLOW PRESSURE	68	71.5
(F) SECOND FINAL FLOW PRESSURE	78	82.6
(G) FINAL CLOSED-IN PRESSURE	541	546.5
(H) FINAL HYDROSTATIC MUD	1766	1769.3

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name F. DINKEL #3 Test No. 3 Date 4/24/93
Company STAAB ENERGY & LEASING Zone LKC 'E'
Address 2514 HANEY DRIVE HAYS KS 67601 Elevation 2328
Co. Rep./Geo. RON NELSON Cont. MURFIN RIG #3 Est. Ft. of Pay _____
Location: Sec. 25 Twp. 13S Rge. 21W Co. TREGO State KS

Interval Tested 3687-3702 Drill Pipe Size 4.5" XH
Anchor Length 15 Wt. Pipe I.D. - 2.7 Ft. Run 713
Top Packer Depth 3682 Drill Collar - 2.25 Ft. Run 180
Bottom Packer Depth 3687 Mud Wt. 8.8 lb/Gal.
Total Depth 3702 Viscosity 44 Filtrate 8.8

Tool Open @ 5:50 AM Initial Blow WEAK - BUILDING TO 4"

Final Blow WEAK - BUILDING TO 1"

Recovery - Total Feet 225 Flush Tool? NO

Rec. 225 Feet of WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 118 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.05 @ 78 °F Chlorides 78000 ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 1791.3 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 23.6 PSI @ (depth) 3691 w / Clock No. 27501

(C) First Final Flow Pressure 71.5 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 476.8 PSI @ (depth) 3697 w / Clock No. 27567

(E) Second Initial Flow Pressure 91.2 PSI AK1 Recorder No. _____ Range _____

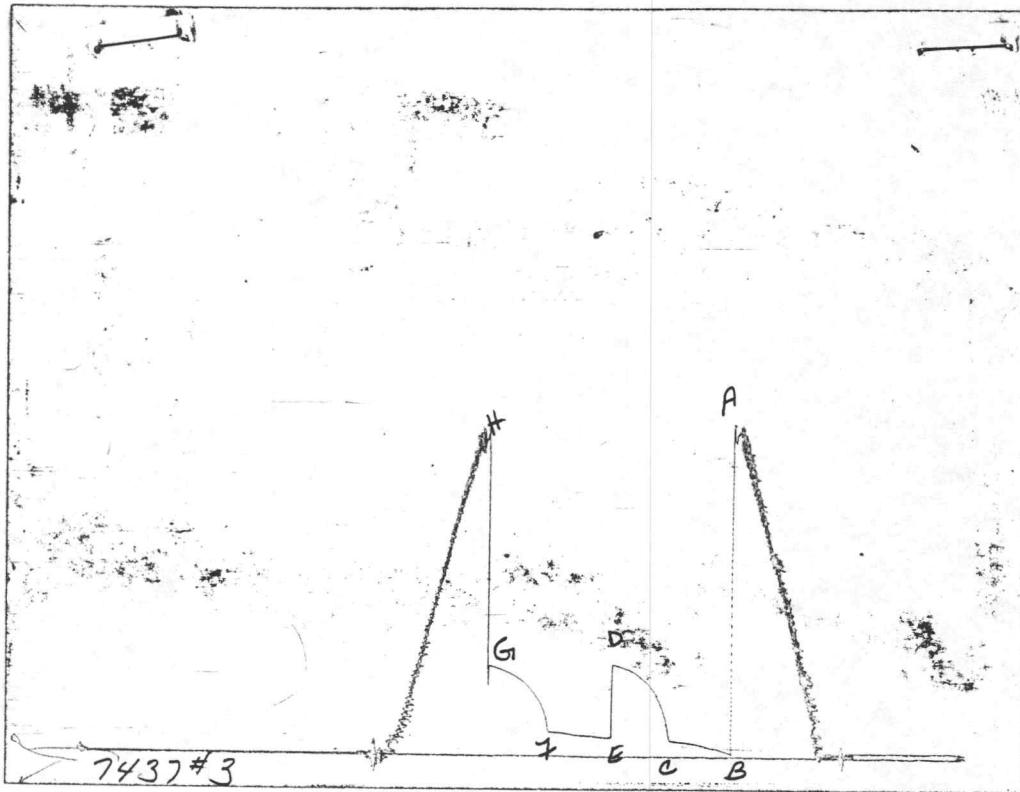
(F) Second Final Flow Pressure 112.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 464.8 PSI Initial Opening 45 Final Flow 45

(H) Final Hydrostatic Mud 1761.2 PSI Initial Shut-in 45 Final Shut-in 45

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CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1786	1791.3
(B) FIRST INITIAL FLOW PRESSURE	19	23.6
(C) FIRST FINAL FLOW PRESSURE	68	71.5
(D) INITIAL CLOSED-IN PRESSURE	472	476.8
(E) SECOND INITIAL FLOW PRESSURE	88	91.2
(F) SECOND FINAL FLOW PRESSURE	108	112.3
(G) FINAL CLOSED-IN PRESSURE	462	464.8
(H) FINAL HYDROSTATIC MUD	1756	1761.2

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name F. DINKEL #3 Test No. 4 Date 4/24/93
Company STAAB ENERGY & LEASING Zone LKC 'I-J'
Address 2514 HANEY DRIVE HAYS KS 67601 Elevation 2328
Co. Rep./Geo. RON NELSON Cont. MURFIN RIG #3 Est. Ft. of Pay _____
Location: Sec. 25 Twp. 13S Rge. 21W Co. TREGO State KS

Interval Tested	<u>3775-3813</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>38</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>713</u>
Top Packer Depth	<u>3770</u>	Drill Collar - 2.25 Ft. Run	<u>180</u>
Bottom Packer Depth	<u>3775</u>	Mud Wt.	<u>9.1</u> lb/Gal.
Total Depth	<u>3813</u>	Viscosity	<u>47</u>
		Filtrate	<u>10.4</u>

Tool Open @ 9:20 PM Initial Blow WEAK - SURFACE BLOW

Final Blow NO BLOW - FLUSHED TOOL

Recovery - Total Feet 2 Flush Tool? YES

Rec. 2 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 106 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 1891.2 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 33.2 PSI @ (depth) 3779 w / Clock No. 27501

(C) First Final Flow Pressure 33.2 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 33.2 PSI @ (depth) 3809 w / Clock No. 27567

(E) Second Initial Flow Pressure 33.2 PSI AK1 Recorder No. _____ Range _____

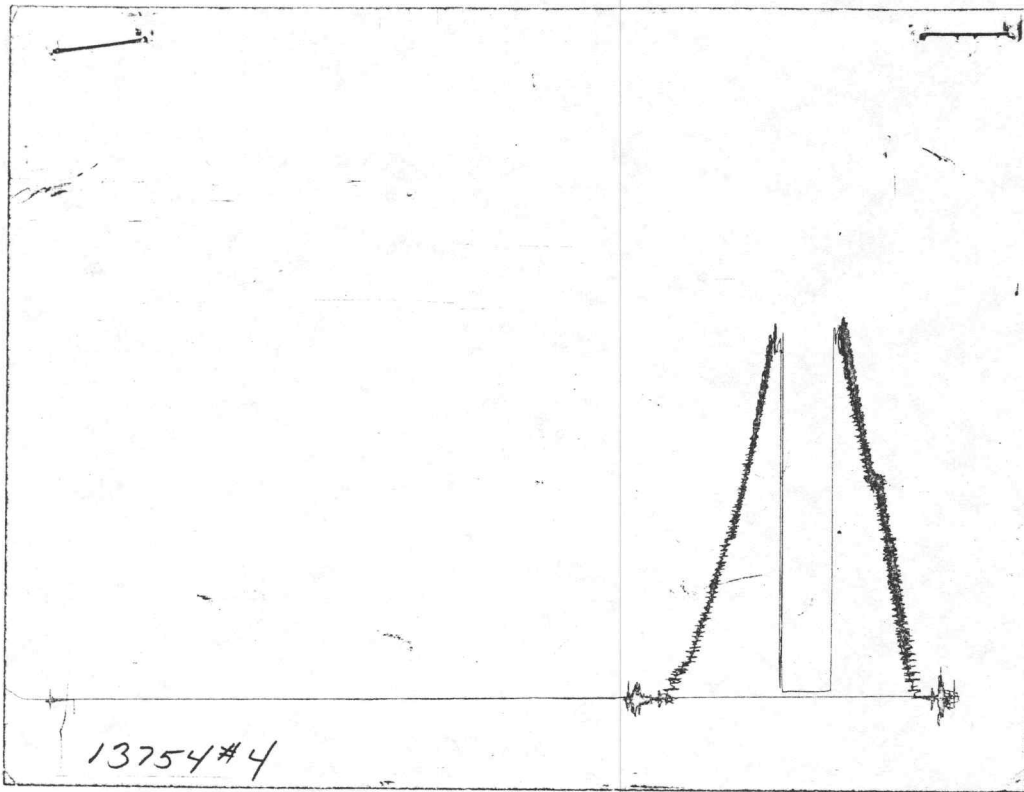
(F) Second Final Flow Pressure 33.2 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 15 Final Flow 5

(H) Final Hydrostatic Mud 1805.2 PSI Initial Shut-in 15 Final Shut-in _____

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1886	1891.2
(B) FIRST INITIAL FLOW PRESSURE	29	33.2
(C) FIRST FINAL FLOW PRESSURE	29	33.2
(D) INITIAL CLOSED-IN PRESSURE	29	33.2
(E) SECOND INITIAL FLOW PRESSURE	29	33.2
(F) SECOND FINAL FLOW PRESSURE	29	33.2
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD	1800	1805.2

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name F. DINKEL Test No. 5 Date 4/25/93
Company STAAB ENERGY & LEASING Zone ARBUCKLE
Address 2514 HANEY DRIVE HAYS KS 67601 Elevation 2328
Co. Rep./Geo. RON NELSON Cont. MURFIN RIG #3 Est. Ft. of Pay 15
Location: Sec. 25 Twp. 13S Rge. 21W Co. TREGO State KS

Interval Tested 3975-4010 Drill Pipe Size 4.5" XH
Anchor Length 35 Wt. Pipe I.D. - 2.7 Ft. Run 713
Top Packer Depth 3970' Drill Collar - 2.25 Ft. Run 180
Bottom Packer Depth 3975 Mud Wt. 9.3 lb/Gal.
Total Depth 4010 Viscosity 45 Filtrate 11.2

Tool Open @ 3:00 PM Initial Blow STRONG - BOTTOM OF BUCKET IN 1 1/2 MINUTES

Final Blow WEAK BUILDING TO 5"

Recovery - Total Feet 620 Flush Tool? NO

Rec. 360 Feet of GAS IN PIPE
Rec. 248 Feet of CLEAN OIL 100%OIL
Rec. 62 Feet of MUD CUT GASSY OIL 10%GAS/70%OIL/20%MUD
Rec. 310 Feet of OIL CUT GASSY MUD 30%GAS/40%OIL/30%MUD
Rec. _____ Feet of _____

BHT 114 °F Gravity _____ °API @ _____ °F Corrected Gravity 39 °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 9000 ppm System

(A) Initial Hydrostatic Mud 2123.6 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 110.2 PSI @ (depth) 3979 w / Clock No. 27501

(C) First Final Flow Pressure 202.7 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 385.8 PSI @ (depth) 4006 w / Clock No. 27567

(E) Second Initial Flow Pressure 236.2 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 247.1 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 337.6 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1981.5 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative DAN BANGLE

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

STAAB ENERGY & LEASIS F. DINKEL

DST 5

25

13S

21W

TREGO KS

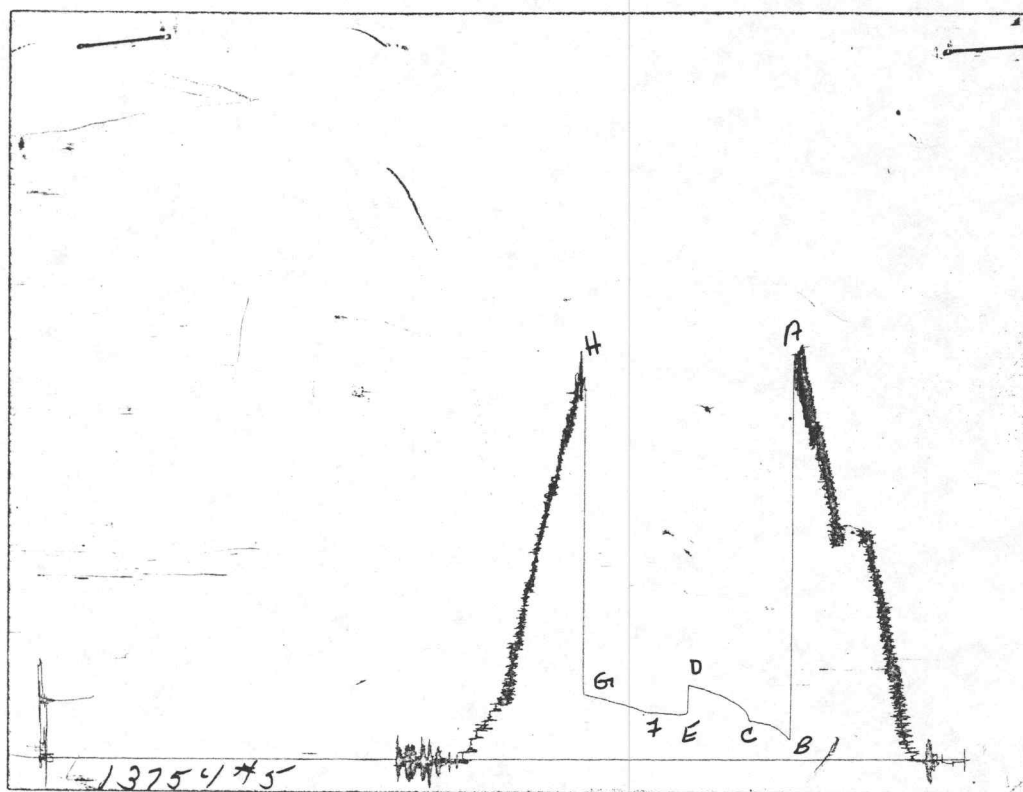
ELEVATION:	2328	KB	EST. PAY	15	FT
DATUM:	-1652		ZONE TESTED:	ARBUCKLE	
TEST INTERVAL:	3975-4010		TIME INTERVALS:	30-45-30-45	
RECORDER DEPTH:	3979		VISCOSITY:	4.437	CP
BOTTOM HOLE TEMP:	114		HOLE SIZE:	7.875	IN

CUBIC FEET OF GAS IN PIPE:	11				
TOTAL FEET OF RECOVERY:	620.00		CORRECTED PIPE FILLUP:	688.301	
TOTAL BARRELS OF RECOVERY:	3.96		CORR. BARRELS OF RECOVERY:	4.436	BBL
BARRELS IN DRILL PIPE:	0.00		API GRAVITY:	39	
BARRELS IN WEIGHT PIPE:	3.08		FLUID GRADIENT:	0.359	
BARRELS IN DRILL COLLARS:	0.88				
GAS OIL RATIO:	2.69		CU.FT/BBL		
BUBBLE POINT PRESSURE:	25				
UNCORRECTED INITIAL PRODUCTION:				95.04	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:				106.47	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:				34.817	

INITIAL SLOPE	405.87	PSI/CYCL	FINAL SLOPE	253.43	PSI/CYCLE
INITIAL P*	470	PSI	FINAL P*	427	PSI

TRANSMISSIBILITY	68.31	(MD.-FT./CP.)
PERMEABILITY	20.20	(MD.)
INDICATED FLOW CAPACITY	303.06	(MD.FT)
PRODUCTIVITY INDEX	0.08	(BARREL/DAY/PSI)
DAMAGE RATIO	0.13	
RADIUS OF INVESTIGATION	34.82	(FT,)
POTENTIOMETRIC SURFACE	-661.12	(FT.)
DRAWDOWN FACTOR	9.168	(%)

CHART PAGE



This is an actual photograph of recorder chart

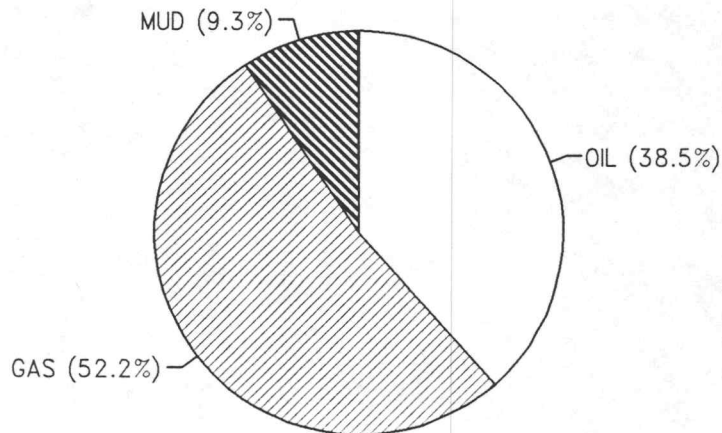
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2117	2123.6
(B) FIRST INITIAL FLOW PRESSURE	98	110.2
(C) FIRST FINAL FLOW PRESSURE	196	202.7
(D) INITIAL CLOSED-IN PRESSURE	374	385.8
(E) SECOND INITIAL FLOW PRESSURE	236	236.2
(F) SECOND FINAL FLOW PRESSURE	236	247.1
(G) FINAL CLOSED-IN PRESSURE	324	337.6
(H) FINAL HYDROSTATIC MUD	1976	1981.5

CALCULATED RECOVERY ANALYSIS

DST # 5 TICKET # 5992

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	87	100	87	0	0	0	0	0	0
PIPE 2			0	0	0	0	0	0	0
3			0	0	0	0	0	0	0
4			0	0	0	0	0	0	0
5			0	0	0	0	0	0	0
6			0	0	0	0	0	0	0
WEIGHT 1	273	100	273	0	0	0	0	0	0
PIPE 2	248		0	100	248	0	0	0	0
3	62	10	6.2	70	43.4	0	20	12.4	
4	130	30	39	40	52	0	30	39	
DRILL 1	180	30	54	40	72	0	30	54	
COLLAR 2			0	0	0	0	0	0	0
3			0	0	0	0	0	0	0
4			0	0	0	0	0	0	0
5			0	0	0	0	0	0	0
TOTAL	980		459.2		415.4		0		105.4

	BBL OIL=	BBL WATER=	BBL MUD=	BBL GAS =	HRS OPEN	BBL/DAY
	2.75588	0	0.66498	3.7286	1	66.14112
	*	*				0



INITIAL FLOW

RECORDER # 13754

DST # 5

TIME(MIN)

<> PRESSURE

-----			-----
3	110.2	110.2	
6	127.9	17.7	
9	143.7	15.8	
12	161.4	17.7	
15	173.2	11.8	
18	184.1	10.9	
21	187.9	3.8	
24	191.9	4	
27	194.8	2.9	
30	200.7	5.9	
33	202.7	2	

FINAL FLOW

RECORDER # 13754

DST # 5

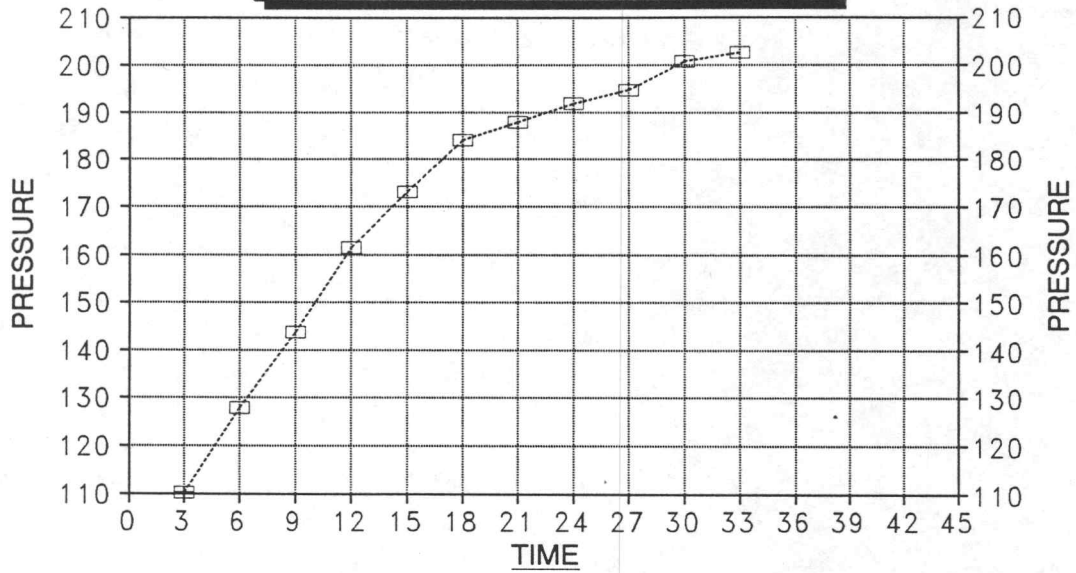
TIME(MIN)

<> PRESSURE

-----		-----
3	236.2	236.2
6	236.2	0
9	236.2	0
12	238.1	1.9
15	239.1	1
18	240.1	1
21	242.1	2
24	245.1	3
27	245.1	0
30	246.1	1
33	247.1	1

DELTA T DELTA P

INITIAL FLOW / DST #5



---□--- F. DINKEL

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:

34.817

F. DINKEL
INITIAL

DST #5
SHUTIN
30 INITIAL FLOW TIME

Slope 405.87 psi/cycle
P * 470 psi

TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
3	243.1	1.041	243.1	11
6	267.7	0.778	24.6	6
9	282.4	0.637	14.7	4
12	294.2	0.544	11.8	4
15	307.1	0.477	12.9	3
18	316.9	0.426	9.8	3
21	326.7	0.385	9.8	2
24	335.6	0.352	8.9	2
27	342.5	0.325	6.9	2
30	349.4	0.301	6.9	2
33	356.3	0.281	6.9	2
X 36	363.1	0.263	6.8	2
39	368.1	0.248	5.0	2
42	375.1	0.234	7.0	2
45	379.9	0.222	4.8	2
X 48	385.8	0.211	5.9	2

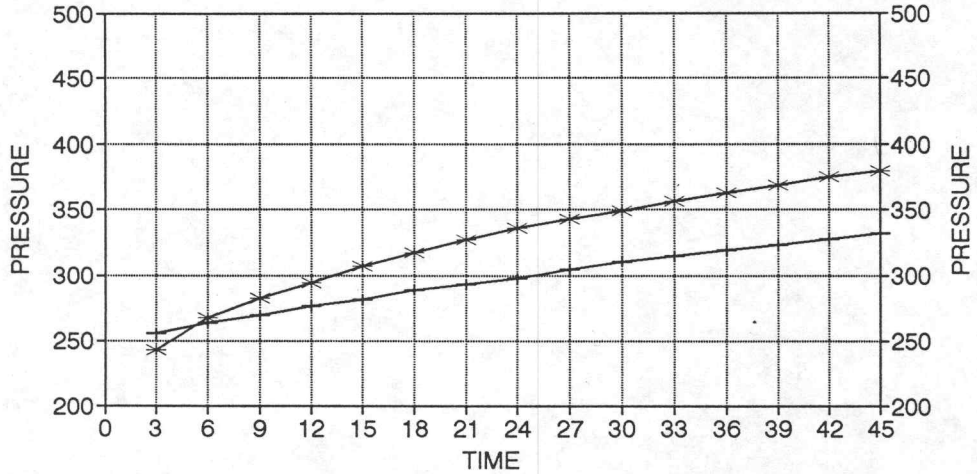
F. DINKEL
FINAL

DST #5
SHUTIN
60 TOTAL FLOW TIME

Slope 253.43 psi/cycle
P * 427 psi

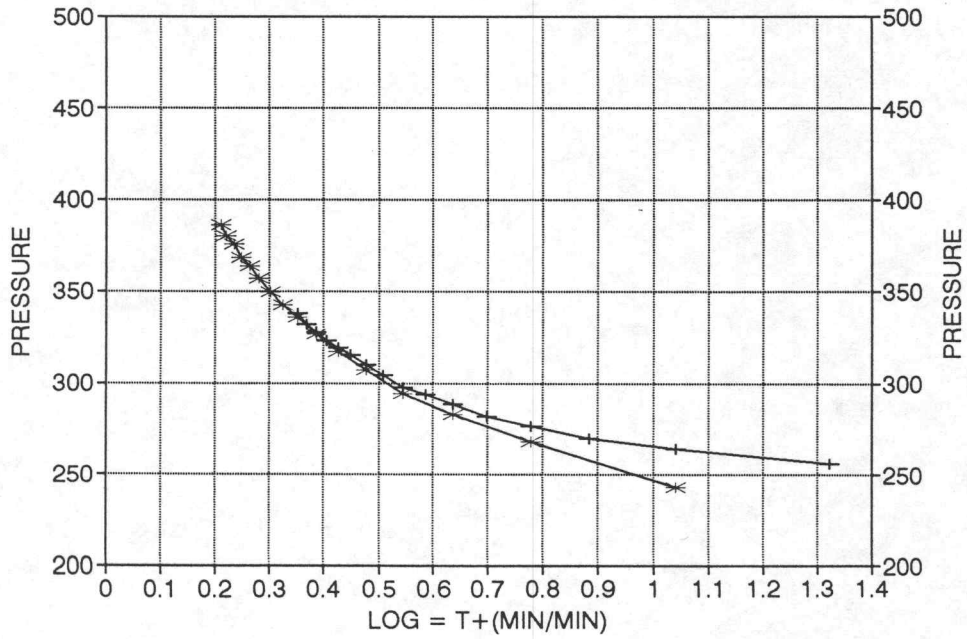
	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
3	255.9	1.322	255.9	21
6	263.7	1.041	7.8	11
9	269.6	0.885	5.9	8
12	276.5	0.778	6.9	6
15	281.4	0.699	4.9	5
18	288.3	0.637	6.9	4
21	293.3	0.586	5.0	4
24	297.2	0.544	3.9	4
27	304.1	0.508	6.9	3
30	310.1	0.477	6.0	3
33	314.9	0.450	4.8	3
X 36	318.9	0.426	4.0	3
39	322.8	0.405	3.9	3
42	327.7	0.385	4.9	2
45	331.6	0.368	3.9	2
X 48	337.6	0.352	6.0	2

F. DINKEL / DST #5 DELTA T DELTA P



—*— INITIAL —+— FINAL

HORNER PLOT



TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name F. DINKEL #3 Test No. 6 Date 4/26/93
Company STAAB ENERGY & LEASING Zone ARBUCKLE
Address 2514 HANEY DRIVE HAYS KS 67601 Elevation 2328
Co. Rep./Geo. RON NELSON Cont. MURFIN RIG #3 Est. Ft. of Pay _____
Location: Sec. 25 Twp. 13S Rge. 21W Co. TREGO State KS

Interval Tested	<u>4008-4021</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>13</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>713</u>
Top Packer Depth	<u>4003</u>	Drill Collar - 2.25 Ft. Run	<u>180</u>
Bottom Packer Depth	<u>4008</u>	Mud Wt.	<u>9.3</u> lb/Gal.
Total Depth	<u>4021</u>	Viscosity	<u>45</u>
		Filtrate	<u>11.2</u>

Tool Open @ 3:15 AM Initial Blow WEAK - BUILDING TO 2"

Final Blow WEAK - BUILDING TO 1"

Recovery - Total Feet 70 Flush Tool? NO

Rec. <u>10</u>	Feet of	<u>CLEAN OIL</u>
Rec. <u>60</u>	Feet of	<u>MUD</u>
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity 38 °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 9000 ppm System

(A) Initial Hydrostatic Mud 2142.1 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 12.3 PSI @ (depth) 4012 w / Clock No. 27501

(C) First Final Flow Pressure 22.6 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 1045.9 PSI @ (depth) 4017 w / Clock No. 27567

(E) Second Initial Flow Pressure 52.6 PSI AK1 Recorder No. _____ Range _____

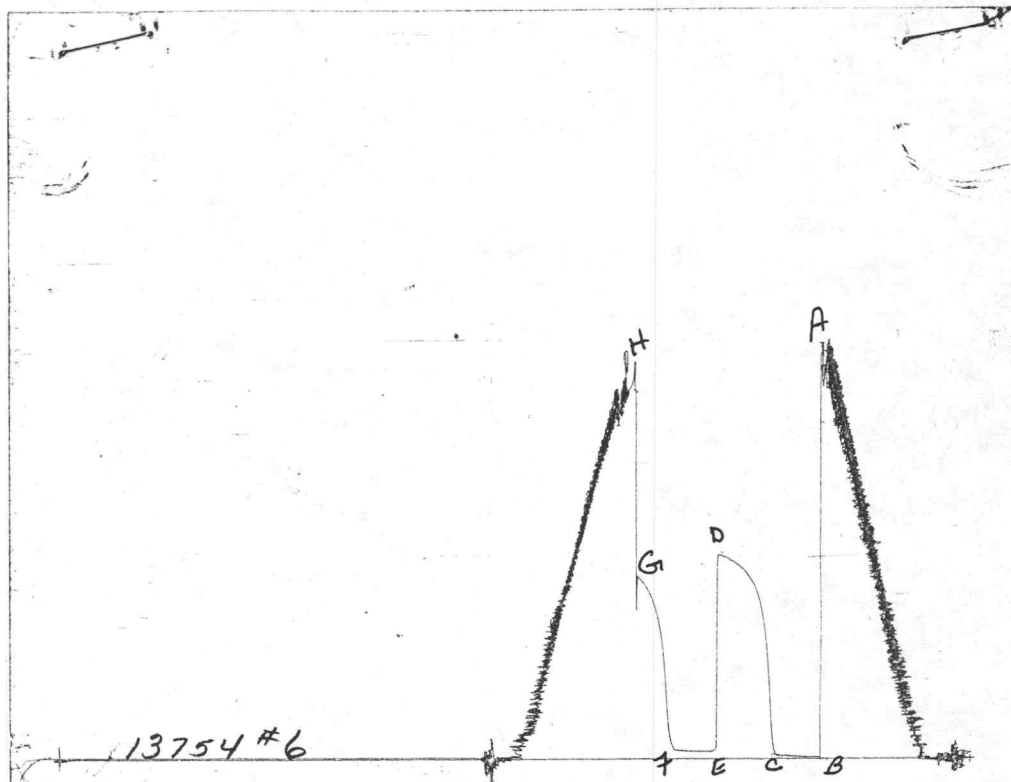
(F) Second Final Flow Pressure 52.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 931.2 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2121.3 PSI Initial Shut-in 45 Final Shut-in 30

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2137	2142.1
(B) FIRST INITIAL FLOW PRESSURE	9	12.3
(C) FIRST FINAL FLOW PRESSURE	19	22.6
(D) INITIAL CLOSED-IN PRESSURE	1036	1045.9
(E) SECOND INITIAL FLOW PRESSURE	49	52.6
(F) SECOND FINAL FLOW PRESSURE	49	52.6
(G) FINAL CLOSED-IN PRESSURE	926	931.2
(H) FINAL HYDROSTATIC MUD	2016	2121.3