

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name SCHMIDT #1 Test No. 1 Date 10/2/93
Company DOWNING-NELSON OIL CO Zone LKC-"A-C"
Address P.O. BOX 372 HAYS KS 67601 Elevation 2056
Co. Rep./Geo. RON NELSON Cont. EMPHASIS RIG #6 Est. Ft. of Pay _____
Location: Sec. 2 Twp. 13S Rge. 17W Co. ELLIS State KS

Interval Tested 3301-3380 Drill Pipe Size 4.5 XH
Anchor Length 79 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3296 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3301 Mud Wt. 8.8 lb/Gal.
Total Depth 3380 Viscosity 44 Filtrate 8.8

Tool Open @ 12:19 AM Initial Blow WEAK 1/4" BLOW BUILDING TO BOTTOM OF BUCKET IN 34
MINUTES-WEAK BLOW ON SHUTIN

Final Blow SURFACE BLOW BUILDING TO 6"

Recovery - Total Feet 225 Flush Tool? NO

Rec. 75 Feet of GAS IN PIPE
Rec. 5 Feet of CLEAN OIL
Rec. 40 Feet of SLTLY OIL CUT MUD-10% OIL/30%WTR/60% MUD
Rec. 60 Feet of WATERY MUD-15% WTR/ 85% MUD
Rec. 120 Feet of MUDDY WATER-90% WTR/ 10% MUD

BHT 98 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.13 @ 72 °F Chlorides 60000 ppm Recovery Chlorides 7000 ppm System

(A) Initial Hydrostatic Mud 1680.4 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 74.3 PSI @ (depth) 2363 w / Clock No. 22993

(C) First Final Flow Pressure 98.6 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 566.1 PSI @ (depth) 3378 w / Clock No. 30401

(E) Second Initial Flow Pressure 121.2 PSI AK1 Recorder No. _____ Range _____

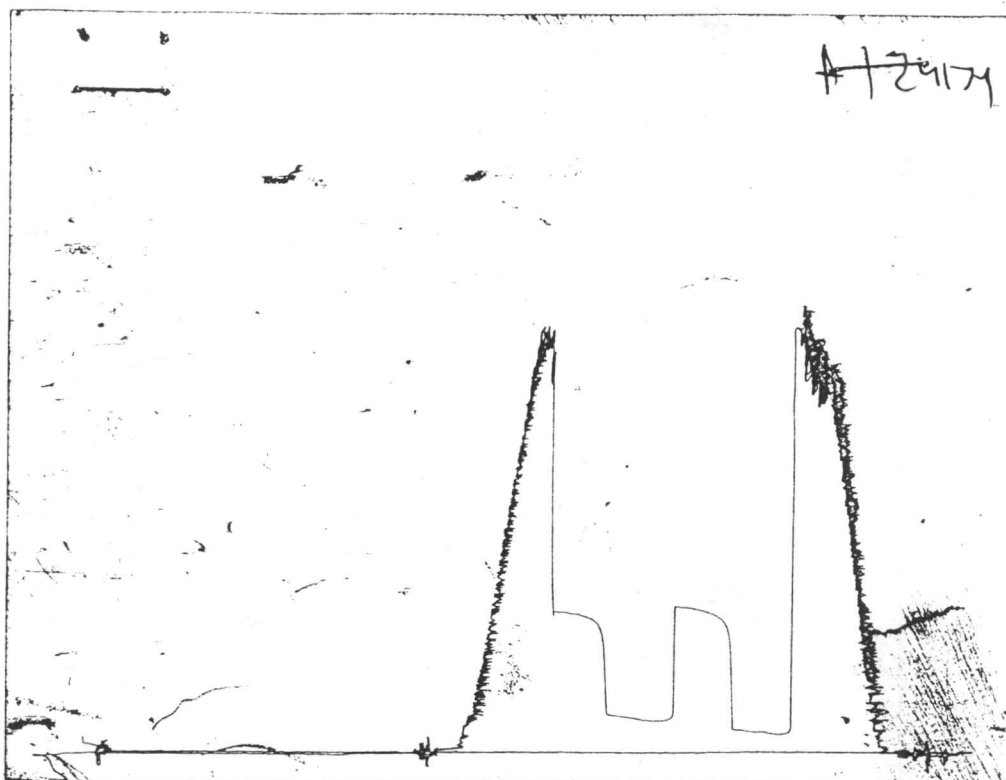
(F) Second Final Flow Pressure 144.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 557.8 PSI Initial Opening 45 Final Flow 45

(H) Final Hydrostatic Mud 1650.3 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
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(A) INITIAL HYDROSTATIC MUD	1674	1680.4
(B) FIRST INITIAL FLOW PRESSURE	67	74.3
(C) FIRST FINAL FLOW PRESSURE	89	98.6
(D) INITIAL CLOSED-IN PRESSURE	568	566.1
(E) SECOND INITIAL FLOW PRESSURE	119	121.2
(F) SECOND FINAL FLOW PRESSURE	142	144.3
(G) FINAL CLOSED-IN PRESSURE	553	557.8
(H) FINAL HYDROSTATIC MUD	1659	1650.3

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Drill-Stem Test Data

Well Name SCHMIDT #1 Test No. 2 Date 10/2/93
Company DOWNING-NELSON OIL CO Zone LKC-"E-F"
Address P.O. BOX 372 HAYS KS 67601 Elevation 2056
Co. Rep./Geo. RON NELSON Cont. EMPHASIS RIG #6 Est. Ft. of Pay _____
Location: Sec. 2 Twp. 13S Rge. 17W Co. ELLIS State KS

Interval Tested 3378-3405 Drill Pipe Size 4.5 XH
Anchor Length 37 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3373 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3378 Mud Wt. 9.1 lb/Gal.
Total Depth 3405 Viscosity 48 Filtrate 8.5

Tool Open @ 1:15 PM Initial Blow WEAK 1/4" BLOW BUILDING TO 3" THEN DECREASING TO 2"

Final Blow SURFACE BLOW BUILDING TO 1"

Recovery - Total Feet 106 Flush Tool? NO

Rec. 75 Feet of GAS IN PIPE
Rec. 1 Feet of CLEAN OIL
Rec. 45 Feet of GSY OIL & WTR CUT MUD-15%GAS/15%OIL/10%WTR/60%MUD
Rec. 30 Feet of WATERY MUD-40% WTR/ 60% MUD
Rec. 30 Feet of MUDDY WATER-60% WTR/ 40% MUD

BHT 102 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides 50000 ppm Recovery Chlorides 7000 ppm System

(A) Initial Hydrostatic Mud 1700.3 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 45.6 PSI @ (depth) 3380 w / Clock No. 27573

(C) First Final Flow Pressure 58.7 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 231.4 PSI @ (depth) 3403 w / Clock No. 22992

(E) Second Initial Flow Pressure 77.6 PSI AK1 Recorder No. _____ Range _____

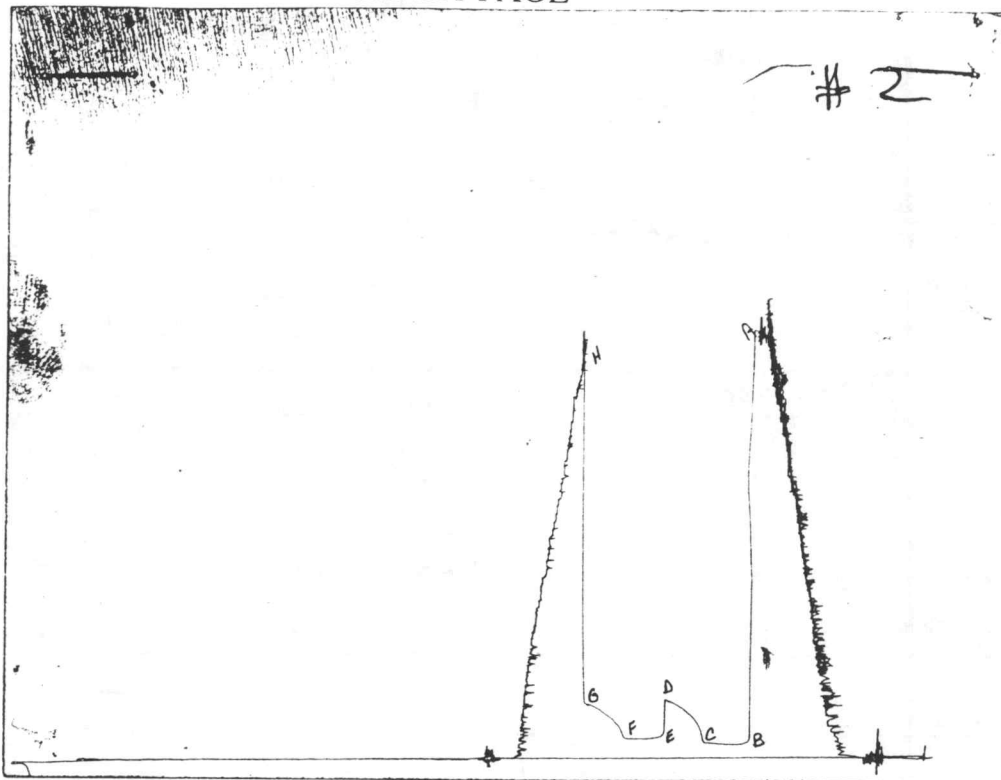
(F) Second Final Flow Pressure 77.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 220.1 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1650.3 PSI Initial Shut-in 30 Final Shut-in 30

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CHART PAGE

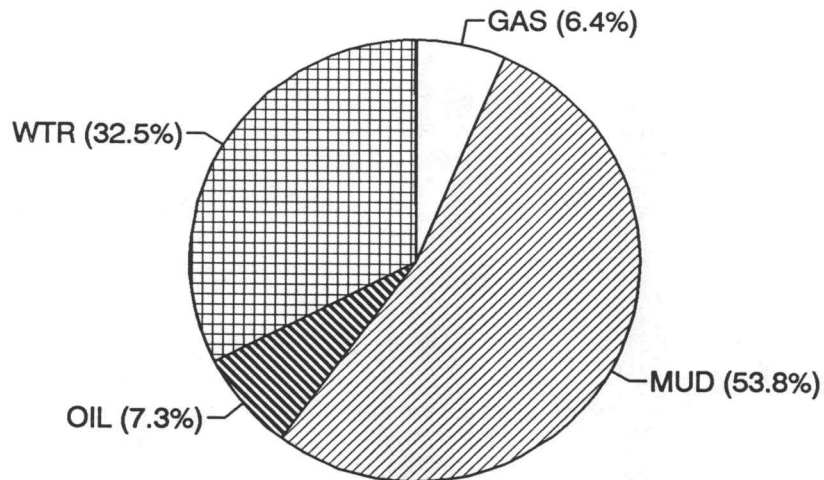


This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1689	1700.3
(B) FIRST INITIAL FLOW PRESSURE	44	45.6
(C) FIRST FINAL FLOW PRESSURE	52	58.7
(D) INITIAL CLOSED-IN PRESSURE	225	231.4
(E) SECOND INITIAL FLOW PRESSURE	74	77.6
(F) SECOND FINAL FLOW PRESSURE	74	77.6
(G) FINAL CLOSED-IN PRESSURE	217	220.1
(H) FINAL HYDROSTATIC MUD	1658	1650.3

DST #	CALCULATED RECOVERY ANALYSIS					DRILL	PIPE		
	2	TICKET					6145		
SAMPLE #	TOTAL FEET	GAS %	OIL FEET	OIL %	WATER FEET	WATER %	MUD %		
1	1	0	0	100	1	0	0	0	0
2	45	15	6.75	15	6.75	10	4.5	60	27
3	30	0	0	0	0	40	12	60	18
4	30	0	0	0	0	60	18	40	12
5			0		0		0		0
TOTAL	106	6.3679245	6.75	7.31	7.75	32.54717	34.5	53.8	57

			HRS	BBL/DAY
BBL OIL=	0.110205	*	1	2.6449
BBL WATER=	0.49059	*		11.774
BBL MUD=	0.81054			
BBL GAS	0.095985			



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Drill-Stem Test Data

Well Name SCHMIDT #1 Test No. 3 Date 10/3/93
Company DOWNING-NELSON OIL CO Zone LKC-"I-J"
Address P.O. BOX 372 HAYS KS 67601 Elevation 2056
Co. Rep./Geo. RON NELSON Cont. EMPHASIS RIG #6 Est. Ft. of Pay _____
Location: Sec. 2 Twp. 13S Rge. 17W Co. ELLIS State KS

Interval Tested <u>3465-3510</u>	Drill Pipe Size <u>4.5 XH</u>
Anchor Length <u>45</u>	Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth <u>3460</u>	Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth <u>3465</u>	Mud Wt. <u>9.3</u> lb/Gal.
Total Depth <u>3510</u>	Viscosity <u>49</u> Filtrate <u>8.8</u>

Tool Open @ 6:41 AM Initial Blow WEAK 1/4" BLOW BUILDING TO 4"

Final Blow 1.5" BLOW BUILDING TO BOTTOM OF BUCKET IN 45 MINUTES - 1/4" BLOW BACK ON SHUTIN

Recovery - Total Feet 100 Flush Tool? NO

Rec. <u>500</u>	Feet of <u>GAS IN PIPE</u>
Rec. <u>70</u>	Feet of <u>CLEAN OIL-5% GAS 95% OIL</u>
Rec. <u>30</u>	Feet of <u>GSY HVY OIL CUT MUD-15%GAS/40%OIL/45%MUD</u>
Rec. _____	Feet of _____
Rec. _____	Feet of _____

BHT 100 °F Gravity 37 °API @ 70 °F Corrected Gravity 36 °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1788.4 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 58.7 PSI @ (depth) 3469 w / Clock No. 22992

(C) First Final Flow Pressure 58.7 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 266.4 PSI @ (depth) 3507 w / Clock No. 30401

(E) Second Initial Flow Pressure 74.3 PSI AK1 Recorder No. _____ Range _____

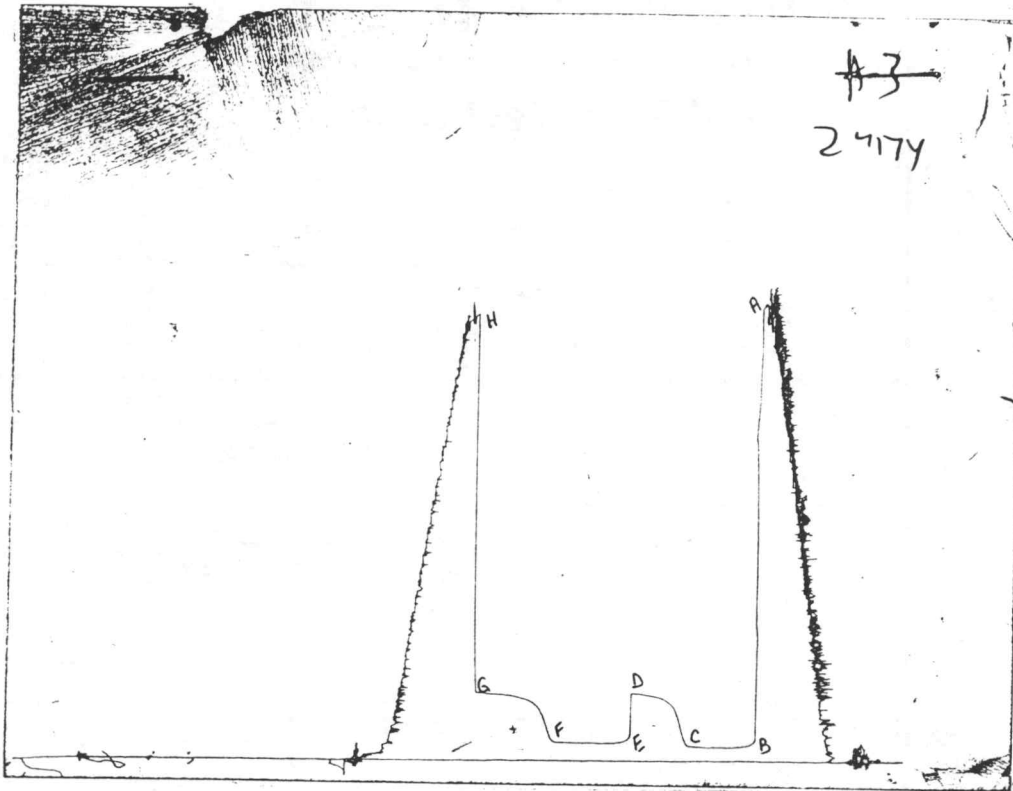
(F) Second Final Flow Pressure 77.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 265.9 PSI Initial Opening 45 Final Flow 60

(H) Final Hydrostatic Mud 1750.4 PSI Initial Shut-in 45 Final Shut-in 60

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CHART PAGE



This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

(A) INITIAL HYDROSTATIC MUD	1772	1788.4
(B) FIRST INITIAL FLOW PRESSURE	51	58.7
(C) FIRST FINAL FLOW PRESSURE	51	58.7
(D) INITIAL CLOSED-IN PRESSURE	263	266.4
(E) SECOND INITIAL FLOW PRESSURE	66	74.3
(F) SECOND FINAL FLOW PRESSURE	74	77.6
(G) FINAL CLOSED-IN PRESSURE	263	265.9
(H) FINAL HYDROSTATIC MUD	1752	1750.4

CALCULATED RECOVERY ANALYSIS						DRILL	PIPE		
DST #	3	TICKET				6146			
SAMPLE	TOTAL	GAS	OIL			WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	70	5	3.5	95	66.5	0	0	0	0
2	30	15	4.5	40	12	0	0	45	13.5
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	100	8	8	78.5	78.5	0	0	13.5	13.5
HRS BBL/DAY									
BBL OIL=	1.11627	*	1.75	15.309					
BBL WATER=	0	*		0					
BBL MUD=	0.19197								
BBL GAS	0.11376								

