3-11-23W

CRUDE OIL TESTING INC.

TEST REPORT

(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 80901

Test Ticket No. 1319

Company A. Scott Ritchie Date 5/30/81
Company Address 125 N. Market Suite 950- Wichita No. of Charts 5
Location: Sec. 3 Twp. 11 Rge. 23 Co. Trego State Kansas
Well Name And Number Harger #1-C Tester Elmer Burgardt
Contractor Murfin Drlg. Rig No. #16 Co. Rep. George Mueller

Formation Lansing Zone _____ Type of Test Conventional

DST# 1 Interval 3,510 To 3,532 Total Depth 3,532
Open 30 Shut In 60 Open 45 Shut In 75
Packer(s) Set 1:28 AM PM Started off Bottom 5:00 AM PM
Blow 1st Open: Good steady blow to 6" inbucket.
2nd Open: Good steady blow to 3" in bucket.

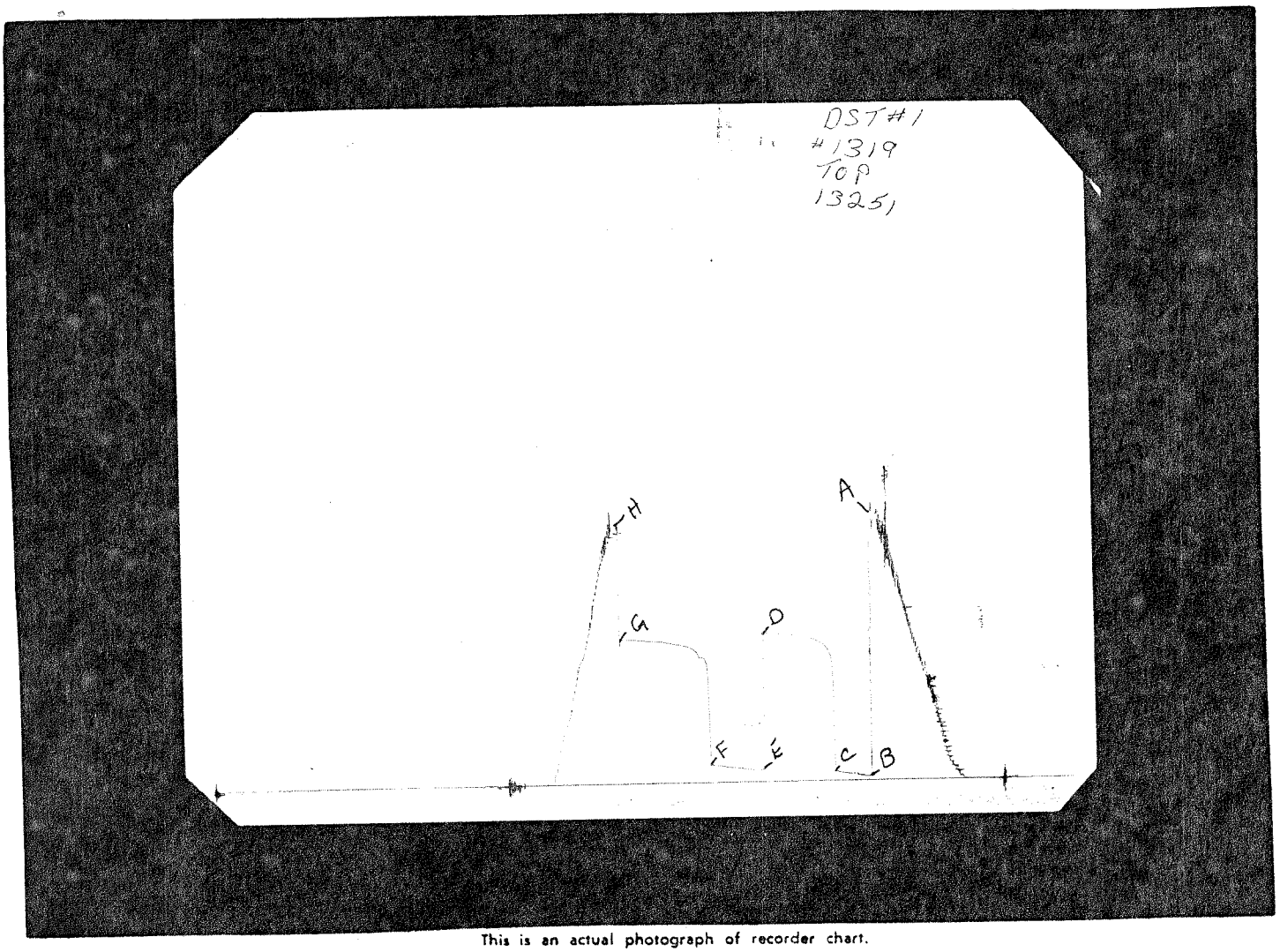
Recovery
Total Feet 206
Recovered 20 Ft. of Muddy water.
Recovered 186 Ft. of Muddy water.
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides _____

Pressures & Temp. (Office Reading If Applicable)
Initial Hydrostatic Pressure 1,705 Final Hydrostatic Pressure 1,682
Initial Closed In Pressure 986 Final Closed In Pressure 963
Initial Flow Pressure 46 To 58 Final Flow Pressure 92 To 104
Test Area Temperature 112

Engineering Date
Elevation 2,263 K. B.
Mud Viscosity 40 Mud Weight 9.3 Water Loss 9.6
Chlorides 27,000 P.P.M. Type of Mud Starch Anchor Length 22
Hole Size 7 7/8 Casing Size 8 5/8 Surface Choke 3/4 Bottom Choke 3/4
Drill Pipe Length 2,657 I.D. 3.8 In. Weight Pipe Length 635 I.D. 2.76 In.
Drill Collar Length 218 I.D. 2.25 In.
Top Packer Depth. _____ Bottom Packer Depth. 3,510 Packer Size 6 3/4
Test Tool Size 5½ In. Tool Joint Size 4½ FH In.
Did Well Flow No Reversed Out _____
Recorder Type and No. Kuster #13251 Clock Range No. #16067 12 Hr.
Recorder Type and No. Kuster #10994 Clock Range No. #14074 12 Hr.
Extra Equipment None
Remarks Slid about 4' to bottom when tool opened.
Open Hole Test - $660.00

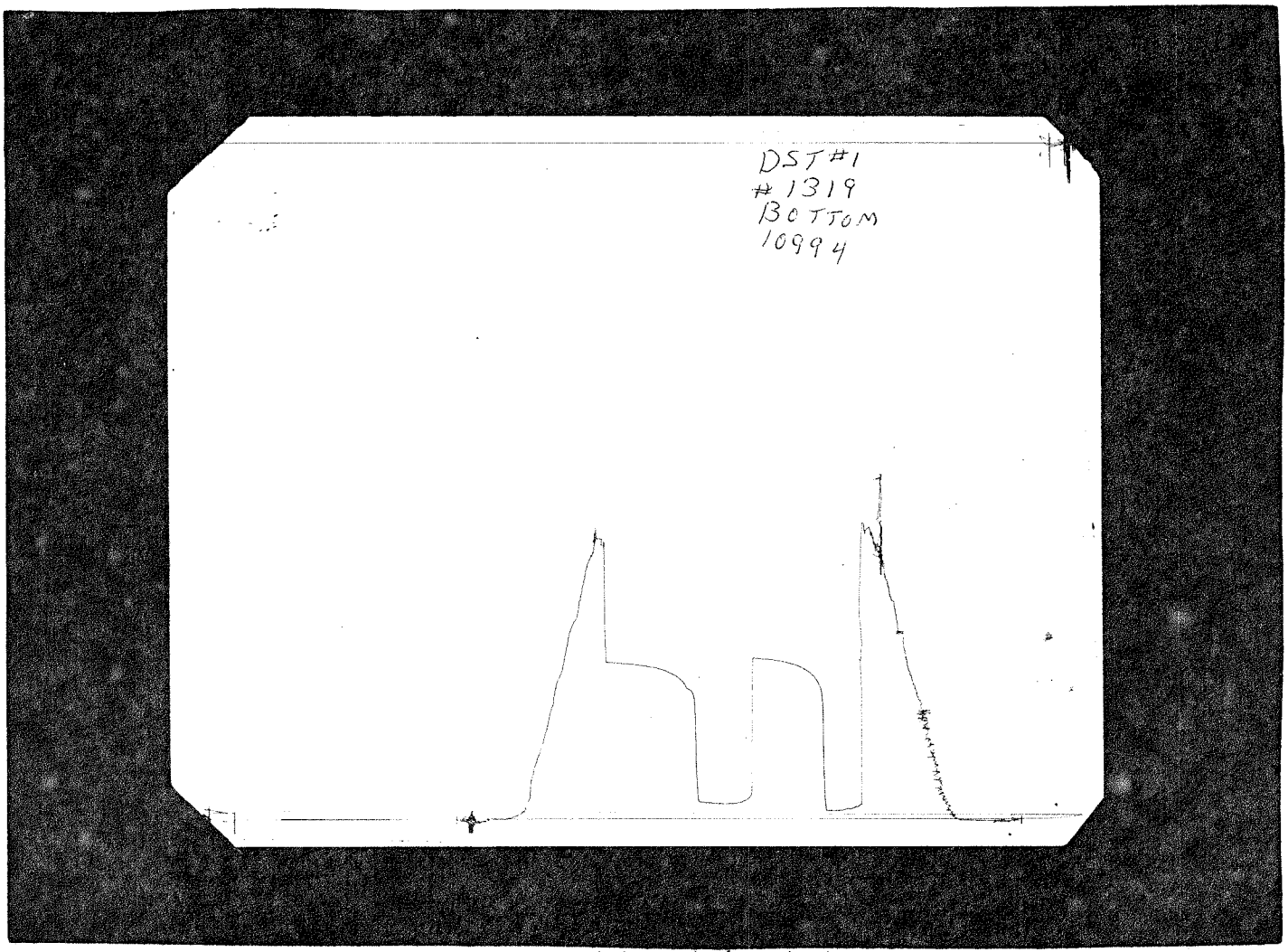
Thank-you

Price of Job $660.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,705	1,814	PSI
(B)	First Initial Flow Pressure	46	24	PSI
(C)	First Final Flow Pressure	58	59	PSI
(D)	Initial Closed-in Pressure	986	990	PSI
(E)	Second Initial Flow Pressure	92	76	PSI
(F)	Second Final Flow Pressure	104	116	PSI
(G)	Final Closed-in Pressure	963	958	PSI
(H)	Final Hydrostatic Mud	1,682	1,715	PSI



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POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud			PSI
(B)	First Initial Flow Pressure			PSI
(C)	First Final Flow Pressure			PSI
(D)	Initial Closed-in Pressure			PSI
(E)	Second Initial Flow Pressure			PSI
(F)	Second Final Flow Pressure			PSI
(G)	Final Closed-in Pressure			PSI
(H)	Final Hydrostatic Mud			PSI

CRUDE OIL TESTING COMPANY

P.O. Box 2260
Colorado Springs, Colorado 80901
(303) 473-6909

Date 5/30/81 Test Ticket No. 1319

Recorder No. Kuster AK-1 #13251 Capacity 4,550 PSI Location 3,522 Ft.

Clock No. #16067 Elevation 2,263 K. B. Well Temperature 112 °F

Point		Pressure			Field Time	Time Computed
A	Initial Hydrostatic Mud	1,814	P.S.I.	Open Tool	1:30 AM	
B	First Initial Flow Pressure	24	P.S.I.	First Flow Pressure	30 Mins.	Mins.
C	First Final Flow Pressure	59	P.S.I.	Initial Closed-in Pressure	60 Mins.	Mins.
D	Initial Closed-in Pressure	990	P.S.I.	Second Flow Pressure	45 Mins.	Mins.
E	Second Initial Flow Pressure	76	P.S.I.	Final Closed-in Pressure	75 Mins.	Mins.
F	Second Final Flow Pressure	116	P.S.I.			
G	Final Closed-in Pressure	958	P.S.I.			
H	Final Hydrostatic Mud	1,715	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of Min.

Initial Shut-In
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of Min.

Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of Min.

Final Shut-In
Breakdown: 15 Inc.
of 5 mins. and a
final inc. of Min.

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	00	24		00	59		00	76		00	116
P 2	05	26		05	853		05	78		05	826
P 3	10	36		10	913		10	82		10	834
P 4	15	43		15	937		15	88		15	893
P 5	20	46		20	954		20	93		20	910
P 6	25	54		25	965		25	96		25	921
P 7	30	59		30	972		30	100		30	927
P 8				35	975		35	106		35	934
P 9				40	979		40	111		40	941
P10				45	984		45	116		45	946
P11				50	987					50	948
P12				55	989					55	952
P13				60	990					60	954
P14										65	957
P15										70	958
P16										75	958
P17											
P18											
P19											
P20											

TEST REPORT

(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 80901

CRUDE OIL TESTING INC.

Test Ticket No. 1320

Company A. Scott Ritchie Date

Company Address 125 N. Market Suite 950 - Wichita No. of Charts 5

Location: Sec. 3 Twp. 11 Rge. 23 Co. Trego State Kansas

Well Name And Number Harger #1-C Tester Elmer Burgardt

Contractor Murfin Drlg. Rig No. #16 Co. Rep. George Mueller

Formation Lansing Zone Type of Test Conventional

DST# 2 Interval 3,544 To 3,585 Total Depth 3,585

Open 30 Shut In 30 Open 30 Shut In 30

Packer(s) Set 7:13 ~~A.M.~~ P.M. Started off Bottom 9:15 ~~A.M.~~ P.M.

Blow 1st Open: Weak decreasing blow to ½" in bucket, dead in 17 min.

2nd Open: Weak decreasing blow to ½" in bucket, dead in 8 min.

Recovery

Total Feet 15

Recovered 15 Ft. of Mud

Recovered Ft. of

Recovered Ft. of

Recovered Ft. of

Recovered Ft. of

Recovered Ft. of

Gravity (Oil) Corrected To Temp. Water Chlorides

Pressures & Temp. (Office Reading If Applicable)

Initial Hydrostatic Pressure 1,716 Final Hydrostatic Pressure 1,693

Initial Closed In Pressure 689 Final Closed In Pressure 655

Initial Flow Pressure 35 To 35 Final Flow Pressure 35 To 35

Test Area Temperature 114

Engineering Date

Elevation 2,263 K. B.

Mud Viscosity 44 Mud Weight 9.4 Water Loss 11.6

Chlorides 25,000 P.P.M. Type of Mud Starch Anchor Length 41

Hole Size 7 7/8 Casing Size 8 5/8 Surface Choke 3/4 Bottom Choke 3/4

Drill Pipe Length 2,691 I.D. 3.8 In. Weight Pipe Length 635 I.D. 2.76 In.

Drill Collar Length 218 I.D. 2.25 In.

Top Packer Depth. Bottom Packer Depth. 3,544 Packer Size 6 3/4

Test Tool Size 5½ In. Tool Joint Size 4½ FH In.

Did Well Flow No Reversed Out No

Recorder Type and No. Kuster #13251 Clock Range No. #16067 12 Hr.

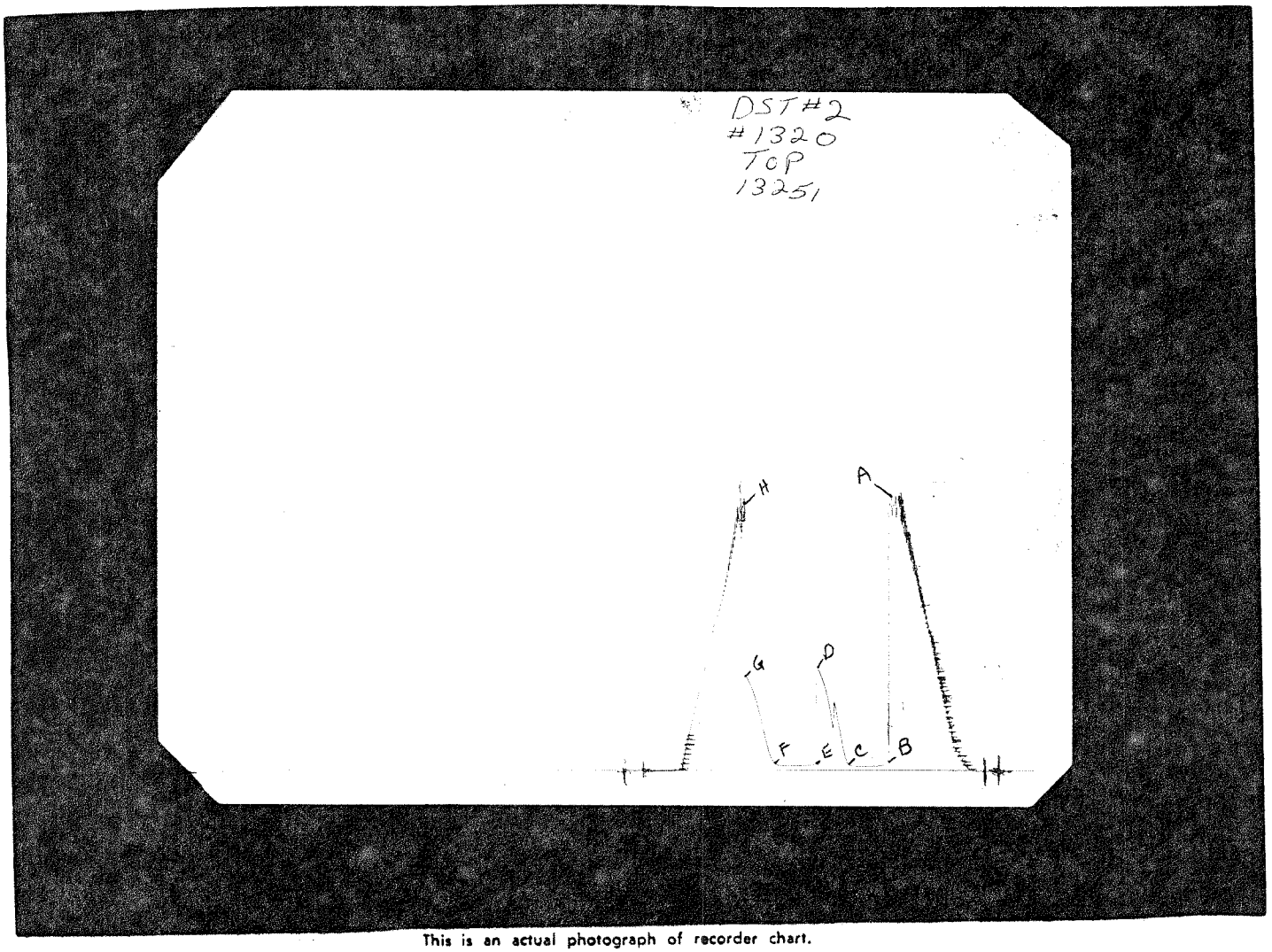
Recorder Type and No. Kuster #10994 Clock Range No. #14074 12 Hr.

Extra Equipment Single Conventional packer.

Remarks Tool slid while on bottom, had to set down about 3' more.
Open Hole Test - $660.00

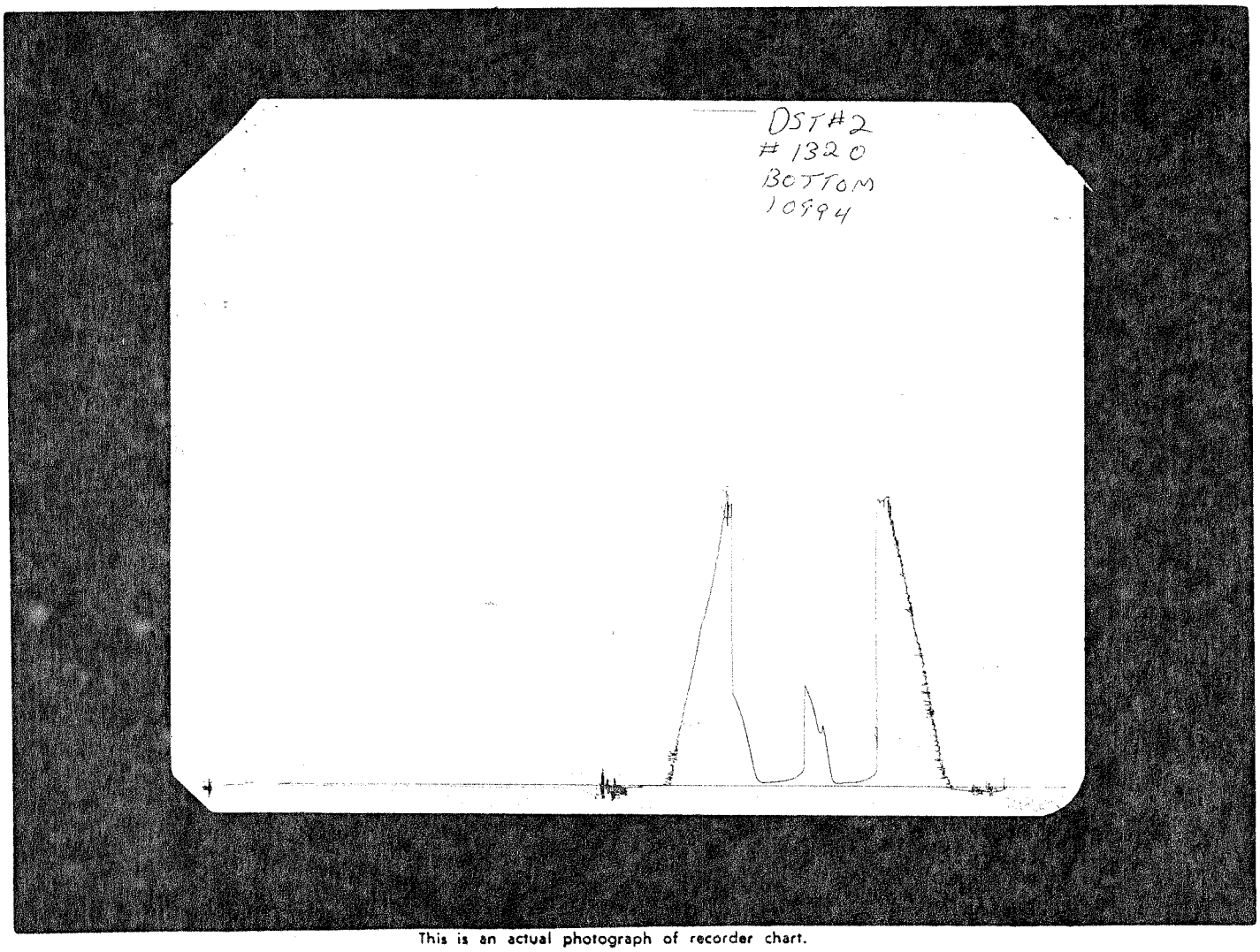
Thank-you

Price of Job $660.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,716	1,838	PSI
(B)	First Initial Flow Pressure	35	11	PSI
(C)	First Final Flow Pressure	35	25	PSI
(D)	Initial Closed-in Pressure	689	692	PSI
(E)	Second Initial Flow Pressure	35	16	PSI
(F)	Second Final Flow Pressure	35	28	PSI
(G)	Final Closed-in Pressure	655	640	PSI
(H)	Final Hydrostatic Mud	1,693	1,770	PSI



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POINT		PRESSURE Field Reading	Office Reading
(A)	Initial Hydrostatic Mud		PSI
(B)	First Initial Flow Pressure		PSI
(C)	First Final Flow Pressure		PSI
(D)	Initial Closed-in Pressure		PSI
(E)	Second Initial Flow Pressure		PSI
(F)	Second Final Flow Pressure		PSI
(G)	Final Closed-in Pressure		PSI
(H)	Final Hydrostatic Mud		PSI

CRUDE OIL TESTING COMPANY

P.O. Box 2260
Colorado Springs, Colorado 80901
(303) 473-6909

Date 5/30/81 Test Ticket No. 1320

Recorder No. Kuster AK-1 #13251 Capacity 4,550 PSI Location 3,575 Ft.

Clock No. #16067 Elevation 2,263 K. B. Well Temperature 114 °F

Point		Pressure			Field Time	Time Computed
A	Initial Hydrostatic Mud	1,838	P.S.I.	Open Tool	7:15 PM	
B	First Initial Flow Pressure	11	P.S.I.	First Flow Pressure	30 Mins.	Mins.
C	First Final Flow Pressure	25	P.S.I.	Initial Closed-in Pressure	30 Mins.	Mins.
D	Initial Closed-in Pressure	692	P.S.I.	Second Flow Pressure	30 Mins.	Mins.
E	Second Initial Flow Pressure	16	P.S.I.	Final Closed-in Pressure	30 Mins.	Mins.
F	Second Final Flow Pressure	28	P.S.I.			
G	Final Closed-in Pressure	640	P.S.I.			
H	Final Hydrostatic Mud	1,770	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 6 Inc. of 5 mins. and a final inc. of Min.		Breakdown: 6 Inc. of 5 mins. and a final inc. of Min.		Breakdown: 6 Inc. of 5 mins. and a final inc. of Min.		Breakdown: 6 Inc. of 5 mins. and a final inc. of Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 00	11	00	25	00	16	00	28
P 2 05	13	05	89	05	17	05	49
P 3 10	16	10	291	10	19	10	146
P 4 15	18	15	447	15	21	15	321
P 5 20	20	20	490	20	23	20	475
P 6 25	23	25	622	25	26	25	583
P 7 30	25	30	692	30	28	30	640
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TEST REPORT

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CRUDE OIL TESTING INC.

Test Ticket No. 1320

Company A. Scott Ritchie Date

Company Address 125 N. Market Suite 950 - Wichita No. of Charts 5

Location: Sec. 3 Twp. 11 Rge. 23 Co. Trego State Kansas

Well Name And Number Harger #1-C Tester Elmer Burgardt

Contractor Murfin Drlg. Rig No. #16 Co. Rep. George Mueller

Formation Lansing Zone Type of Test Conventional

DST# 2

Interval 3,544 To 3,585 Total Depth 3,585

Open 30 Shut In 30 Open 30 Shut In 30

Packer(s) Set 7:13 ~~A.M.~~ P.M. Started off Bottom 9:15 ~~A.M.~~ P.M.

Blow 1st Open: Weak decreasing blow to ½" in bucket, dead in 17 min.

2nd Open: Weak decreasing blow to ½" in bucket, dead in 8 min.

Recovery

Total Feet 15

Recovered 15 Ft. of Mud

Recovered Ft. of

Recovered Ft. of

Recovered Ft. of

Recovered Ft. of

Recovered Ft. of

Gravity (Oil) Corrected To Temp. Water Chlorides

Pressures & Temp. (Office Reading If Applicable)

Initial Hydrostatic Pressure 1,716 Final Hydrostatic Pressure 1,693

Initial Closed In Pressure 689 Final Closed In Pressure 655

Initial Flow Pressure 35 To 35 Final Flow Pressure 35 To 35

Test Area Temperature 114

Engineering Date

Elevation 2,263 K. B.

Mud Viscosity 44 Mud Weight 9.4 Water Loss 11.6

Chlorides 25,000 P.P.M. Type of Mud Starch Anchor Length 41

Hole Size 7 7/8 Casing Size 8 5/8 Surface Choke 3/4 Bottom Choke 3/4

Drill Pipe Length 2,691 I.D. 3.8 In. Weight Pipe Length 635 I.D. 2.76 In.

Drill Collar Length 218 I.D. 2.25 In.

Top Packer Depth. Bottom Packer Depth. 3,544 Packer Size 6 3/4

Test Tool Size 5½ In. Tool Joint Size 4½ FH In.

Did Well Flow No Reversed Out No

Recorder Type and No. Kuster #13251 Clock Range No. #16067 12 Hr.

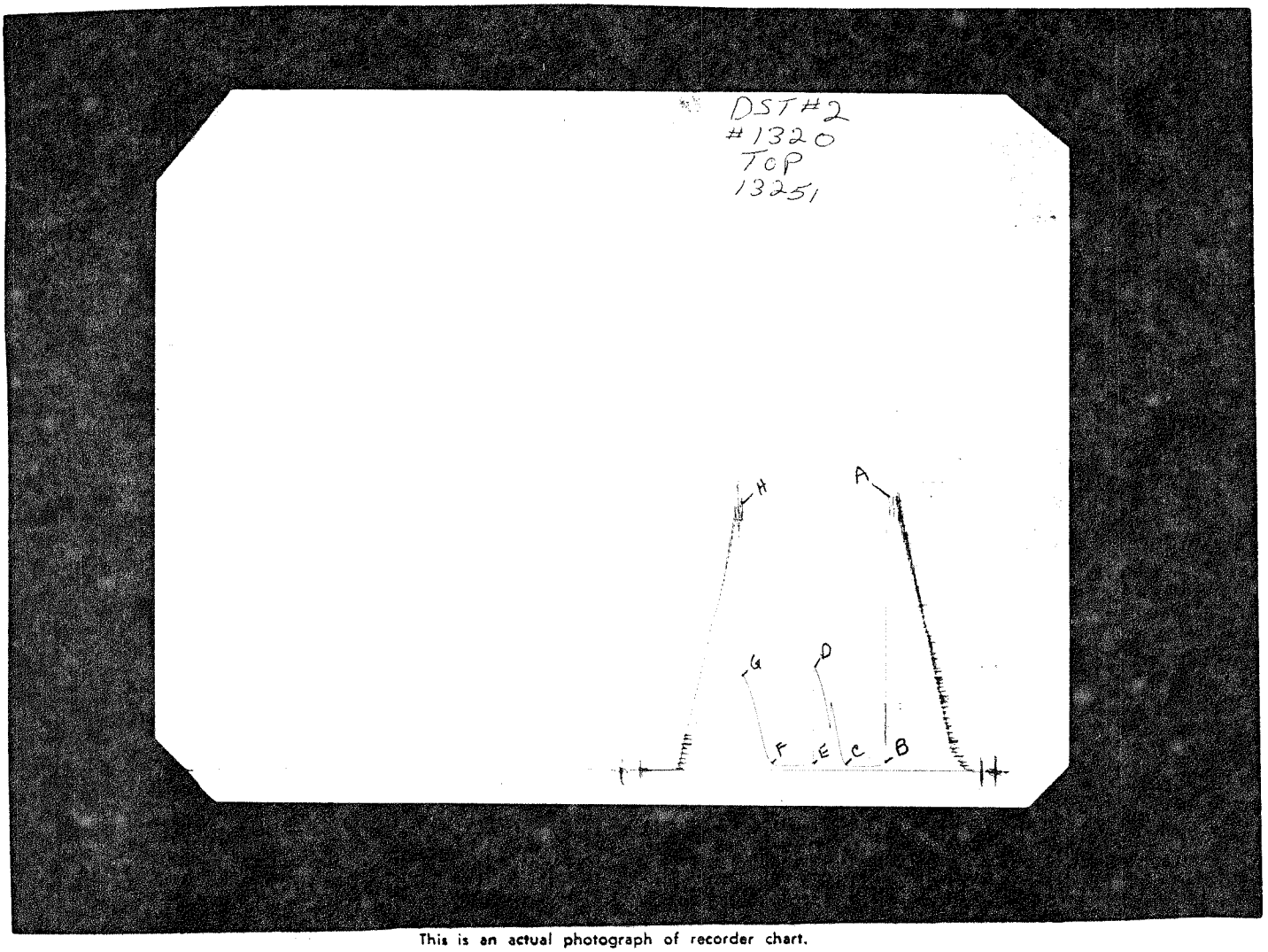
Recorder Type and No. Kuster #10994 Clock Range No. #14074 12 Hr.

Extra Equipment Single Conventional packer.

Remarks Tool slid while on bottom, had to set down about 3' more.
Open Hole Test - $660.00

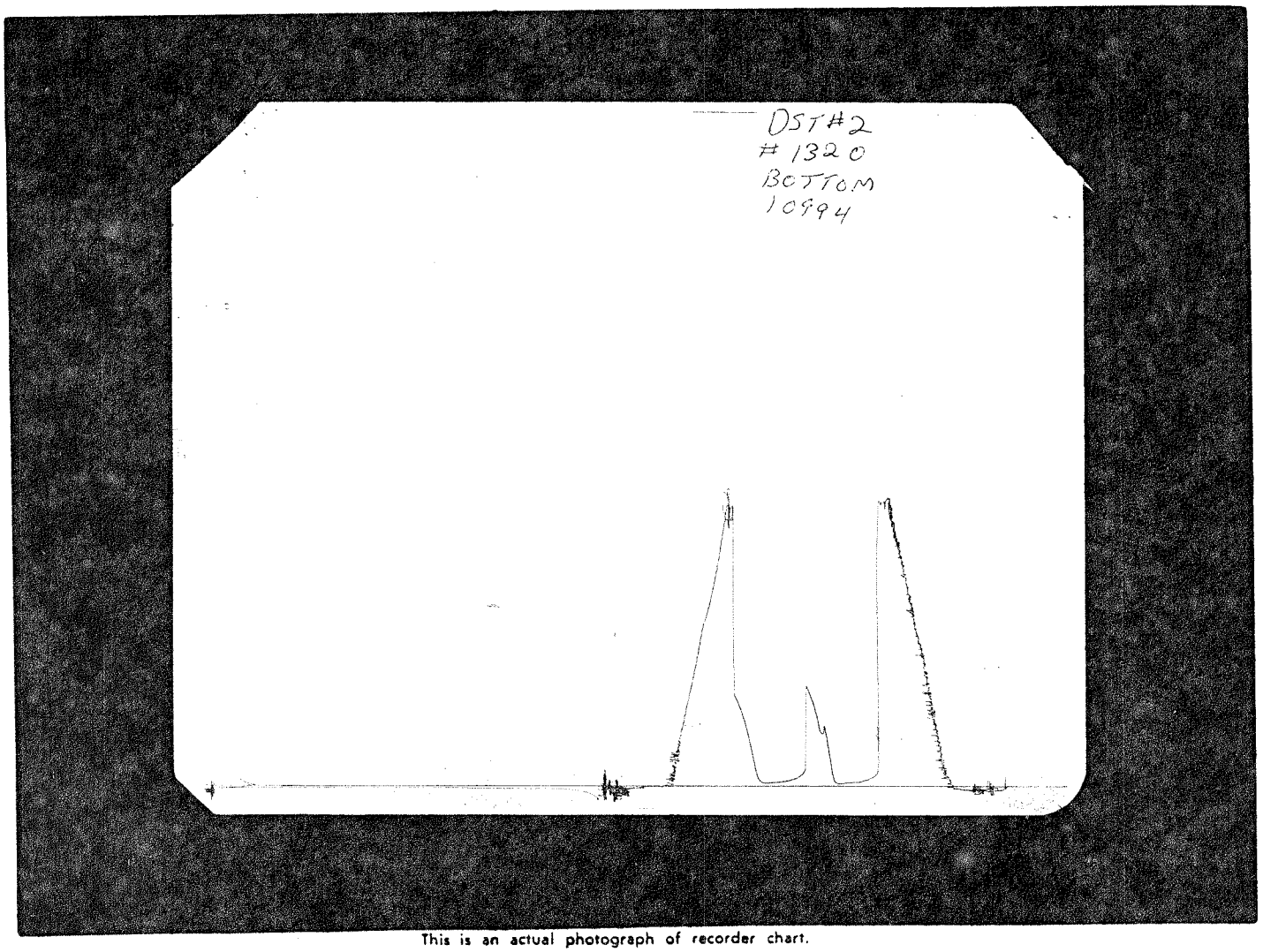
Thank-you

Price of Job $660.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,716	1,838	PSI
(B)	First Initial Flow Pressure	35	11	PSI
(C)	First Final Flow Pressure	35	25	PSI
(D)	Initial Closed-in Pressure	689	692	PSI
(E)	Second Initial Flow Pressure	35	16	PSI
(F)	Second Final Flow Pressure	35	28	PSI
(G)	Final Closed-in Pressure	655	640	PSI
(H)	Final Hydrostatic Mud	1,693	1,770	PSI



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POINT		PRESSURE Field Reading	Office Reading
(A)	Initial Hydrostatic Mud		PSI
(B)	First Initial Flow Pressure		PSI
(C)	First Final Flow Pressure		PSI
(D)	Initial Closed-in Pressure		PSI
(E)	Second Initial Flow Pressure		PSI
(F)	Second Final Flow Pressure		PSI
(G)	Final Closed-in Pressure		PSI
(H)	Final Hydrostatic Mud		PSI

CRUDE OIL TESTING COMPANY

P.O. Box 2260
Colorado Springs, Colorado 80901
(303) 473-6909

Date 5/30/81 Test Ticket No. 1320

Recorder No. Kuster AK-1 #13251 Capacity 4,550 PSI Location 3,575 Ft.

Clock No. #16067 Elevation 2,263 K. B. Well Temperature 114 °F

Point		Pressure			Field Time	Time Computed
A	Initial Hydrostatic Mud	1,838	P.S.I.	Open Tool	7:15 PM	
B	First Initial Flow Pressure	11	P.S.I.	First Flow Pressure	30 Mins.	Mins.
C	First Final Flow Pressure	25	P.S.I.	Initial Closed-in Pressure	30 Mins.	Mins.
D	Initial Closed-in Pressure	692	P.S.I.	Second Flow Pressure	30 Mins.	Mins.
E	Second Initial Flow Pressure	16	P.S.I.	Final Closed-in Pressure	30 Mins.	Mins.
F	Second Final Flow Pressure	28	P.S.I.			
G	Final Closed-in Pressure	640	P.S.I.			
H	Final Hydrostatic Mud	1,770	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 6 Inc.		Breakdown: 6 Inc.		Breakdown: 6 Inc.		Breakdown: 6 Inc.	
of 5 mins. and a		of 5 mins. and a		of 5 mins. and a		of 5 mins. and a	
final inc. of Min.		final inc. of Min.		final inc. of Min.		final inc. of Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 00	11	00	25	00	16	00	28
P 2 05	13	05	89	05	17	05	49
P 3 10	16	10	291	10	19	10	146
P 4 15	18	15	447	15	21	15	321
P 5 20	20	20	490	20	23	20	475
P 6 25	23	25	622	25	26	25	583
P 7 30	25	30	692	30	28	30	640
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TEST REPORT

(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 80901

CRUDE OIL TESTING INC.

Test Ticket No. 1201

Company A. Scott Ritchie Date 5/31/81

Company Address 125 N. Market Suite 950 - Wichita No. of Charts 5

Location: Sec. 3 Twp. 11 Rge. 23 Co. Trego State Kansas

Well Name And Number Harger #1-C Tester Elmer Burgardt

Contractor Murfin Drlg. Rig No. #16 Co. Rep. George Mueller

Formation Kansas City Zone _____ Type of Test Conventional

DST# 3

Interval 3,638 To 3,708 Total Depth 3,708

Open 30 Shut In 60 Open 45 Shut In 75

Packer(s) Set 8:08 ~~A.M.~~ P.M. Started off Bottom 11:40 ~~A.M.~~ P.M.

Blow 1st Open: Strong increasing blow to bottom of bucket in 9 min.
2nd Open: Strong increasing blow to bottom of bucket in 13 min.

Recovery

Total Feet 625

Recovered 5 Ft. of Mud.

Recovered 186 Ft. of Gas & slightly oil cut mud.

Recovered 186 Ft. of Gas & heavy oil cut mud.

Recovered 248 Ft. of Foamy gas & heavy oil cut mud.

Recovered _____ Ft. of _____

Recovered _____ Ft. of _____

Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides _____

Pressures & Temp. (Office Reading If Applicable)

Initial Hydrostatic Pressure 1,818 Final Hydrostatic Pressure 1,795

Initial Closed In Pressure 895 Final Closed In Pressure 758

Initial Flow Pressure 104 To 184 Final Flow Pressure 242 To 288

Test Area Temperature 116

Engineering Date

Elevation 2,263 K. B.

Mud Viscosity 44 Mud Weight 9.5 Water Loss 14.4

Chlorides 23,000 P.P.M. Type of Mud Starch Anchor Length 70

Hole Size 7 7/8 Casing Size 8 5/8 Surface Choke 3/4 Bottom Choke 3/4

Drill Pipe Length 2,785 I.D. 3.8 In. Weight Pipe Length 635 I.D. 2.76 In.

Drill Collar Length 218 I.D. 2.25 In.

Top Packer Depth. _____ Bottom Packer Depth. 3,638 Packer Size 6 3/4

Test Tool Size 5½ In. Tool Joint Size 4½ FH In.

Did Well Flow No Reversed Out _____

Recorder Type and No. Kuster #13251 Clock Range No. #16067 12 Hr.

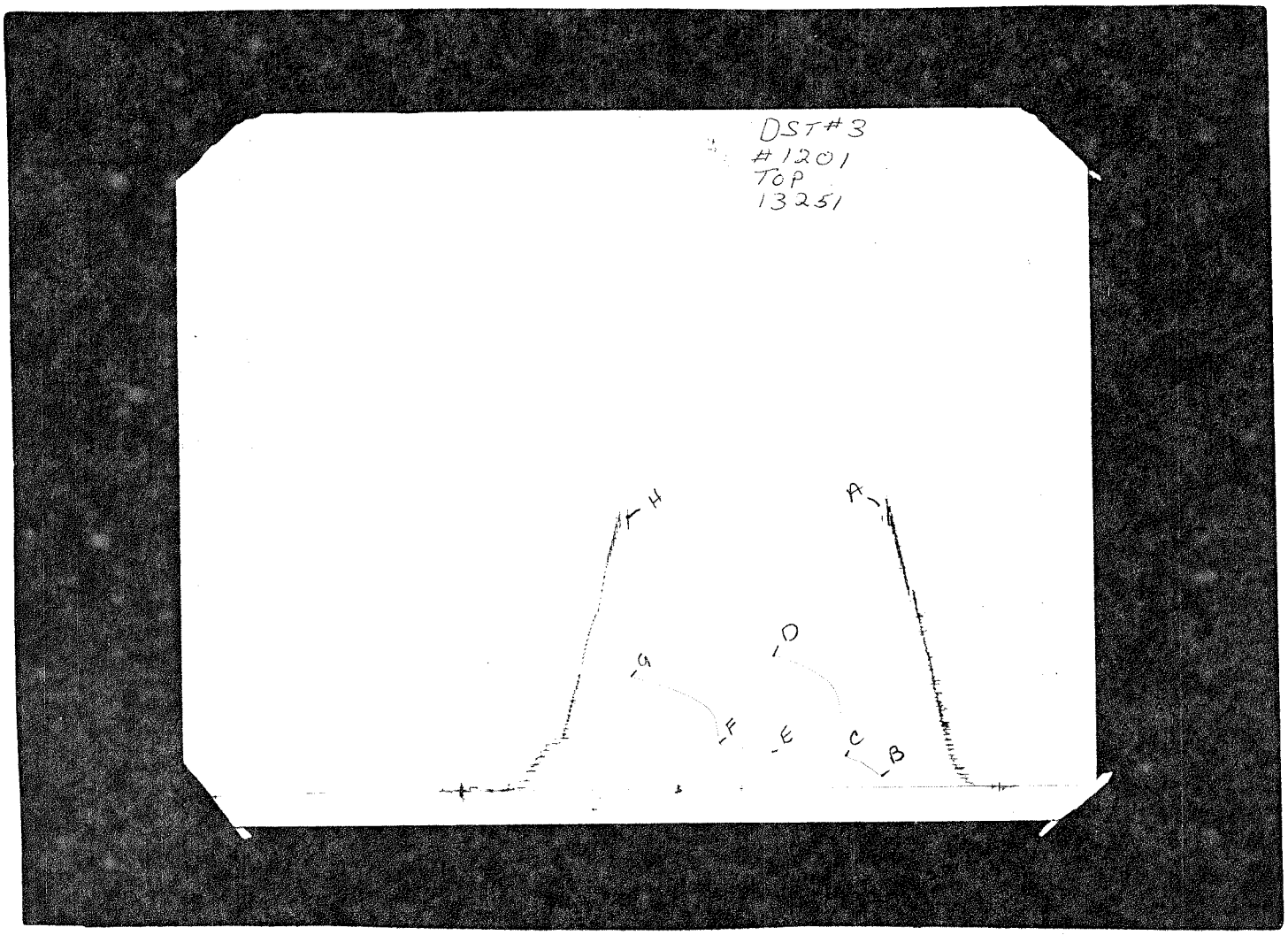
Recorder Type and No. Kuster #10994 Clock Range No. #14074 12 Hr.

Extra Equipment Single Conventional packer.

Remarks Open Hole Test - $660.00

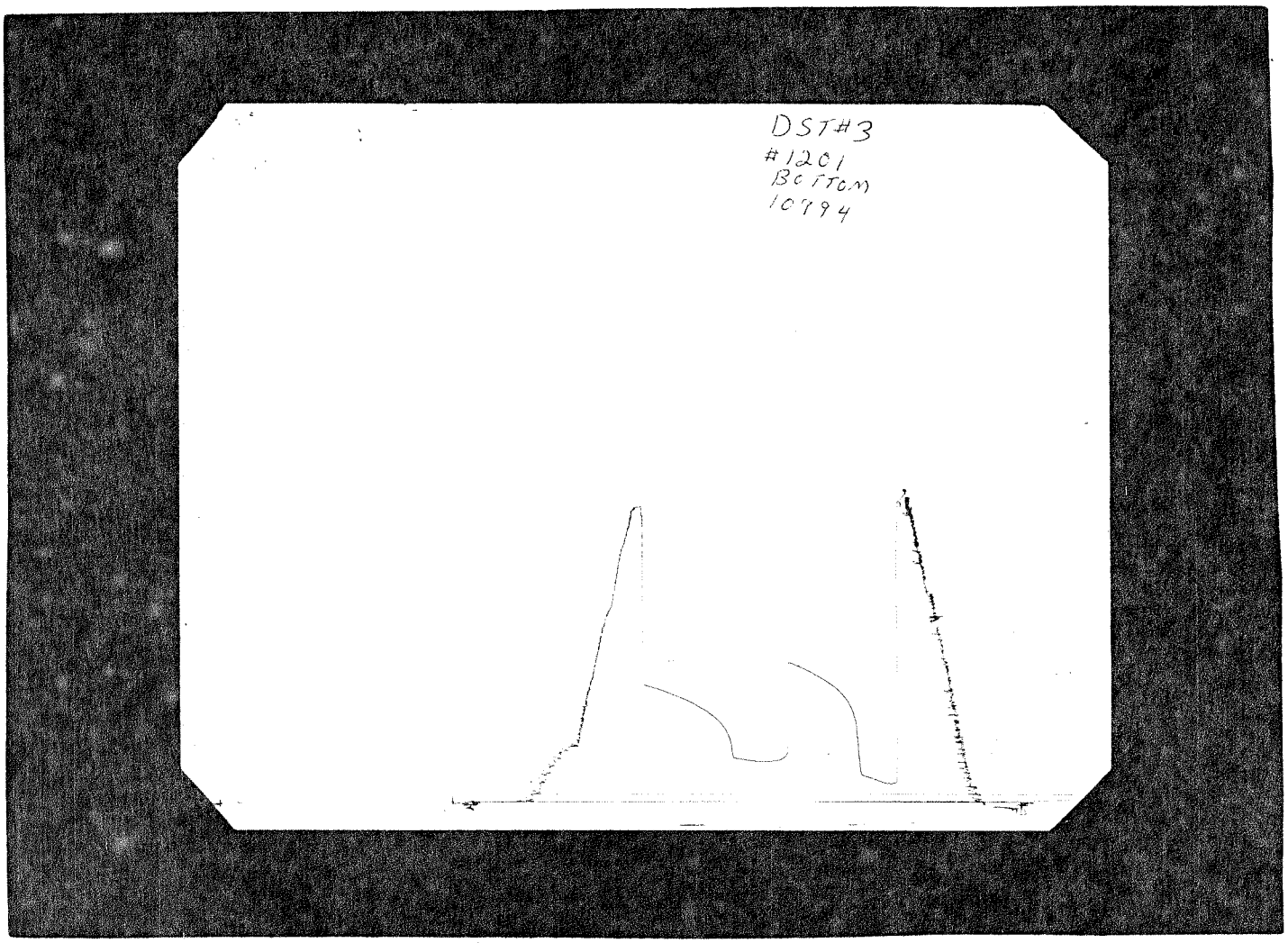
Thank-you

Price of Job $660.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,818	1,925	PSI
(B)	First Initial Flow Pressure	104	83	PSI
(C)	First Final Flow Pressure	184	205	PSI
(D)	Initial Closed-in Pressure	895	894	PSI
(E)	Second Initial Flow Pressure	242	231	PSI
(F)	Second Final Flow Pressure	288	295	PSI
(G)	Final Closed-in Pressure	758	752	PSI
(H)	Final Hydrostatic Mud	1,795	1,831	PSI



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POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud			PSI
(B)	First Initial Flow Pressure			PSI
(C)	First Final Flow Pressure			PSI
(D)	Initial Closed-in Pressure			PSI
(E)	Second Initial Flow Pressure			PSI
(F)	Second Final Flow Pressure			PSI
(G)	Final Closed-in Pressure			PSI
(H)	Final Hydrostatic Mud			PSI

CRUDE OIL TESTING COMPANY

P.O. Box 2260
Colorado Springs, Colorado 80901
(303) 473-6909

Date 5/31/81 Test Ticket No. 1201

Recorder No. Kuster AK-1 #13251 Capacity 4,550 PSI Location 3,698 Ft.

Clock No. #16067 Elevation 2,263 K. B. Well Temperature 116 °F

Point		Pressure			Field Time	Time Computed
A	Initial Hydrostatic Mud	1,925	P.S.I.	Open Tool	8:10 PM	
B	First Initial Flow Pressure	83	P.S.I.	First Flow Pressure	30 Mins.	Mins.
C	First Final Flow Pressure	205	P.S.I.	Initial Closed-in Pressure	60 Mins.	Mins.
D	Initial Closed-in Pressure	894	P.S.I.	Second Flow Pressure	45 Mins.	Mins.
E	Second Initial Flow Pressure	231	P.S.I.	Final Closed-in Pressure	75 Mins.	Mins.
F	Second Final Flow Pressure	295	P.S.I.			
G	Final Closed-in Pressure	752	P.S.I.			
H	Final Hydrostatic Mud	1,831	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: 6 Inc. of 5 mins. and a final inc. of Min.

Initial Shut-In Breakdown: 12 Inc. of 5 mins. and a final inc. of Min.

Second Flow Pressure Breakdown: 9 Inc. of 5 mins. and a final inc. of Min.

Final Shut-In Breakdown: 15 Inc. of 5 mins. and a final inc. of Min.

Point	Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	00	83	00	205	00	231	00	295
P 2	05	104	05	570	05	235	05	503
P 3	10	133	10	669	10	242	10	546
P 4	15	162	15	715	15	252	15	575
P 5	20	177	20	747	20	262	20	600
P 6	25	191	25	773	25	271	25	621
P 7	30	205	30	800	30	279	30	640
P 8			35	819	35	285	35	656
P 9			40	836	40	291	40	672
P10			45	852	45	295	45	685
P11			50	867			50	698
P12			55	881			55	710
P13			60	894			60	722
P14							65	732
P15							70	744
P16							75	752
P17								
P18								
P19								
P20								

DRILL STEM TEST RECOVERY ANALYSIS

(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 80901

COMPANY: A. Scott Ritchie
LEASE: Harger #1-C
DST# 3
SEC: 3 Twp: 11 Rge: 23
COUNTY: Trego
STATE: Kansas

VISUAL DST RECOVERY: 625' Gassy oil cut mud.

CENTIFUDGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	5	10	10	15	65
2	124	15	20	10	55
3	124	20	50	10	20
4	124	15	70	10	5
5	124	15	70	10	5
6	124	10	75	10	5
7	124	25	60	10	5

CALCULATED FLUID RECOVERY FROM PERCENTAGES

(Formula for Calculation)

Percent of individual fluid × Total footage represented in sample

SAMPLE #	TOTAL FOOTAGE	GAS %	×	Total	=	Feet	OIL %	×	Total	=	Feet	WATER %	×	Total	=	Feet	MUD %	×	Total	=	Feet
1	5	10	×	5	=	.5	10	×	5	=	.5	15	×	5	=	.75	65	×	5	=	3.25
2	124	15	×	124	=	18.6	20	×	124	=	24.8	10	×	124	=	12.4	55	×	124	=	68.2
3	124	20	×	124	=	24.8	50	×	124	=	62	10	×	124	=	12.4	20	×	124	=	24.8
4	124	15	×	124	=	18.6	70	×	124	=	86.8	10	×	124	=	12.4	5	×	124	=	6.2
5	124	15	×	124	=	18.6	70	×	124	=	86.8	10	×	124	=	12.4	5	×	124	=	6.2
6	124	10	×	124	=	12.4	75	×	124	=	93	10	×	124	=	12.4	5	×	124	=	6.2
			×		=			×		=			×		=			×		=	
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			×		=			×		=			×		=			×		=	
Totals						93.5					353.9					62.75					114.85

CALCULATED DST RECOVERY =

CHLORIDES MUD SYSTEM
CHLORIDES DST WATER
GRAVITY OF OIL

GAS	93.5
OIL	353.9
WTR	62.75
MUD	114.85
TOTAL FLUID	625'

TEST REPORT

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Test Ticket No. 1202

Company A. Scott Ritchie Date 6/01/81
Company Address 125 N. Market Suite 950 - Wichita No. of Charts 5
Location: Sec. 3 Twp. 11 Rge. 23 Co. Trego State Kansas
Well Name And Number Harger #1-C Tester Elmer Burgardt
Contractor Murfin Drlg. Rig No. #16 Co. Rep. George Mueller

Formation B K C Zone 200 - 220 Type of Test Conventional

DST# 4 Interval 3,708 To 3,755 Total Depth 3,755
Open 30 Shut In 30 Open 30 Shut In 30
Packer(s) Set 4:13 ~~A.M.~~ P.M. Started off Bottom 6:15 ~~A.M.~~ P.M.
Blow 1st Open: Weak on top of bucket died in 9 min. 2nd Open: Very weak on top of bucket died in 8 min.

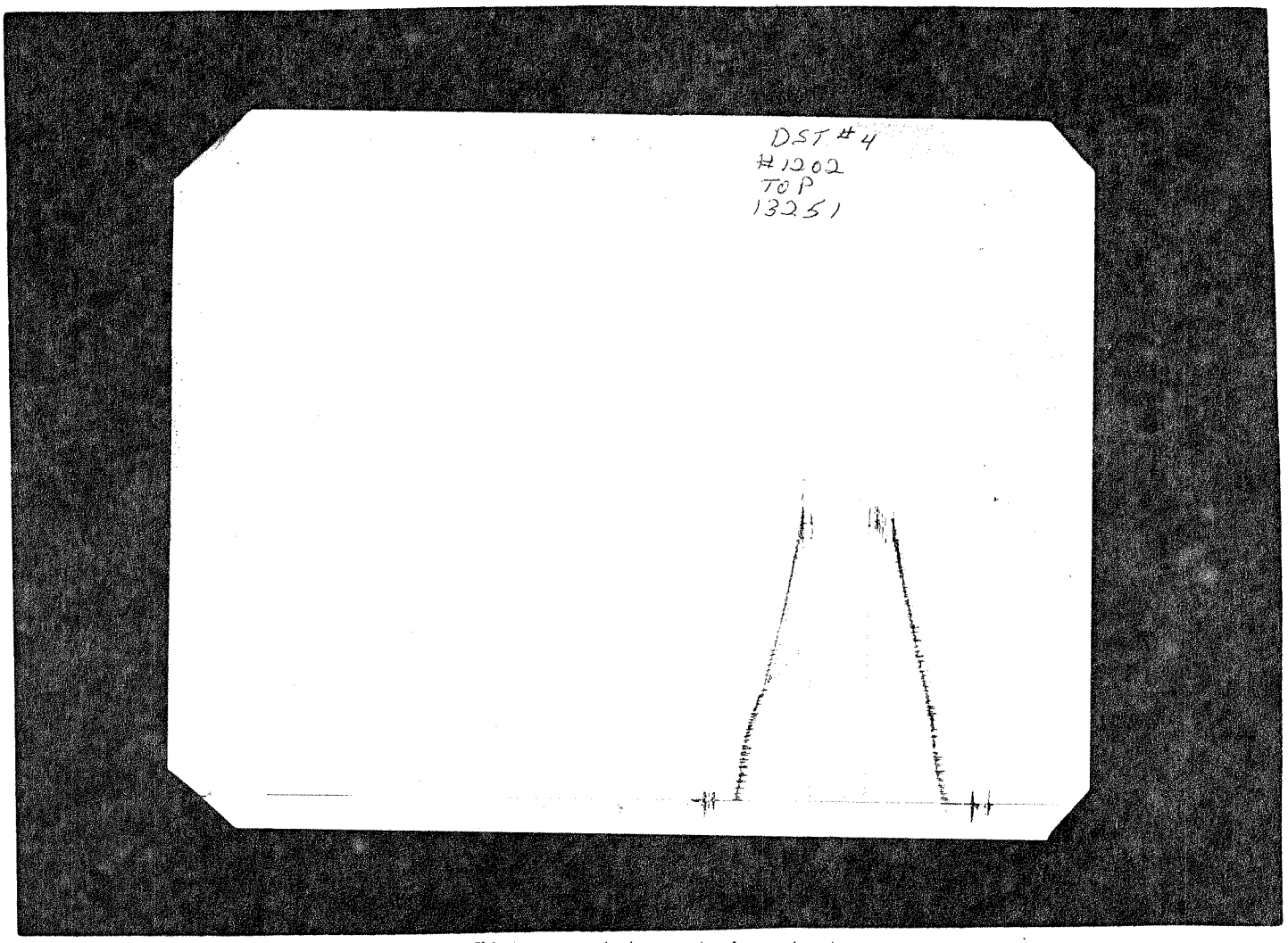
Recovery
Total Feet 10
Recovered 10 Ft. of Mud
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides _____

Pressures & Temp. (Office Reading If Applicable)
Initial Hydrostatic Pressure 1,898 Final Hydrostatic Pressure 1,877
Initial Closed In Pressure 43 Final Closed In Pressure 32
Initial Flow Pressure 43 To 43 Final Flow Pressure 43 To 43
Test Area Temperature 118

Engineering Date
Elevation 2,263 K. B.
Mud Viscosity 45 Mud Weight 9.5 Water Loss 11.6
Chlorides 19,000 P.P.M. Type of Mud Starch Anchor Length 47
Hole Size 7 7/8 Casing Size 8 5/8 Surface Choke 3/4 Bottom Choke 3/4
Drill Pipe Length 2,855 I.D. 3.8 In. Weight Pipe Length 635 I.D. 2.76 In.
Drill Collar Length _____ I.D. _____ In.
Top Packer Depth. _____ Bottom Packer Depth. 3,708 Packer Size 6 3/4
Test Tool Size 5½ In. Tool Joint Size 4½ FH In.
Did Well Flow No Reversed Out No
Recorder Type and No. Kuster #13251 Clock Range No. #16067 12 Hr.
Recorder Type and No. Kuster #10994 Clock Range No. #14074 12 Hr.
Extra Equipment Single conventional packer.
Remarks Open Hole Test - $660.00
Clock stopped on top recorder.

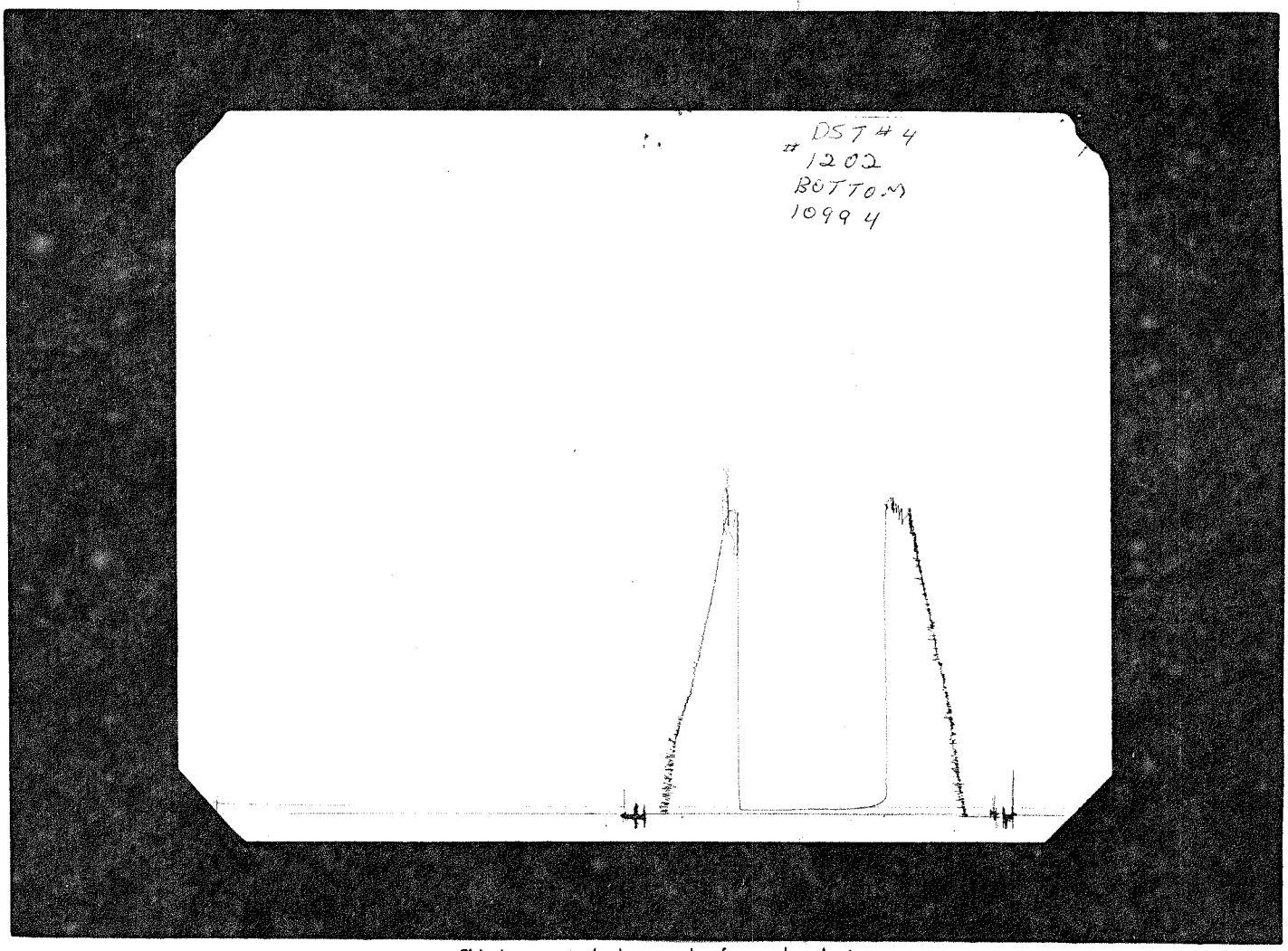
Thank-you

Price of Job $660.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,898		PSI
(B)	First Initial Flow Pressure	43		PSI
(C)	First Final Flow Pressure	43		PSI
(D)	Initial Closed-in Pressure	43		PSI
(E)	Second Initial Flow Pressure	43		PSI
(F)	Second Final Flow Pressure	43		PSI
(G)	Final Closed-in Pressure	32		PSI
(H)	Final Hydrostatic Mud	1,877		PSI



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POINT		PRESSURE Field Reading	PRESSURE Office Reading
(A)	Initial Hydrostatic Mud		PSI
(B)	First Initial Flow Pressure		PSI
(C)	First Final Flow Pressure		PSI
(D)	Initial Closed-in Pressure		PSI
(E)	Second Initial Flow Pressure		PSI
(F)	Second Final Flow Pressure		PSI
(G)	Final Closed-in Pressure		PSI
(H)	Final Hydrostatic Mud		PSI