COMPANY Mobile C. Hoover LEASE AND WELL NO. Rinker #1 SEC. 6 TWP. 12S RGE. 22W TEST NO. 1 - 7 DATE 10/9/81

COPY

CRUDE OIL TESTING CO.

DRILL STEM TEST REPORT

TEST REPORT

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

CRUDE OIL TESTING INC.

Test Ticket No. 1489

Company Moble C. Hoover Date 10/5/81

Company Address 302 NBC Plaza, El Dorado, AR No. of Charts 5

Location: Sec. 6 Twp. 12S Rge. 22W Co. Trego State KS

Well Name And Number Rinker #1 Tester Mitch Dougherty

Contractor Abercrombie Drlg Rig No. #1 Co. Rep. Mike Freeman

Formation Lansing Zone _____ Type of Test Conventional

DST# 1 Interval 3,636 To 3,677 Total Depth 3,677

Open 30 9:15 Shut In 60 9:45 Open 60 10:45 Shut In 60 11:45

Packer(s) Set 9:13 ~~A.M.~~ ~~P.M.~~ Started off Bottom 12:45 ~~P.M~~

Blow 1st Open: Good, steady blow to 6" in bucket.

2nd Open: Good, steady blow to 6" in bucket.

Recovery

Total Feet 190

Recovered 3 Ft. of Oil

Recovered 101 Ft. of Water

Recovered 86 Ft. of Mud

Recovered _____ Ft. of _____

Recovered _____ Ft. of _____

Recovered _____ Ft. of _____

Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides 35,000

Pressures & Temp. (Office Reading If Applicable)

Initial Hydrostatic Pressure 1,830 Final Hydrostatic Pressure 1,807

Initial Closed In Pressure 941 Final Closed In Pressure 906

Initial Flow Pressure 35 To 69 Final Flow Pressure 69 To 115

Test Area Temperature 114

Engineering Date

Elevation 2,414 K.B.

Mud Viscosity 48 Mud Weight 9.4 Water Loss 9.6

Chlorides 15,000 P.P.M. Type of Mud Monpac Anchor Length 41'

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

Drill Pipe Length 2,760 I.D. 3.8 In. Weight Pipe Length 643 I.D. 2.76 In.

Drill Collar Length _____ I.D. _____ In.

Top Packer Depth. 3,631 Bottom Packer Depth. 3,636 Packer Size 6-3/4

Test Tool Size 5-1/2 In. Tool Joint Size 4-1/2 XH In.

Did Well Flow No Reversed Out No

Recorder Type and No. AK-1 13251 Clock Range No. 14074 12 Hr.

Recorder Type and No. AK-1 10994 Clock Range No. 22348 12 Hr.

Extra Equipment None.

Remarks Open Hole Test. Thank You.

Price of Job $660.00

CRUDE OIL TESTING COMPANY

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

Date 10/5/81 Test Ticket No. 1489

Recorder No. Kuster AK-1 13251 Capacity 4,550 PSI Location 3,667 Ft.

Clock No. 14074 Elevation 2,414 K.B. Well Temperature 114 °F

Point		Pressure		Field Time	Time Computed
A	Initial Hydrostatic Mud	1,829	P.S.I.	Open Tool 9:15 A M	
B	First Initial Flow Pressure	41	P.S.I.	First Flow Pressure 30 Mins.	Mins.
C	First Final Flow Pressure	62	P.S.I.	Initial Closed-in Pressure 60 Mins.	59 Mins.
D	Initial Closed-in Pressure	938	P.S.I.	Second Flow Pressure 60 Mins.	Mins.
E	Second Initial Flow Pressure	82	P.S.I.	Final Closed-in Pressure 60 Mins.	Mins.
F	Second Final Flow Pressure	122	P.S.I.		
G	Final Closed-in Pressure	904	P.S.I.		
H	Final Hydrostatic Mud	1,790	P.S.I.		

PRESSURE BREAKDOWN

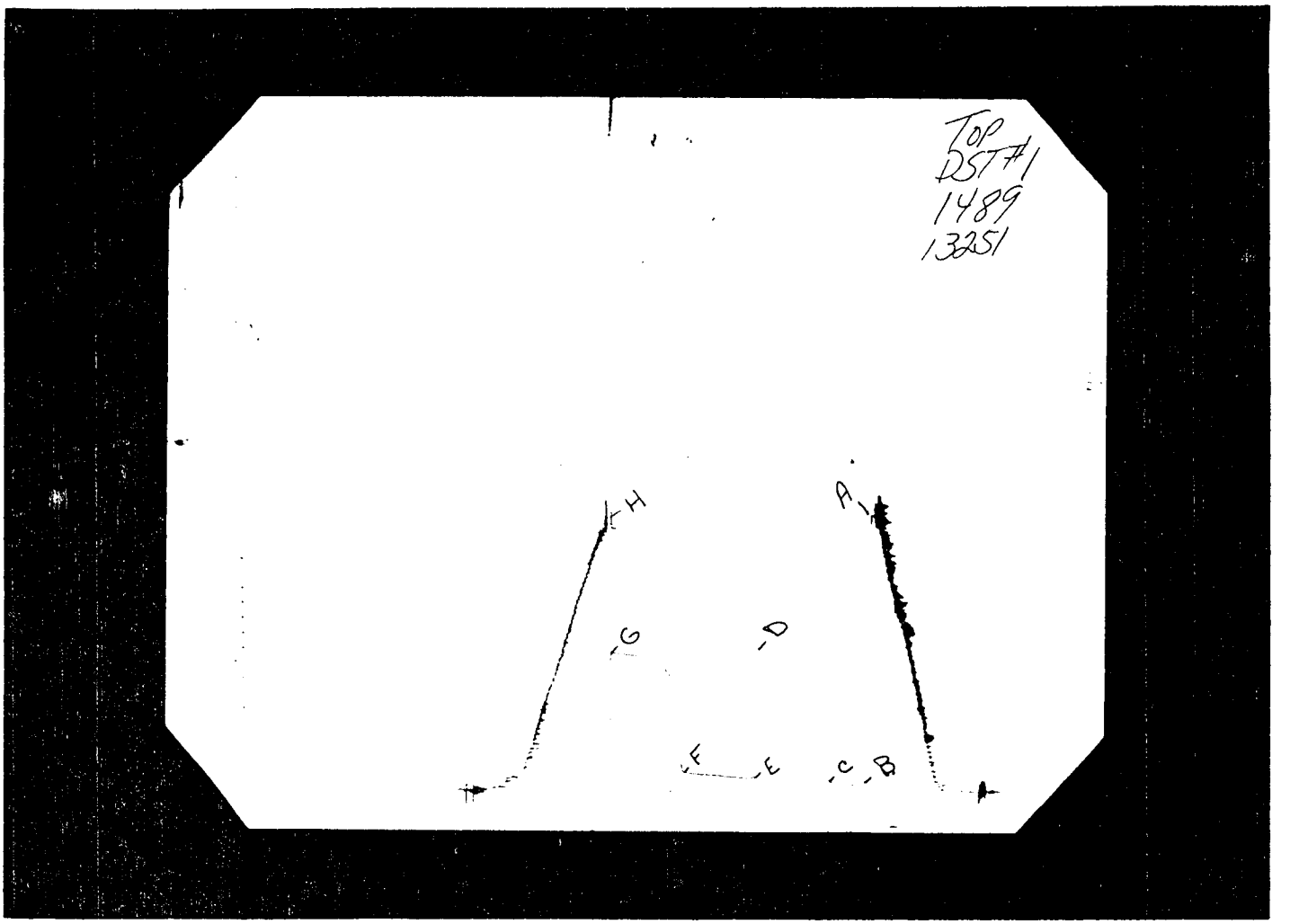
First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of ___ Min.

Initial Shut-In
Breakdown: 11 Inc.
of 5 mins. and a
final inc. of 4 Min.

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of ___ Min.

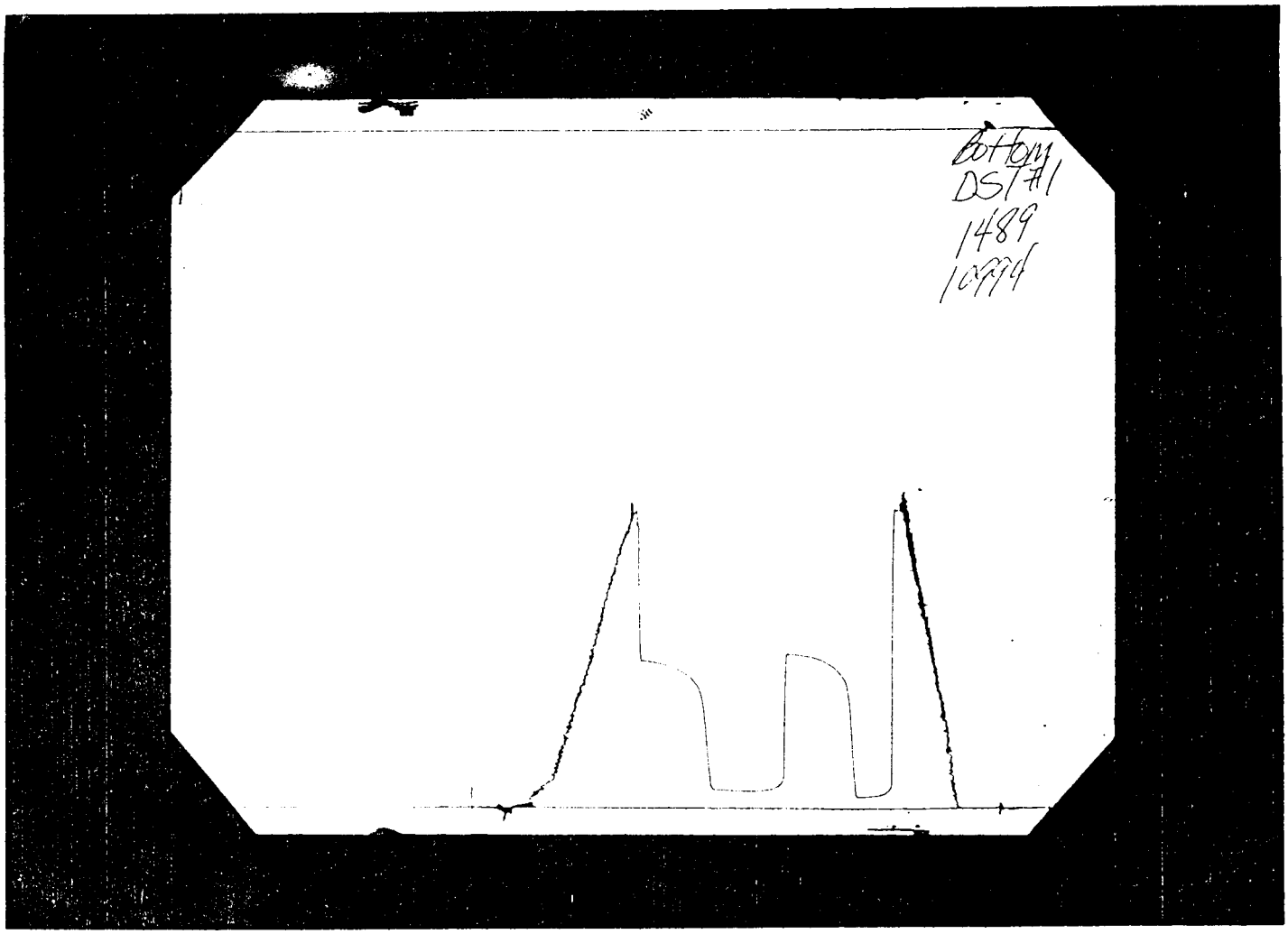
Final Shut-In
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of ___ Min.

Point	First Flow Pressure Mins.	First Flow Pressure Press.	Initial Shut-In Point Minutes	Initial Shut-In Press.	Second Flow Pressure Point Minutes	Second Flow Pressure Press.	Final Shut-In Point Minutes	Final Shut-In Press.
P 1	0	41	0	62	0	82	0	122
P 2	5	41	5	632	5	82	5	506
P 3	10	41	10	803	10	82	10	735
P 4	15	48	15	853	15	82	15	803
P 5	20	55	20	881	20	94	20	828
P 6	25	62	25	899	25	99	25	849
P 7	30	62	30	910	30	103	30	863
P 8			35	917	35	108	35	876
P 9			40	926	40	108	40	888
P10			45	931	45	112	45	892
P11			50	933	50	112	50	899
P12			55	938	55	119	55	901
P13			59	938	60	122	60	904
P14								
P15								
P16								
P17								
P18								
P19								
P20								



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,830	1,829	PSI
(B)	First Initial Flow Pressure	35	41	PSI
(C)	First Final Flow Pressure	69	62	PSI
(D)	Initial Closed-in Pressure	941	938	PSI
(E)	Second Initial Flow Pressure	69	82	PSI
(F)	Second Final Flow Pressure	115	122	PSI
(G)	Final Closed-in Pressure	906	904	PSI
(H)	Final Hydrostatic Mud	1,807	1,790	PSI



This is an actual photograph of recorder chart.

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

DRILL STEM TEST RECOVERY ANALYSIS

(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 8090

COMPANY: Moble C. Hoover LEASE: Rinker #1 DST# 1 #1489
SEC: 6 Twp: 12S Rge: 22W COUNTY: Trego STATE: KS

VISUAL DST RECOVERY: 190' Muddy, oil cut salt water

CENTRIFUGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	10		30	20	50
2	60		Trace	35	65
3	60			80	20
4	60			50	50

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	10		×		=		30	×	10	=	3.	20	×	10	=	2.	50	×	10	=	5.
2	60		×		=		Tr	×	60	=	-	35	×	60	=	21.	65	×	60	=	39.
3	60		×		=			×		=		80	×	60	=	48.	20	×	60	=	12.
4	60		×		=			×		=		50	×	60	=	30.	50	×	60	=	30.
			×		=			×		=			×		=			×		=	
			×		=			×		=			×		=			×		=	
			×		=			×		=			×		=			×		=	
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			×		=			×		=			×		=			×		=	
Totals											3.					101.					86.

CALCULATED DST RECOVERY =

CHLORIDES MUD SYSTEM 15,000
CHLORIDES DST WATER 35,000
GRAVITY OF OIL

GAS 0'
OIL 3
WTR 101
MUD 86
TOTAL FLUID 190'

TEST REPORT

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

Test Ticket No. 1490

Company Moble C. Hoover Date 10/6/81
Company Address 302 NBC Plaza, El Dorado, AR No. of Charts 5
Location: Sec. 6 Twp. 12S Rge. 22W Co. Trego State KS
Well Name And Number Rinker #1 Tester Mitch Dougherty
Contractor Abercrombie Drlg. Rig No. #1 Co. Rep. Mike Freeman

Formation Lansing Zone _____ Type of Test Conventional

DST# 2
Interval 3,726 To 3,759 Total Depth 3,759
Open 30 5:15 Shut In 60 5:45 Open 30 6:45 Shut In 60 7:15
Packer(s) Set 5:13 ~~AM~~ PM Started off Bottom 8:15 ~~AM~~ PM
Blow 1st Open: Very strong blow off bottom of bucket in 2 mins.
2nd Open: Very strong blow off bottom of bucket in 5 mins.

Recovery
Total Feet 1,410
Recovered 1,410 Ft. of Oil cut salt water
Recovered _____ Ft. of _____
Recovered 150 Ft. of Gas in pipe
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides 83,000

Pressures & Temp. (Office Reading If Applicable)
Initial Hydrostatic Pressure 1,852 Final Hydrostatic Pressure 1,830
Initial Closed In Pressure 884 Final Closed In Pressure 884
Initial Flow Pressure 92 To 472 Final Flow Pressure 575 To 701
Test Area Temperature 118

Engineering Date
Elevation 2,414 K.B.
Mud Viscosity 48 Mud Weight 9.4 Water Loss 9.6
Chlorides 15,000 P.P.M. Type of Mud Monpac Anchor Length 33'
Hole Size 7-7/8 Casing Size 8-5/8 Surface Choke 3/4 Bottom Choke 3/4
Drill Pipe Length 2,842 I.D. 3.8 In. Weight Pipe Length 643 I.D. 2.76 In.
Drill Collar Length _____ I.D. _____ In.
Top Packer Depth. 3,721 Bottom Packer Depth. 3,726 Packer Size 6-3/4
Test Tool Size 5-1/2 In. Tool Joint Size 4-1/2 XH In.
Did Well Flow No Reversed Out No
Recorder Type and No. AK-1 13251 Clock Range No. 14074 12 Hr.
Recorder Type and No. AK-1 10994 Clock Range No. 22348 12 Hr.
Extra Equipment None.
Remarks Open Hole Test. Thank You.

Price of Job $660.00

CRUDE OIL TESTING COMPANY

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

Date 10/6/81 Test Ticket No. 1490

Recorder No. Kuster AK-1 13251 Capacity 4,550 PSI Location 3,749 Ft.

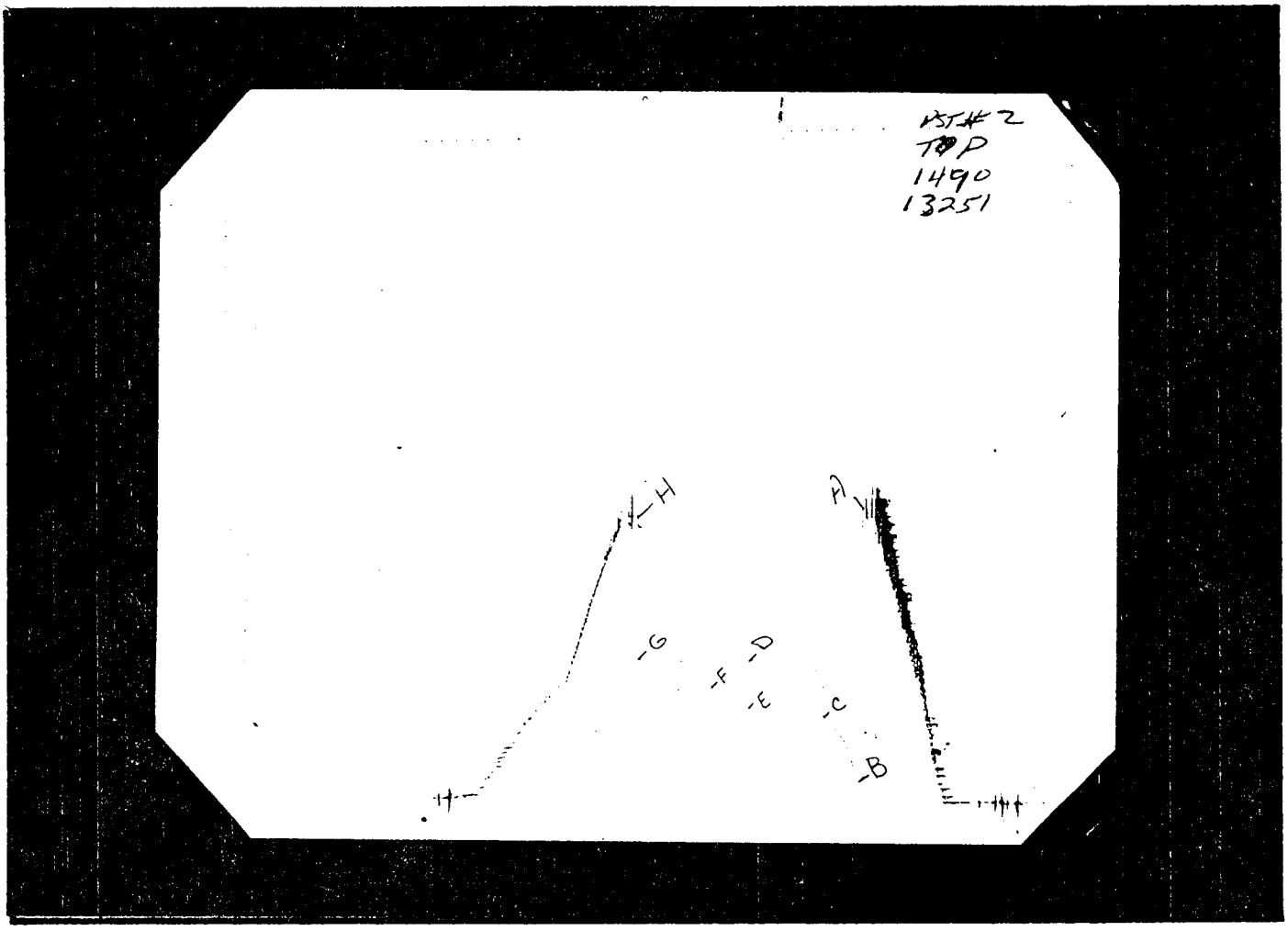
Clock No. 14074 Elevation 2,414 K.B. Well Temperature 118 °F

Point		Pressure			Field Time	Time Computed
A	Initial Hydrostatic Mud	1,870	P.S.I.	Open Tool	5:15 AM	
B	First Initial Flow Pressure	129	P.S.I.	First Flow Pressure	30 Mins.	Mins.
C	First Final Flow Pressure	545	P.S.I.	Initial Closed-in Pressure	60 Mins.	58 Mins.
D	Initial Closed-in Pressure	908	P.S.I.	Second Flow Pressure	30 Mins.	Mins.
E	Second Initial Flow Pressure	593	P.S.I.	Final Closed-in Pressure	60 Mins.	58 Mins.
F	Second Final Flow Pressure	726	P.S.I.			
G	Final Closed-in Pressure	901	P.S.I.			
H	Final Hydrostatic Mud	1,813	P.S.I.			

PRESSURE BREAKDOWN

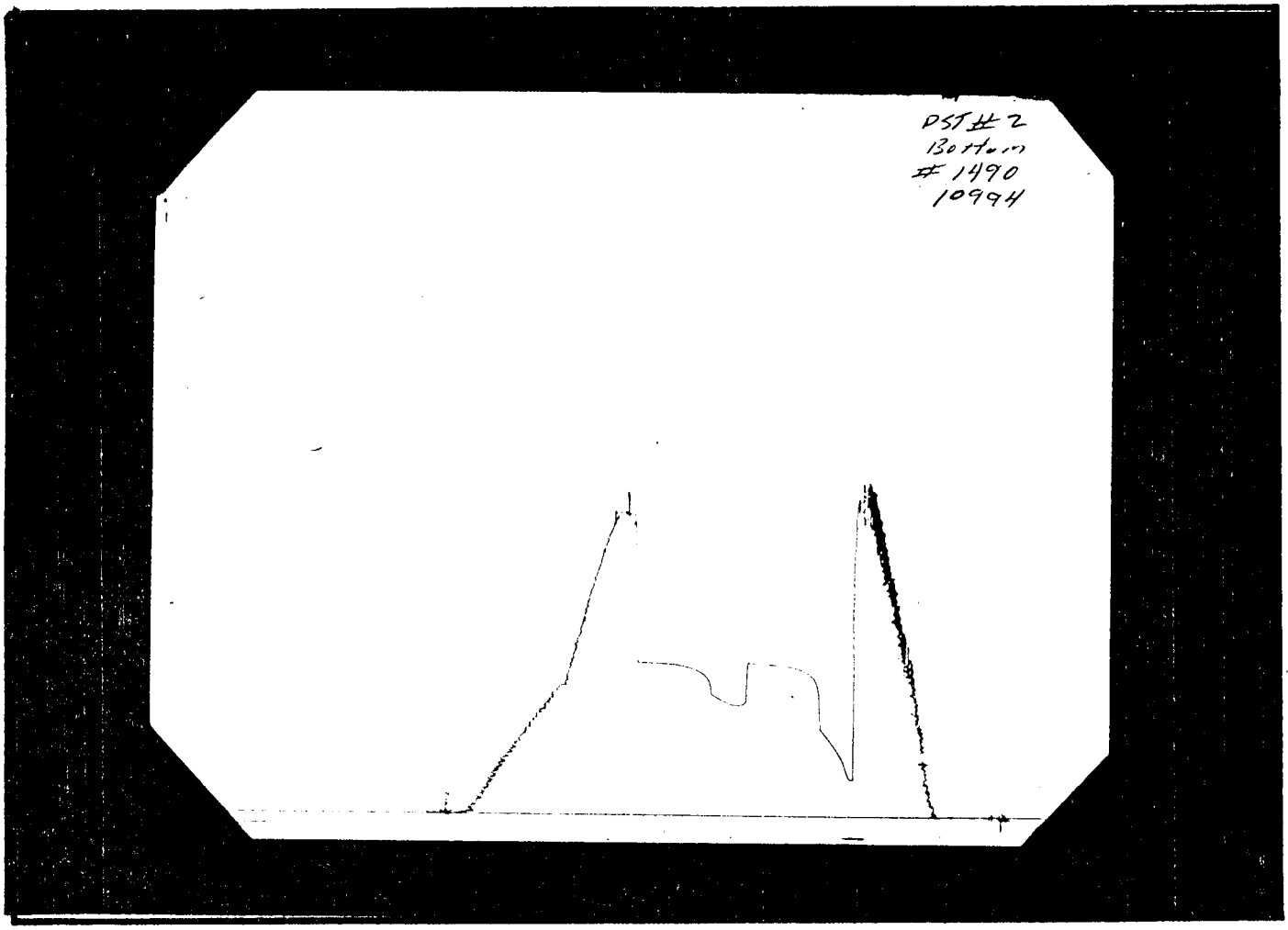
First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: 6 Inc.	Breakdown: 11 Inc.	Breakdown: 6 Inc.	Breakdown: 11 Inc.
of 5 mins. and a	of 5 mins. and a	of 5 mins. and a	of 5 mins. and a
final inc. of Min.	final inc. of 3 Min.	final inc. of Min.	final inc. of 3 Min.

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	0	129		0	545		0	593		0	726
P 2	5	237		5	842		5	602		5	863
P 3	10	361		10	865		10	636		10	874
P 4	15	423		15	879		15	664		15	883
P 5	20	472		20	888		20	689		20	892
P 6	25	518		25	894		25	712		25	897
P 7	30	545		30	899		30	726		30	899
P 8				35	899					35	899
P 9				40	899					49	899
P10				45	901					45	899
P11				50	901					50	899
P12				55	908					55	899
P13				58	908					58	901
P14											
P15											
P16											
P17											
P18											
P19											
P20											



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,852	1,870	PSI
(B)	First Initial Flow Pressure	92	129	PSI
(C)	First Final Flow Pressure	472	545	PSI
(D)	Initial Closed-in Pressure	884	908	PSI
(E)	Second Initial Flow Pressure	575	593	PSI
(F)	Second Final Flow Pressure	701	726	PSI
(G)	Final Closed-in Pressure	884	901	PSI
(H)	Final Hydrostatic Mud	1,830	1,813	PSI



This is an actual photograph of recorder chart.

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

DRILL STEM TEST
RECOVERY ANALYSIS

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

MPANY: Moble C. Hoover LEASE: Rinker #1 DST# 2 #1490
C: 6 Twp: 12S Rge: 22W COUNTY: Trego STATE: KS

ISUAL DST RECOVERY: 1,410' Slightly oil cut salt water

CENTRIFUGE PERCENTAGE ANALYSIS

ıple	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
	30	5	35	40	20
	60	5	5	55	35
	60		5	60	35
	60		5	80	15
	60		2	95	3
	60		2	95	3
	60		2	95	3
	60		2	95	3
	120		1	97	2
	120		1	97	2
	180		Trace	98	2
	180		Trace	98	2
	180		Trace	98	2
	180		Trace	98	2

CALCULATED FLUID RECOVERY FROM PERCENTAGES

(Formula for Calculation)

Percent of individual fluid × Total footage represented in sample

TOTAL FOOT-AGE	GAS %	×	Total	=	Feet	OIL %	×	Total	=	Feet	WATER %	×	Total	=	Feet	MUD %	×	Total	=	Feet
30	5	×	30	=	1.5	35	×	30	=	10.5	40	×	30	=	12.	20	×	30	=	6.
60	5	×	60	=	3.	5	×	60	=	3.	55	×	60	=	33.	35	×	60	=	21.
60		×		=		5	×	60	=	3.	60	×	60	=	36.	35	×	60	=	21.
60		×		=		5	×	60	=	3.	80	×	60	=	48.	15	×	60	=	9.
60		×		=		2	×	60	=	1.2	95	×	60	=	57.	3	×	60	=	1.8
60		×		=		2	×	60	=	1.2	95	×	60	=	57.	3	×	60	=	1.8
60		×		=		2	×	60	=	1.2	95	×	60	=	57.	3	×	60	=	1.8
60		×		=		2	×	60	=	1.2	95	×	60	=	57.	3	×	60	=	1.8
120		×		=		1	×	120	=	1.2	97	×	120	=	116.4	2	×	120	=	2.4
120		×		=		1	×	120	=	1.2	97	×	120	=	116.4	2	×	120	=	2.4
180		×		=		Tr	×	180	=	-	98	×	180	=	176.4	2	×	180	=	3.6
180		×		=		Tr	×	180	=	-	98	×	180	=	176.4	2	×	180	=	3.6
180		×		=		Tr	×	180	=	-	98	×	180	=	176.4	2	×	180	=	3.6
180		×		=		Tr	×	180	=	-	98	×	180	=	176.4	2	×	180	=	3.6
ıls					4.5					26.7					1,295.4					83.4

ALCULATED DST RECOVERY =

GAS	4.5'
OIL	26.7
WTR	1,295.4
MUD	83.4
TOTAL FLUID	1,410.0'

.ORIDES MUD SYSTEM 15,000

.ORIDES DST WATER 83,000

AVITY OF OIL

CRUDE OIL TESTING INC.

TEST REPORT

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

Test Ticket No. 1491

Company Moble C. Hoover Date 10/6/81

Company Address 302 NBC Plaza, El Dorado, AR No. of Charts 5

Location: Sec. 6 Twp. 12S Rge. 22W Co. Trego State KS

Well Name And Number Rinker #1 Tester Mitch Dougherty

Contractor Abercrombie Drlg Rig No. #1 Co. Rep. Mike Freeman

Formation Lansing Zone _____ Type of Test Straddle

DST# 3

Interval 3,689 To 3,722 Total Depth 3,759

Open 30 12:45 Shut In 60 1:15 Open 30 2:15 Shut In 60 2:45

Packer(s) Set 12:43 ~~A.M.~~ P.M. Started off Bottom 3:45 ~~P.M.~~ P.M

Blow 1st Open: Weak blow to 3/4" in bucket (blew throughout open).

2nd Open: No blow.

Recovery

Total Feet 15

Recovered 15 Ft. of Drilling 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 1,864 Final Hydrostatic Pressure 1,841

Initial Closed In Pressure 92 Final Closed In Pressure 35

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

Test Area Temperature 117

Engineering Date

Elevation 2,414 K.B.

Mud Viscosity 48 Mud Weight 9.5 Water Loss 9.6

Chlorides 15,000 P.P.M. Type of Mud _____ Anchor Length 33'

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

Drill Pipe Length 2,842 I.D. 3.8 In. Weight Pipe Length 643 I.D. 2.76 In.

Drill Collar Length 90 I.D. 2.25 In.

Top Packer Depth. 3,689 Bottom Packer Depth. 3,722 Packer Size 6-3/4

Test Tool Size 5-1/2 In. Tool Joint Size 4-1/2 XH In.

Did Well Flow No Reversed Out No

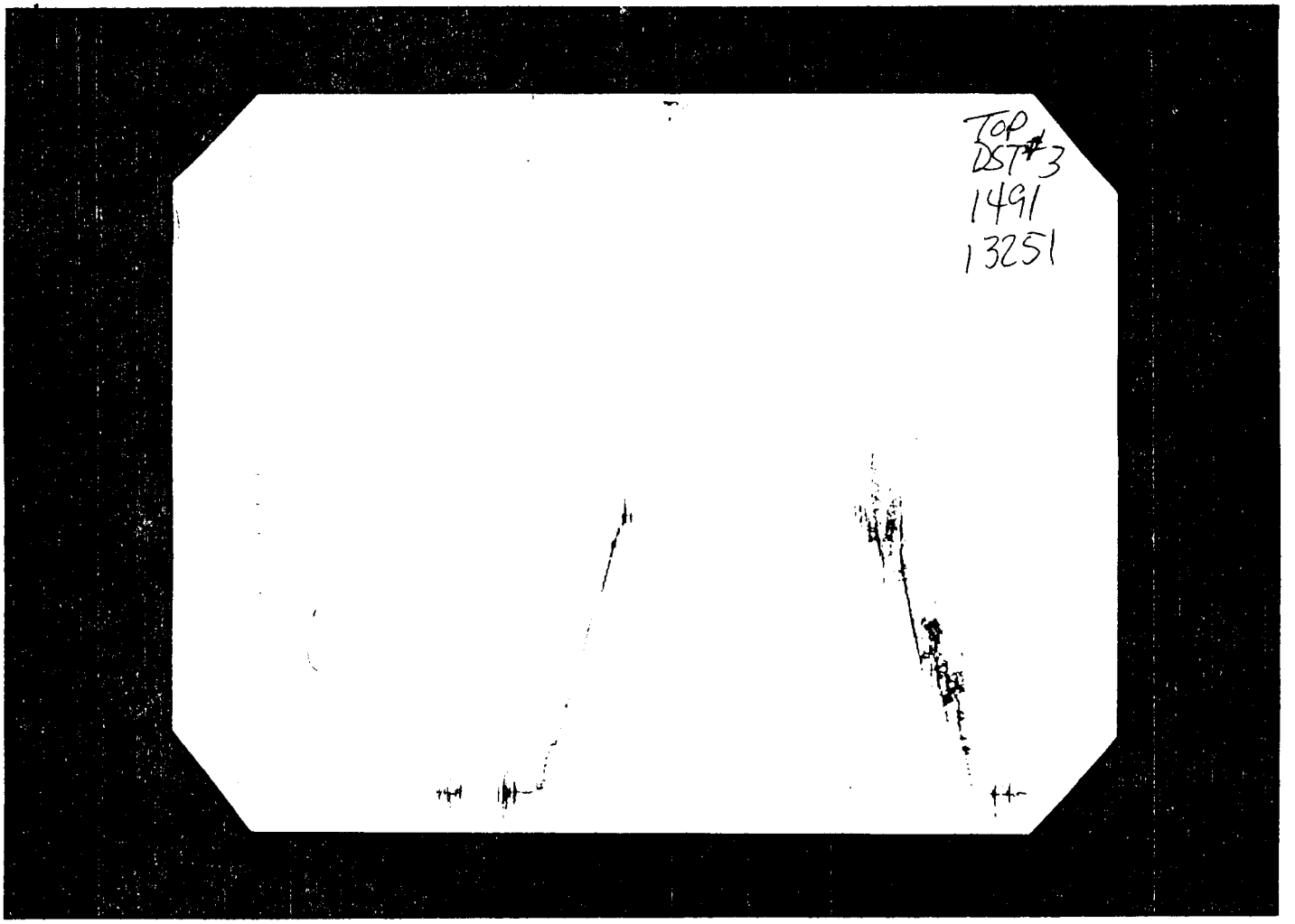
Recorder Type and No. AK-1 13251 Clock Range No. 14074 12 Hr.

Recorder Type and No. AK-1 10994 Clock Range No. 22348 12 Hr.

Extra Equipment Extra Packer Assembly Blank Off Recorder #2836

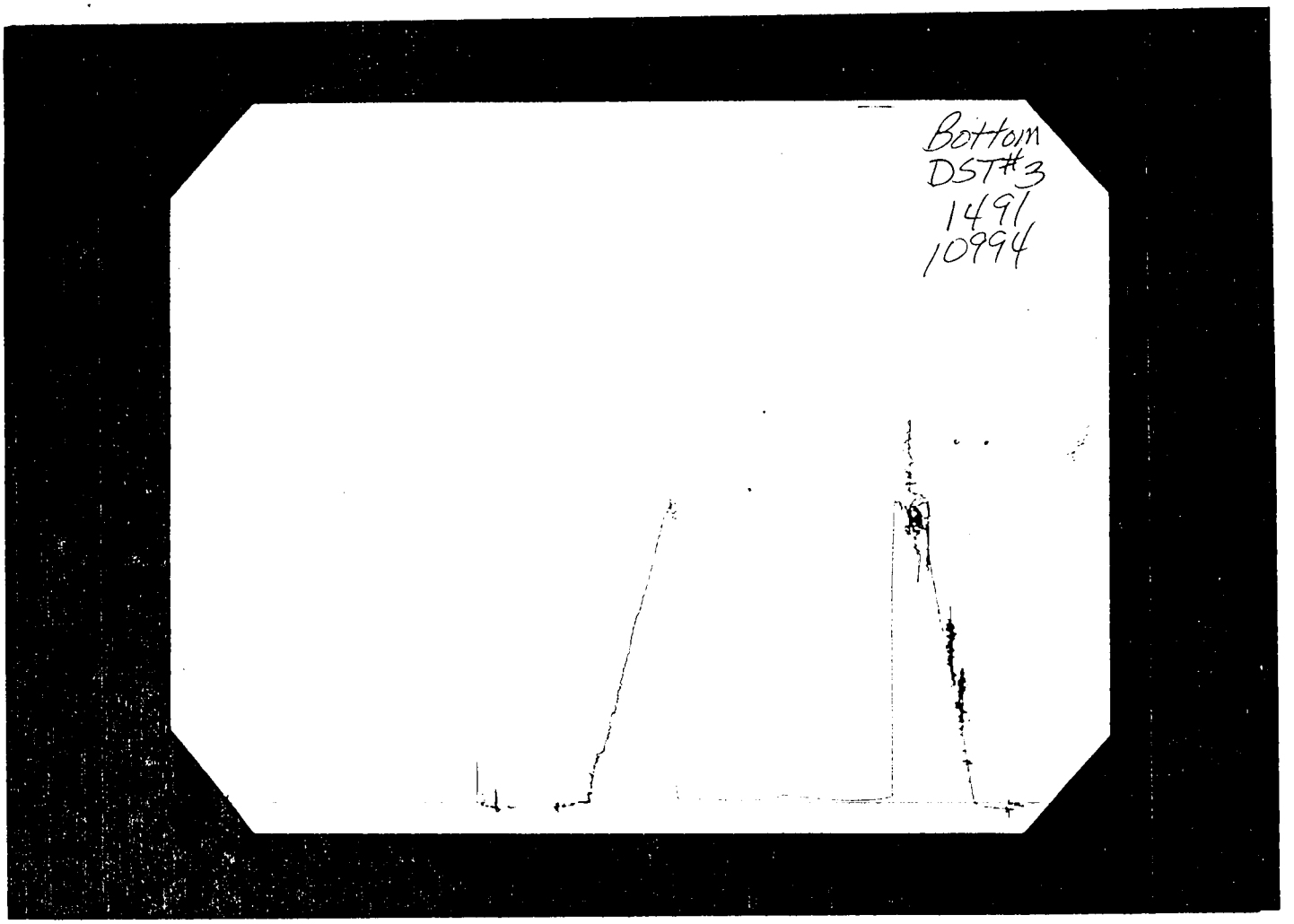
Remarks Open Hole Test Straddle Thank You.

Price of Job $1,335.00



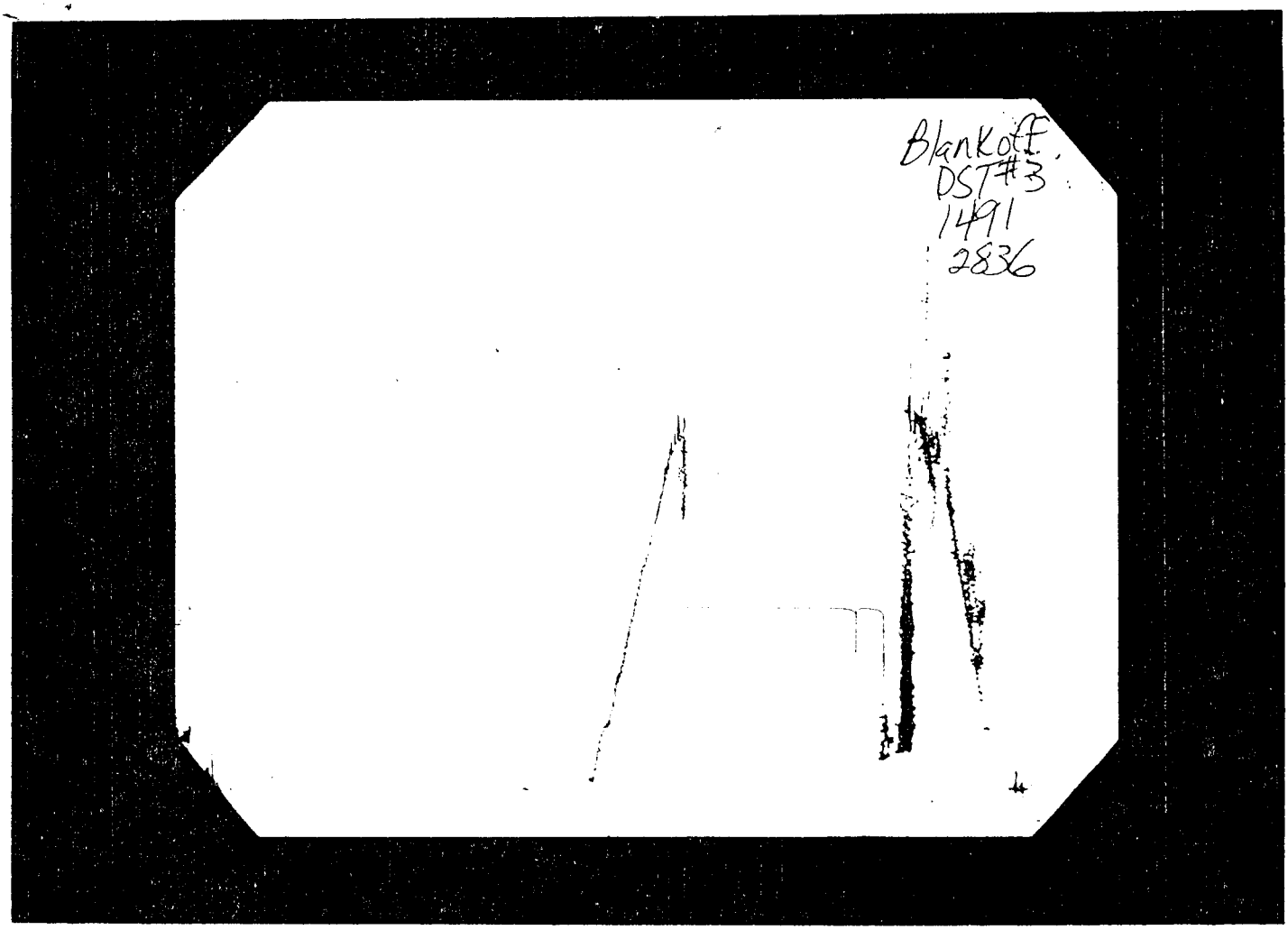
This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,864		PSI
(B)	First Initial Flow Pressure	35		PSI
(C)	First Final Flow Pressure	35		PSI
(D)	Initial Closed-in Pressure	92		PSI
(E)	Second Initial Flow Pressure	35		PSI
(F)	Second Final Flow Pressure	35		PSI
(G)	Final Closed-in Pressure	35		PSI
(H)	Final Hydrostatic Mud	1,841		PSI



This is an actual photograph of recorder chart.

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



This is an actual photograph of recorder chart.

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

TEST REPORT

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

Test Ticket No. 1492

Company Moble C. Hoover Date 10/7/81
Company Address 302 NBC Plaza, El Dorado, AR No. of Charts 5
Location: Sec. 6 Twp. 12S Rge. 22W Co. Trego State KS
Well Name And Number Rinker #1 Tester Mitch Dougherty
Contractor Abercrombie Drlg Rig No. #1 Co. Rep. Mike Freeman

Formation Lansing Zone _____ Type of Test Conventional

DST# 4 Interval 3,792 To 3,837 Total Depth 3,837
Open 30 9:45 Shut In 60 10:15 Open 60 11:15 Shut In 60 12:15
Packer(s) Set 9:43 ~~AM~~ ~~PM~~ Started off Bottom 1:15 ~~AM~~ ~~PM~~
Blow 1st Open: Steady blow to 3" in bucket.
2nd Open: Steady blow to 2" in bucket.

Recovery
Total Feet 135
Recovered 130 Ft. of Heavy, oil cut mud
Recovered 5 Ft. of Clean oil
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Gravity (Oil) 42 Corrected To Temp. 60 Water Chlorides _____

Pressures & Temp. (Office Reading If Applicable)
Initial Hydrostatic Pressure 1,909 Final Hydrostatic Pressure 1,886
Initial Closed In Pressure 1,203 Final Closed In Pressure 1,078
Initial Flow Pressure 58 To 58 Final Flow Pressure 81 To 81
Test Area Temperature 118

Engineering Date
Elevation 2,414 K.B.
Mud Viscosity 48 Mud Weight 9.5 Water Loss 9.6
Chlorides 15,000 P.P.M. Type of Mud Monpac Anchor Length 45'
Hole Size 7-7/8 Casing Size 8-5/8 Surface Choke 3/4 Bottom Choke 3/4
Drill Pipe Length 2,920 I.D. 3.8 In. Weight Pipe Length 643 I.D. 2.76 In.
Drill Collar Length 120 I.D. 2.25 In.
Top Packer Depth. 3,787 Bottom Packer Depth. 3,792 Packer Size 6-3/4
Test Tool Size 5-1/2 In. Tool Joint Size 4-1/2 XH In.
Did Well Flow No Reversed Out No
Recorder Type and No. AK-1 13251 Clock Range No. 14074 12 Hr.
Recorder Type and No. AK-1 10994 Clock Range No. 22348 12 Hr.
Extra Equipment None.
Remarks Open Hole Test. Thank You.

Price of Job $660.00

CRUDE OIL TESTING COMPANY

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

Date 10/7/81 Test Ticket No. 1492

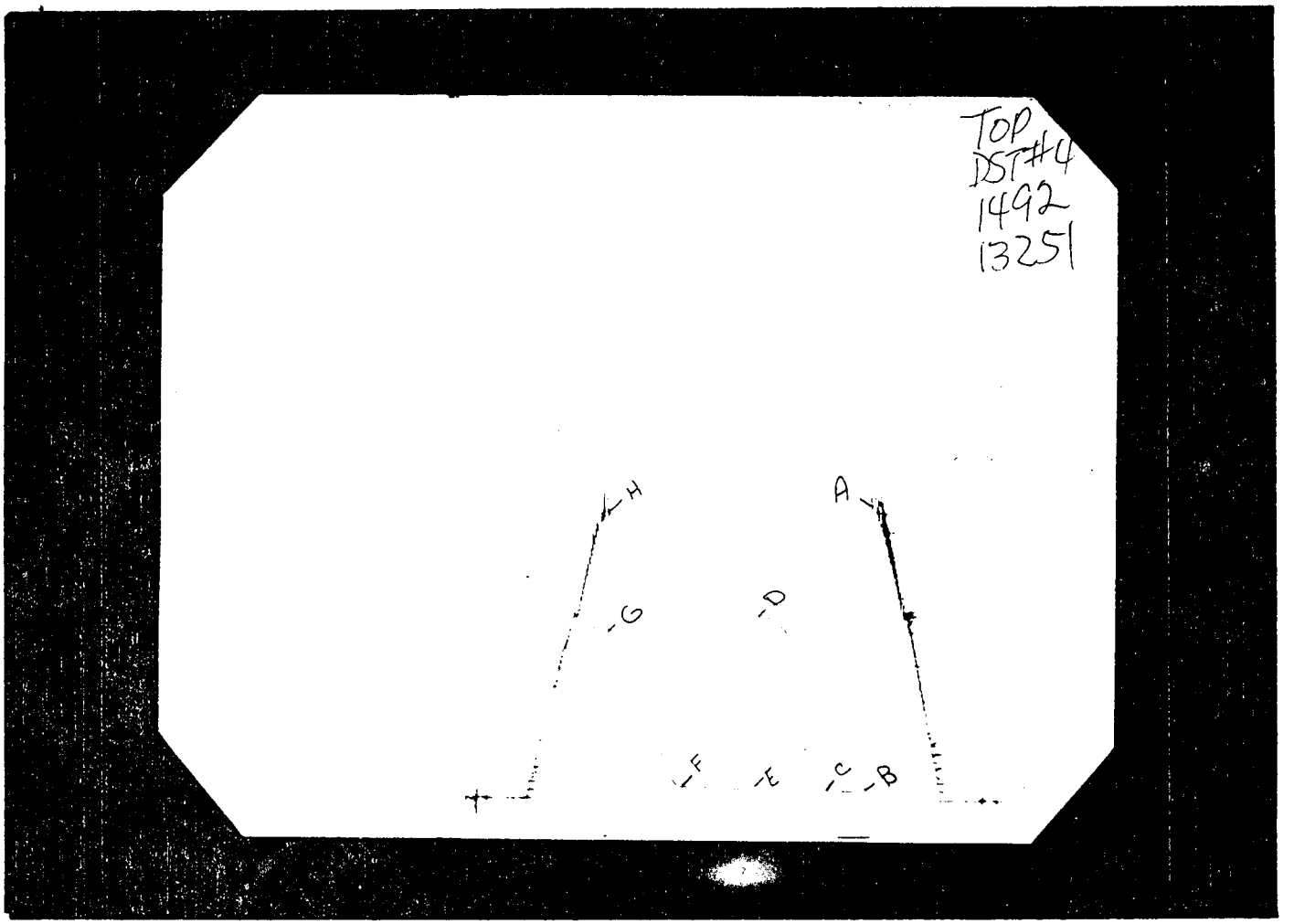
Recorder No. Kuster AK-1 13251 Capacity 4,550 PSI Location 3,827 Ft.

Clock No. 14074 Elevation 2,414 K.B. Well Temperature 118 °F

Point		Pressure		Field Time	Time Computed
A	Initial Hydrostatic Mud	1,890	P.S.I.	Open Tool 9:45 AM	
B	First Initial Flow Pressure	57	P.S.I.	First Flow Pressure 30 Mins.	Mins.
C	First Final Flow Pressure	64	P.S.I.	Initial Closed-in Pressure 60 Mins.	55 Mins.
D	Initial Closed-in Pressure	1,194	P.S.I.	Second Flow Pressure 60 Mins.	Mins.
E	Second Initial Flow Pressure	66	P.S.I.	Final Closed-in Pressure 60 Mins.	Mins.
F	Second Final Flow Pressure	76	P.S.I.		
G	Final Closed-in Pressure	1,095	P.S.I.		
H	Final Hydrostatic Mud	1,852	P.S.I.		

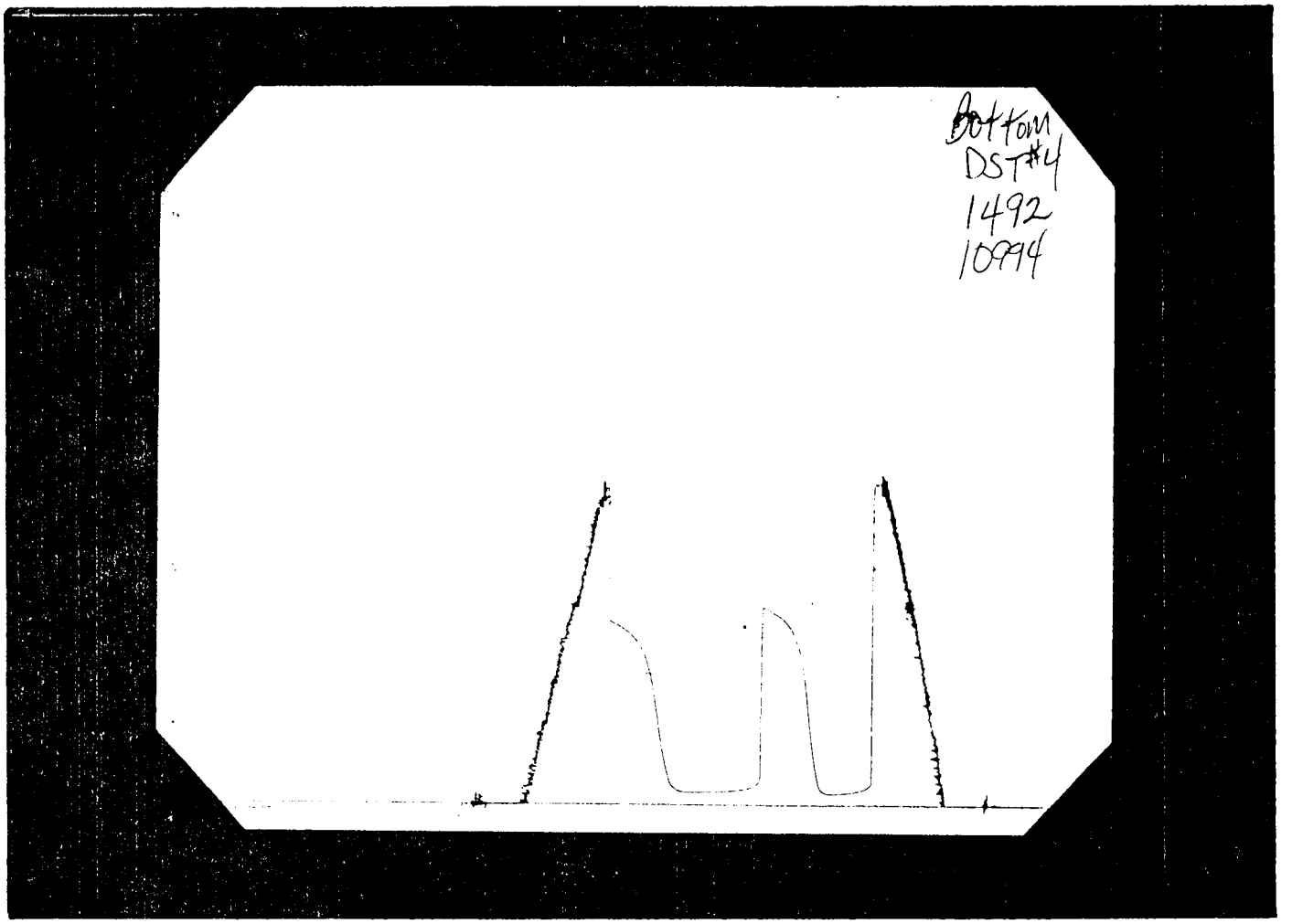
PRESSURE BREAKDOWN

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: 11 Inc. of 5 mins. and a final inc. of ____ Min.		Breakdown: 12 Inc. of 5 mins. and a final inc. of ____ Min.		Breakdown: 12 Inc. of 5 mins. and a final inc. of ____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	57	0	64	0	66	0	76
P 2 5	57	5	87	5	66	5	101
P 3 10	57	10	145	10	66	10	163
P 4 15	57	15	283	15	66	15	267
P 5 20	57	20	570	20	66	20	447
P 6 25	57	25	890	25	66	25	694
P 7 30	64	30	1,036	30	69	30	872
P 8		35	1,100	35	73	35	965
P 9		40	1,141	40	76	40	1,013
P10		45	1,164	45	76	45	1,045
P11		50	1,180	50	76	50	1,068
P12		55	1,194	55	76	55	1,084
P13				60	76	60	1,095
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,909	1,890	PSI
(B)	First Initial Flow Pressure	58	57	PSI
(C)	First Final Flow Pressure	58	64	PSI
(D)	Initial Closed-in Pressure	1,203	1,194	PSI
(E)	Second Initial Flow Pressure	81	66	PSI
(F)	Second Final Flow Pressure	81	76	PSI
(G)	Final Closed-in Pressure	1,078	1,095	PSI
(H)	Final Hydrostatic Mud	1,886	1,852	PSI



This is an actual photograph of recorder chart.

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

DRILL STEM TEST RECOVERY ANALYSIS

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

COMPANY: Moble C. Hoover LEASE: Rinker #1 DST# 4 #1492
SEC: 6 Twp: 12S Rge: 22W COUNTY: Trego STATE: KS

VISUAL DST RECOVERY: 130' Muddy cut oil

CENTRIFUGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	70	5	25	10	60
2	60		20	15	65

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	70	5	×	70	=	3.5	25	×	70	=	17.5	10	×	70	=	7.	60	×	70	=	42.
2	60		×		=		20	×	60	=	12.	15	×	60	=	9.	65	×	60	=	39.
Totals						3.5					29.5					16.					81.

CALCULATED DST RECOVERY =

GAS	3.5'
OIL	29.5
WTR	16.
MUD	81.
TOTAL FLUID	130.0'

CHLORIDES MUD SYSTEM 20,000
CHLORIDES DST WATER
GRAVITY OF OIL 42

TEST REPORT

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

CRUDE OIL TESTING INC.

Test Ticket No. 1493

Company Moble C. Hoover Date 10/7/81

Company Address 302 NBC Plaza, El Dorado, AR No. of Charts 5

Location: Sec. 6 Twp. 12S Rge. 22W Co. Trego State KS

Well Name And Number Rinker #1 Tester Mitch Dougherty

Contractor Abercrombie Drlg Rig No. #1 Co. Rep. Mike Freeman

Formation Lansing Zone _____ Type of Test Conventional

DST# 5 Interval 3,837 To 3,860 Total Depth 3,860

Open 30 1:00 Shut In 60 1:30 Open 60 2:30 Shut In 60 3:30

Packer(s) Set 12:58 ~~A.M.~~ ~~XXX~~ Started off Bottom 4:30 ~~A.M.~~ ~~XXX~~

Blow 1st Open: Good, steady blow to 5" in bucket.

2nd Open: Good, steady blow to 4" in bucket.

Recovery

Total Feet 270

Recovered 270 Ft. of Very slightly oil cut 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 1,877 Final Hydrostatic Pressure 1,855

Initial Closed In Pressure 850 Final Closed In Pressure 871

Initial Flow Pressure 32 To 32 Final Flow Pressure 85 To 85

Test Area Temperature 118 Read Bottom Chart

Engineering Date

Elevation 2,414 K.B.

Mud Viscosity 48 Mud Weight 9.6 Water Loss 9.5

Chlorides 20,000 P.P.M. Type of Mud Monpac Anchor Length 23'

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

Drill Pipe Length 2,943 I.D. 2.8 In. Weight Pipe Length 643 I.D. 2.76 In.

Drill Collar Length 120 I.D. 2.25 In.

Top Packer Depth. 3,832 Bottom Packer Depth. 3,837 Packer Size 6-3/4

Test Tool Size 5-1/2 In. Tool Joint Size 4-1/2 XH In.

Did Well Flow No Reversed Out No

Recorder Type and No. AK-1 13251 Clock Range No. 14074 12 Hr.

Recorder Type and No. AK-1 10994 Clock Range No. 22348 12 Hr.

Extra Equipment None.

Remarks Read Bottom Chart.

Open Hole Test. Thank You.

Price of Job $660.00

CRUDE OIL TESTING COMPANY

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

Date 10/7/81 Test Ticket No. 1493

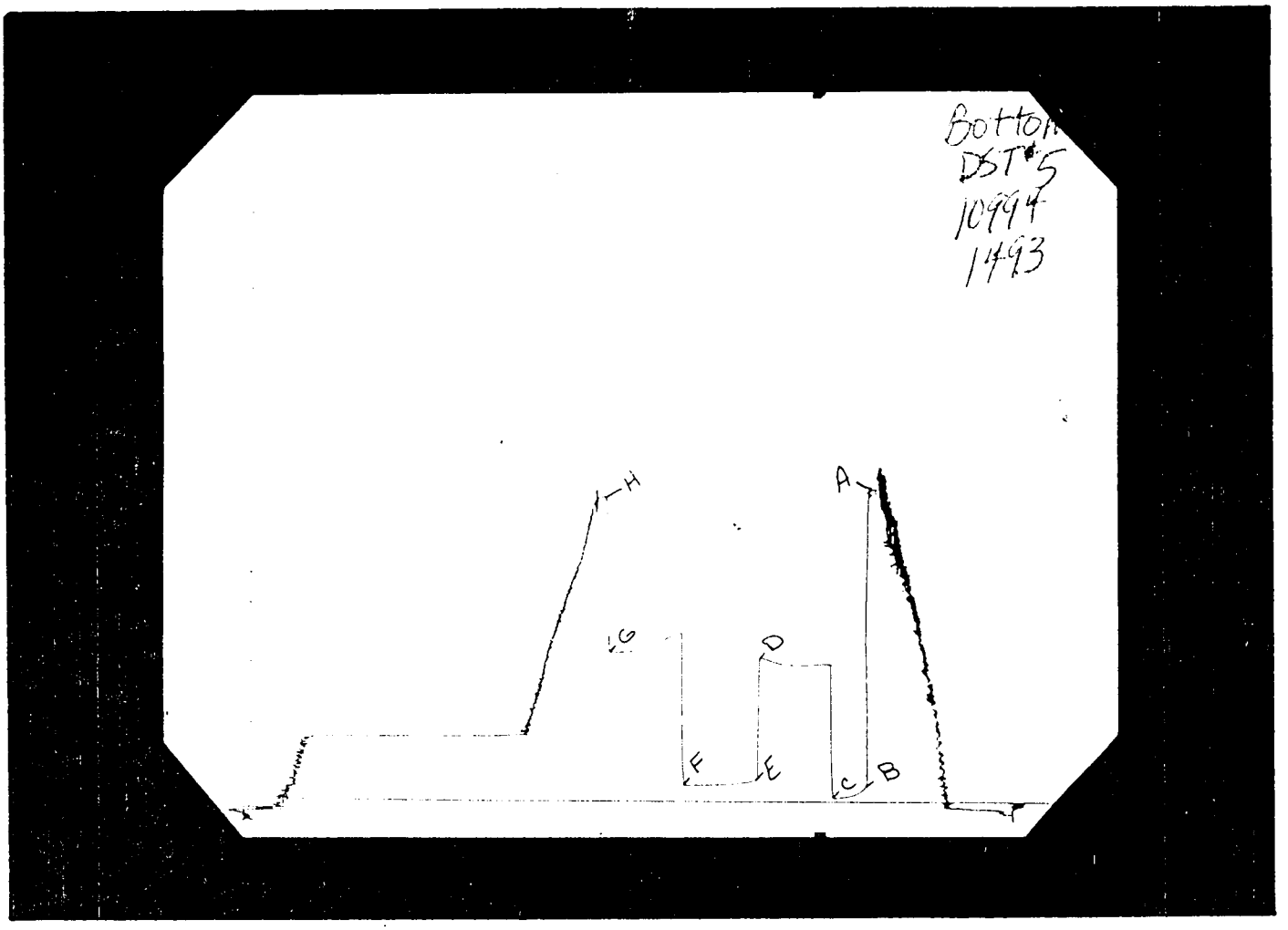
Recorder No. Kuster AK-1 10994 Capacity 4,200 PSI Location 3,850 Ft.

Clock No. 22348 Elevation 2,414 K.B. Well Temperature 118 °F

Point		Pressure			Field Time	Time Computed
A	Initial Hydrostatic Mud	1,878	P.S.I.	Open Tool	1:00 A M	
B	First Initial Flow Pressure	21	P.S.I.	First Flow Pressure	30 Mins.	27 Mins.
C	First Final Flow Pressure	21	P.S.I.	Initial Closed-in Pressure	60 Mins.	58 Mins.
D	Initial Closed-in Pressure	858	P.S.I.	Second Flow Pressure	60 Mins.	Mins.
E	Second Initial Flow Pressure	100	P.S.I.	Final Closed-in Pressure	60 Mins.	Mins.
F	Second Final Flow Pressure	100	P.S.I.			
G	Final Closed-in Pressure	898	P.S.I.			
H	Final Hydrostatic Mud	1,834	P.S.I.			

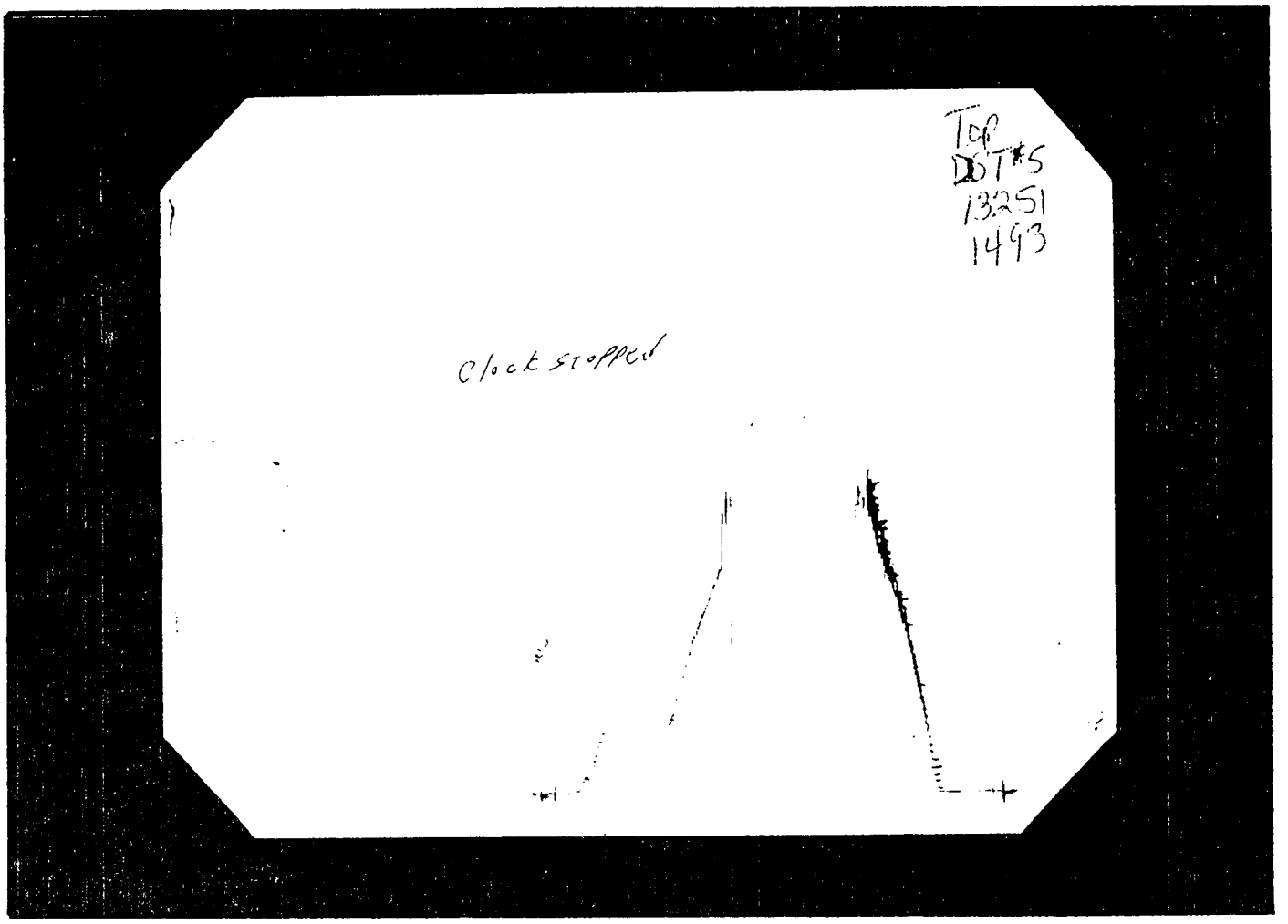
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 5 Inc.		Breakdown: 11 Inc.		Breakdown: 12 Inc.		Breakdown: 12 Inc.	
of 5 mins. and a		of 5 mins. and a		of 5 mins. and a		of 5 mins. and a	
final inc. of 2 Min.		final inc. of 3 Min.		final inc. of Min.		final inc. of Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	21	0	21	0	100	0	100
P 2 5	21	5	817	5	100	5	898
P 3 10	21	10	817	10	100	10	898
P 4 15	21	15	817	15	100	15	898
P 5 20	21	20	817	20	100	20	898
P 6 25	21	25	817	25	100	25	898
P 7 27	21	30	817	30	100	30	898
P 8		35	817	35	100	35	898
P 9		40	817	40	100	40	898
P10		45	832	45	100	45	898
P11		50	843	50	100	50	898
P12		55	858	55	100	55	898
P13		58	858	60	100	60	898
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,877	1,878	PSI
(B)	First Initial Flow Pressure	32	21	PSI
(C)	First Final Flow Pressure	32	21	PSI
(D)	Initial Closed-in Pressure	850	878	PSI
(E)	Second Initial Flow Pressure	85	100	PSI
(F)	Second Final Flow Pressure	85	100	PSI
(G)	Final Closed-in Pressure	871	898	PSI
(H)	Final Hydrostatic Mud	1,855	1,834	PSI



This is an actual photograph of recorder chart.

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

DRILL STEM TEST RECOVERY ANALYSIS

CRUDE OIL TESTING INC
(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 8090

COMPANY: Moble C. Hoover LEASE: Rinker #1 DST# 5 #1493
SEC: 6 Twp: 12S Rge: 22W COUNTY: Trego STATE: KS

VISUAL DST RECOVERY: 270' Very slightly oil cut mud

CENTRIFUGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	30		4	16	80
2	60		2	15	83
3	60		Trace	10	90
4	60		Trace	10	90
5	60		Trace	10	90

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	30		×		=		4	×	30	=	1.2	16	×	30	=	4.8	80	×	30	=	24.
2	60		×		=		2	×	60	=	1.2	15	×	60	=	9.	83	×	60	=	49.8
3	60		×		=		Tr	×	60	=	-	10	×	60	=	6.	90	×	60	=	54.
4	60		×		=		Tr	×	60	=	-	10	×	60	=	6.	90	×	60	=	54.
5	60		×		=		Tr	×	60	=	-	10	×	60	=	6.	90	×	60	=	54.
			×		=			×		=			×		=			×		=	
			×		=			×		=			×		=			×		=	
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			×		=			×		=			×		=			×		=	
			×		=			×		=			×		=			×		=	
Totals											2.4					31.8					235.8

CALCULATED DST RECOVERY =

CHLORIDES MUD SYSTEM 20,000
CHLORIDES DST WATER 21,000
GRAVITY OF OIL

GAS 0.0'
OIL 2.4
WTR 31.8
MUD 235.8
TOTAL FLUID 270.0'

TEST REPORT

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

CRUDE OIL TESTING INC.

Test Ticket No. 1529

Company Moble C. Hoover Date 10/8/81
Company Address 302 NBC Plaza, El Dorado, AR No. of Charts 5
Location: Sec. 6 Twp. 12S Rge. 22W Co. Trego State KS
Well Name And Number Rinker #1 Tester Mitch Dougherty
Contractor Abercrombie Drlg. Rig No. #1 Co. Rep. Mike Freeman

Formation _____ Zone _____ Type of Test Conventional

DST# 6 Interval 3,858 To 3,900 Total Depth 3,900
Open 30 7:00 Shut In 45 7:30 Open 60 8:15 Shut In 45 9:15
Packer(s) Set 6:58 ~~A.M.~~ P.M. Started off Bottom 10:00 ~~A.M.~~ P.M.
Blow 1st Open: Very weak blow on top of bucket.
2nd Open: Steady blow to 2" in bucket.

Recovery
Total Feet 190
Recovered 190 Ft. of Drilling mud
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides 22,000

Pressures & Temp. (Office Reading If Applicable)
Initial Hydrostatic Pressure 1,864 Final Hydrostatic Pressure 1,841
Initial Closed In Pressure 1,260 Final Closed In Pressure 1,020
Initial Flow Pressure 81 To 81 Final Flow Pressure 138 To 138
Test Area Temperature 117

Engineering Date
Elevation 2,414 K.B.
Mud Viscosity 50 Mud Weight 9.5 Water Loss 12
Chlorides 20,000 P.P.M. Type of Mud Monpac Anchor Length 42'
Hole Size 7-7/8 Casing Size 8-5/8 Surface Choke 3/4 Bottom Choke 3/4
Drill Pipe Length 2,983 I.D. 3.8 In. Weight Pipe Length 643 I.D. 2.76 In.
Drill Collar Length 120 I.D. 2.25 In.
Top Packer Depth. 3,853 Bottom Packer Depth. 3,858 Packer Size 6-3/4
Test Tool Size 5-1/2 In. Tool Joint Size 4-1/2 XH In.
Did Well Flow No Reversed Out No
Recorder Type and No. AK-1 13251 Clock Range No. 14074 12 Hr.
Recorder Type and No. AK-1 10994 Clock Range No. 22348 12 Hr.
Extra Equipment None.
Remarks Open Hole Test, Thank You.

Price of Job $660.00

CRUDE OIL TESTING COMPANY

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

Date 10/8/81 Test Ticket No. 1529

Recorder No. Kuster AK-1 13251 Capacity 4,550 PSI Location 3,890 Ft.

Clock No. 14074 Elevation 2,414 K.B. Well Temperature 117 °F

Point		Pressure			Field Time	Time Computed
A	Initial Hydrostatic Mud	2,000	P.S.I.	Open Tool	7:00 P M	
B	First Initial Flow Pressure	80	P.S.I.	First Flow Pressure	30 Mins.	Mins.
C	First Final Flow Pressure	80	P.S.I.	Initial Closed-in Pressure	45 Mins.	Mins.
D	Initial Closed-in Pressure	1,269	P.S.I.	Second Flow Pressure	60 Mins.	Mins.
E	Second Initial Flow Pressure	131	P.S.I.	Final Closed-in Pressure	45 Mins.	Mins.
F	Second Final Flow Pressure	131	P.S.I.			
G	Final Closed-in Pressure	1,036	P.S.I.			
H	Final Hydrostatic Mud	1,922	P.S.I.			

PRESSURE BREAKDOWN

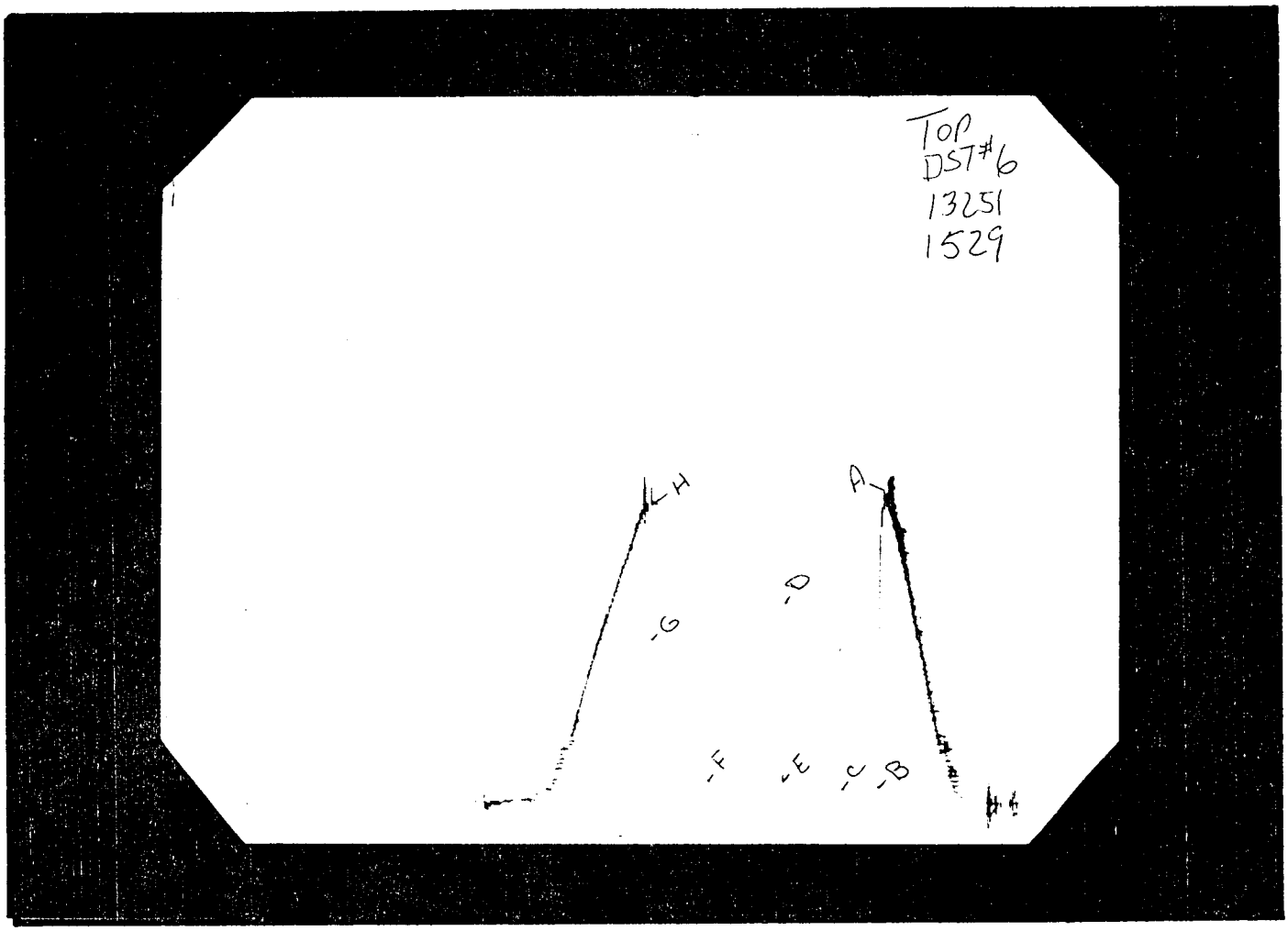
First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of Min.

Initial Shut-In
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of Min.

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of Min.

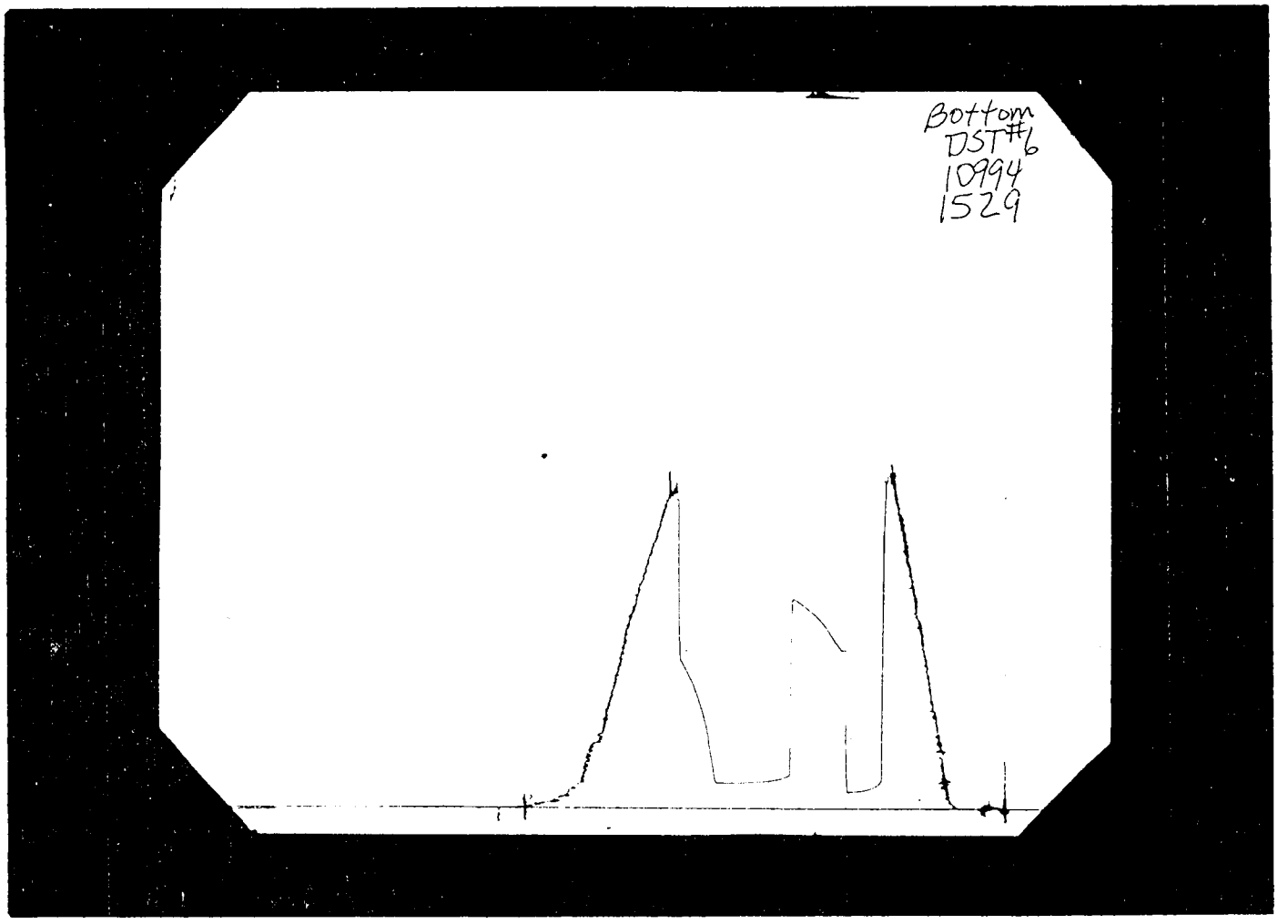
Final Shut-In
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1 0	80	0	80	0	131	0	131
2 5	80	5	942	5	131	5	364
3 10	80	10	1,022	10	131	10	554
4 15	80	15	1,082	15	131	15	678
5 20	80	20	1,132	20	131	20	776
6 25	80	25	1,171	25	131	25	856
7 30	80	30	1,205	30	131	30	917
8		35	1,232	35	131	35	968
9		40	1,255	40	131	40	1,009
10		45	1,269	45	131	45	1,036
11				50	131		
12				55	131		
13				60	131		
14							
15							
16							
17							
18							
19							
20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,864	2,000	PSI
(B)	First Initial Flow Pressure	81	80	PSI
(C)	First Final Flow Pressure	81	80	PSI
(D)	Initial Closed-in Pressure	1,260	1,269	PSI
(E)	Second Initial Flow Pressure	138	131	PSI
(F)	Second Final Flow Pressure	138	131	PSI
(G)	Final Closed-in Pressure	1,020	1,036	PSI
(H)	Final Hydrostatic Mud	1,841	1,922	PSI



This is an actual photograph of recorder chart.

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

DRILL STEM TEST RECOVERY ANALYSIS

CRUDE OIL TESTING INC
(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 8090

COMPANY: Moble C. Hoover LEASE: Rinker #1 DST# 6 #1529
SEC: 6 Twp: 12S Rge: 22W COUNTY: Trego STATE: KS

VISUAL DST RECOVERY: 190' Drilling mud

CENTRIFUGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	10			30	70
2	60			30	70
3	60			30	70
4	60			40	60

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	10		×		=			×		=		30	×	10	=	3.	70	×	10	=	7.
2	60		×		=			×		=		30	×	60	=	18.	70	×	60	=	42.
3	60		×		=			×		=		30	×	60	=	18.	70	×	60	=	42.
4	60		×		=			×		=		40	×	60	=	24.	60	×	60	=	36.
Totals																63.					127.

CALCULATED DST RECOVERY =

GAS 0.0'
OIL 0.0
WTR 63.0
MUD 127.0
TOTAL FLUID 190.0'

CHLORIDES MUD SYSTEM 20,000
CHLORIDES DST WATER 22,000
GRAVITY OF OIL

TEST REPORT

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

Test Ticket No. 1530

Company Mobile C. Hoover Date 10/9/81
Company Address 302 NBC Plaza, El Dorado, AR No. of Charts 5
Location: Sec. 6 Twp. 12S Rge. 22W Co. Trego State KS
Well Name And Number Rinker #1 Tester Mitch Dougherty
Contractor Abercrombie Drlg. Rig No. #1 Co. Rep. Mike Freeman

Formation Conglomerate Zone _____ Type of Test Conventional

DST# 7

Interval 3,985 To 4,030 Total Depth 4,030
Open 30 4:45 Shut In 60 5:15 Open 60 6:15 Shut In 60 7:15
Packer(s) Set 4:43 ~~XXX~~ P.M. Started off Bottom 8:15 ~~XXX~~ P.M.
Blow 1st Open: Good, steady blow to 8" in bucket.
2nd Open: Good, steady blow to 7" in bucket.

Recovery

Total Feet 600
Recovered 10 Ft. of Clean Oil
Recovered 240 Ft. of Heavy, oil cut, watery mud
Recovered 360 Ft. of Heavy, oil cut, muddy water
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides 29,000

Pressures & Temp. (Office Reading If Applicable)

Initial Hydrostatic Pressure 2,113 Final Hydrostatic Pressure 2,091
Initial Closed In Pressure 1,215 Final Closed In Pressure 1,146
Initial Flow Pressure 58 To 138 Final Flow Pressure 161 To 288
Test Area Temperature 116

Engineering Date

Elevation 2,414 K.B.
Mud Viscosity 50 Mud Weight 9.5 Water Loss 12
Chlorides 20,000 P.P.M. Type of Mud Monpac Anchor Length 45'
Hole Size 7-7/8 Casing Size 8-5/8 Surface Choke 3/4 Bottom Choke 3/4
Drill Pipe Length 3,113 I.D. 3.8 In. Weight Pipe Length 643 I.D. 2.76 In.
Drill Collar Length 120 I.D. 2.25 In.
Top Packer Depth. 3,980 Bottom Packer Depth. 3,985 Packer Size 6-3/4
Test Tool Size 5-1/2 In. Tool Joint Size 4-1/2 XH In.
Did Well Flow No Reversed Out No
Recorder Type and No. AK-1 13251 Clock Range No. 14074 12 Hr.
Recorder Type and No. AK-1 10994 Clock Range No. 22348 12 Hr.
Extra Equipment None
Remarks Open Hole Test. Thank You.

Price of Job $715.00

CRUDE OIL TESTING COMPANY

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

Date 10/9/81 Test Ticket No. 1530

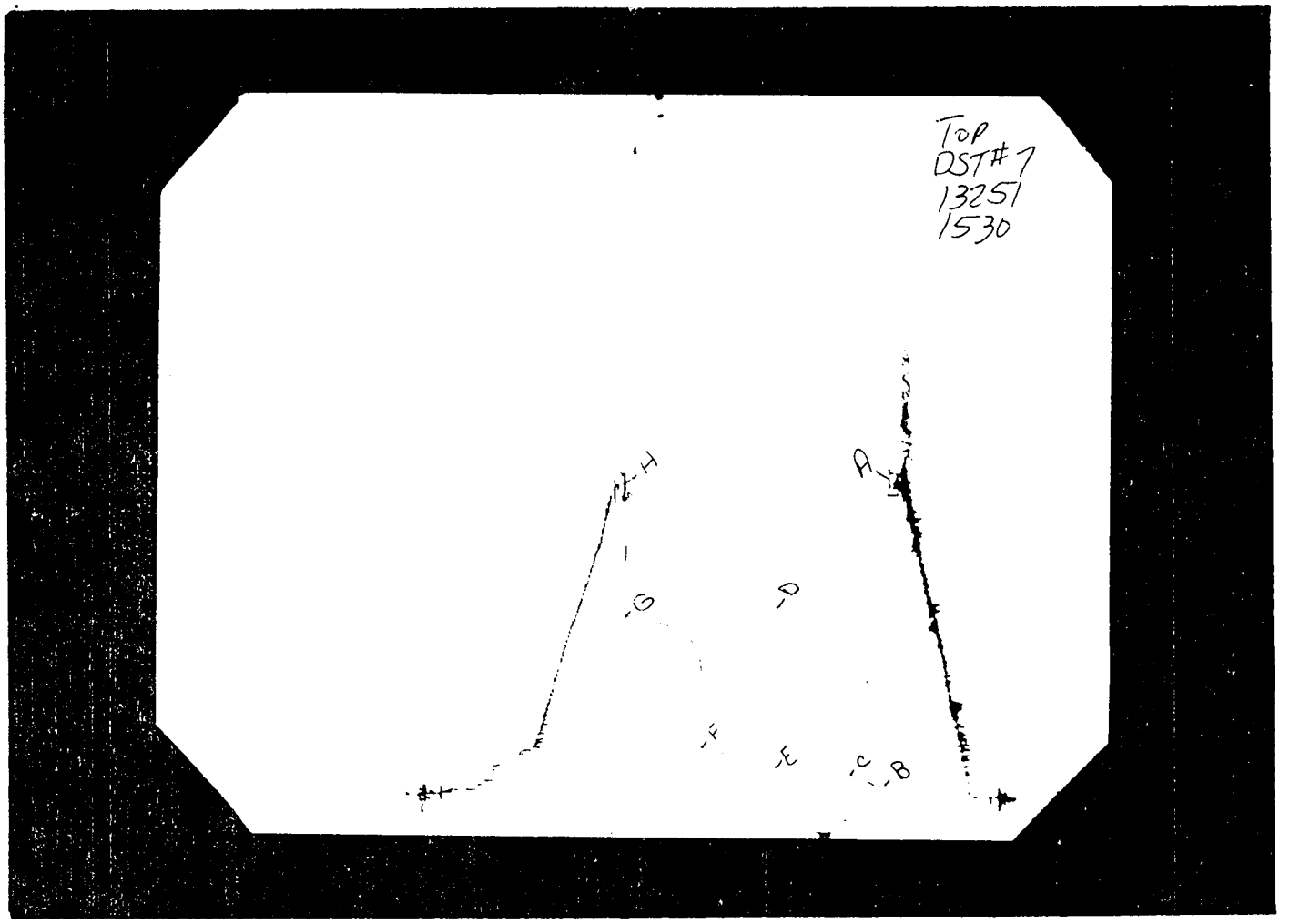
Recorder No. Kuster AK-1 13251 Capacity 4,550 PSI Location 4,020 Ft.

Clock No. 14074 Elevation 2,414 K.B. Well Temperature 116 °F

Point		Pressure		Field Time	Time Computed
A	Initial Hydrostatic Mud	2,061 P.S.I.	Open Tool	4:45 P M	
B	First Initial Flow Pressure	66 P.S.I.	First Flow Pressure	30 Mins.	28 Mins.
C	First Final Flow Pressure	142 P.S.I.	Initial Closed-in Pressure	60 Mins.	Mins.
D	Initial Closed-in Pressure	1,223 P.S.I.	Second Flow Pressure	60 Mins.	Mins.
E	Second Initial Flow Pressure	172 P.S.I.	Final Closed-in Pressure	60 Mins.	Mins.
F	Second Final Flow Pressure	308 P.S.I.			
G	Final Closed-in Pressure	1,157 P.S.I.			
H	Final Hydrostatic Mud	2,022 P.S.I.			

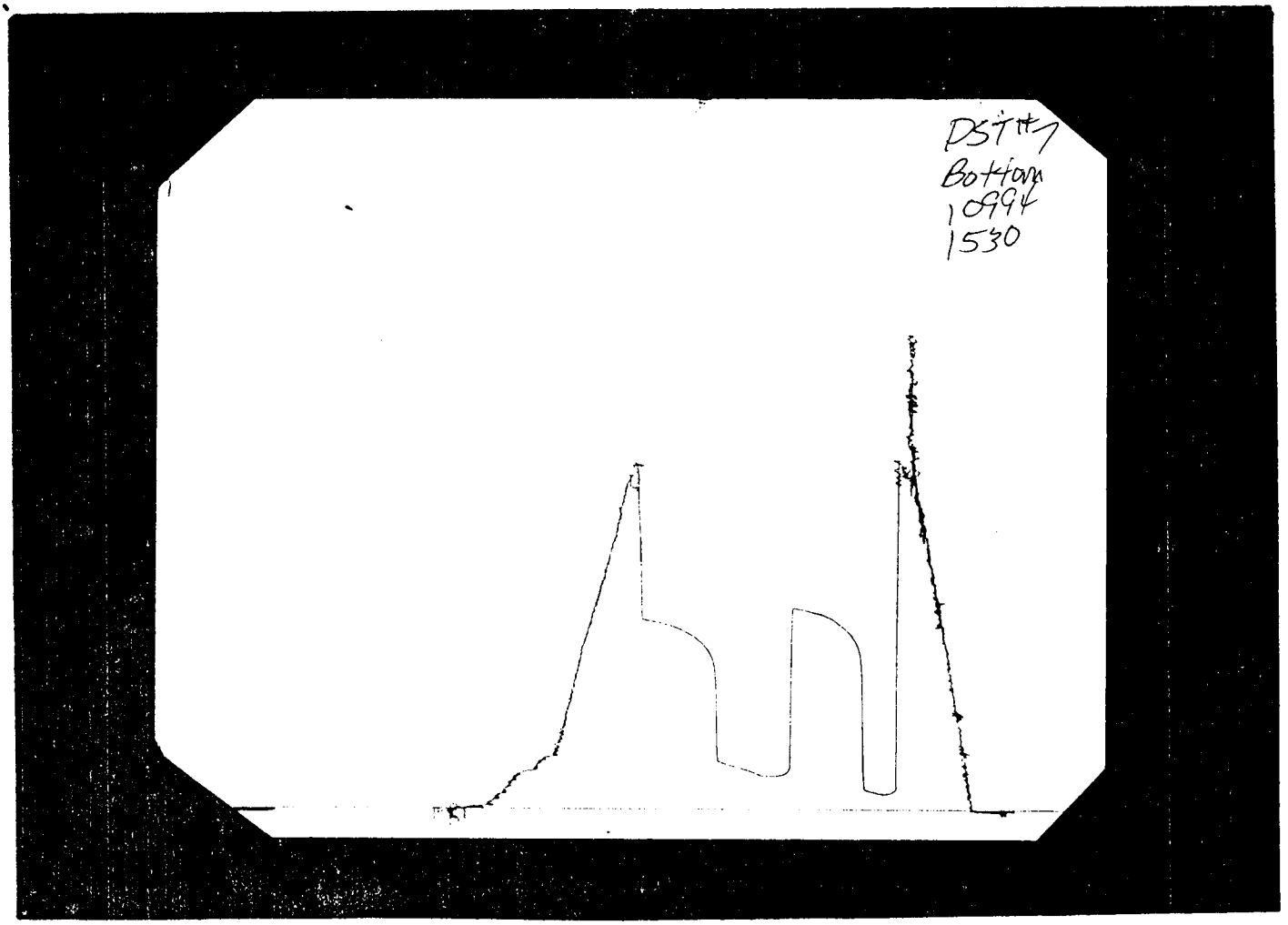
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 5 Inc.		Breakdown: 12 Inc.		Breakdown: 12 Inc.		Breakdown: 12 Inc.	
of 5 mins. and a		of 5 mins. and a		of 5 mins. and a		of 5 mins. and a	
final inc. of 3 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 0	66	0	142	0	172	0	308
P 2 5	66	5	1,015	5	172	5	965
P 3 10	80	10	1,086	10	184	10	1,020
P 4 15	105	15	1,125	15	195	15	1,054
P 5 20	122	20	1,148	20	216	20	1,075
P 6 25	133	25	1,170	25	230	25	1,093
P 7 28	142	30	1,184	30	241	30	1,107
P 8		35	1,194	35	258	35	1,121
P 9		40	1,203	40	269	40	1,130
P10		45	1,210	45	281	45	1,136
P11		50	1,216	50	292	50	1,146
P12		55	1,223	55	301	55	1,152
P13		60	1,223	60	308	60	1,157
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2,113	2,061	PSI
(B)	First Initial Flow Pressure	58	66	PSI
(C)	First Final Flow Pressure	138	142	PSI
(D)	Initial Closed-in Pressure	1,215	1,223	PSI
(E)	Second Initial Flow Pressure	161	172	PSI
(F)	Second Final Flow Pressure	288	308	PSI
(G)	Final Closed-in Pressure	1,146	1,157	PSI
(H)	Final Hydrostatic Mud	2,091	2,022	PSI



This is an actual photograph of recorder chart.

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

DRILL STEM TEST RECOVERY ANALYSIS

(303) 473-6909
P.O. Box 2260
Colorado Springs, CO 8090

COMPANY: Moble C. Hoover LEASE: Rinker #1 DST# 7 #1530
SEC: 6 Twp: 12S Rge: 22W COUNTY: Trego STATE: KS

VISUAL DST RECOVERY:

10' Clean Oil
240' Heavy, oil cut, watery mud
360' Heavy, oil cut, muddy water

CENTRIFUGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	60	10	10	35	45
2	60	10	10	35 (22,000 ppm)	45
3	60	10	15	* 40	35
4	60	10	15	45	30
5	60	5	15	70	10
6	60	5	15	72	8
7	60		12	83	5
8	60		12	* 83 (29,000 ppm)	5
9	60		10	85	5
10	60		10	85	5

NOTE: 10' Clean Oil above Sample #1

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	60	10	×	60	=	6.	10	×	60	=	6.	35	×	60	=	21.	45	×	60	=	27.
2	60	10	×	60	=	6.	10	×	60	=	6.	35	×	60	=	21.	45	×	60	=	27.
3	60	10	×	60	=	6.	15	×	60	=	9.	40	×	60	=	24.	35	×	60	=	21.
4	60	10	×	60	=	6.	15	×	60	=	9.	45	×	60	=	27.	30	×	60	=	18.
5	60	5	×	60	=	3.	15	×	60	=	9.	70	×	60	=	42.	10	×	60	=	6.
6	60	5	×	60	=	3.	15	×	60	=	9.	72	×	60	=	43.2	8	×	60	=	4.
7	60		×		=		12	×	60	=	7.2	83	×	60	=	49.8	5	×	60	=	3.
8	60		×		=		12	×	60	=	7.2	83	×	60	=	49.8	5	×	60	=	3.
9	60		×		=		10	×	60	=	6.	85	×	60	=	51.	5	×	60	=	3.
10	60		×		=		10	×	60	=	6.	85	×	60	=	51.	5	×	60	=	3.
			×		=			×		=			×		=			×		=	
			×		=		Clean Oil	×		=	10.		×		=			×		=	
			×		=		above Sample	×		=			×		=			×		=	
			×		=			×	#1	=			×		=			×		=	
Totals						30					84.4					379.8					115.

CALCULATED DST RECOVERY =

CHLORIDES MUD SYSTEM 18,000
CHLORIDES DST WATER *29,000 & 22,000
GRAVITY OF OIL

GAS	30.0'
OIL	84.4
WTR	379.8
MUD	115.8
TOTAL FLUID	610.0'