

**COPY
CRUDE OIL
TESTING INC.**

DRILL STEM TEST REPORT

NOV 19 1982

COMPANY J.A. Allison

LEASE AND WELL NO.

Renz #4

SEC.

14

TWP.

18S

RGE.

18W

TEST NO.

1-4

DATE

11/11/82



TEST REPORT

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

Test Ticket No. 2461
Company J.A. Allison Date 11/10/82
Company Address 300 W. Douglas, #305, Wichita, KS 67202 No. of Charts 5
Location: Sec. 14 Twp. 18S Rge. 18W Co. Rush State Kansas
Well Name And Number Renz#4 Tester Bud O'Dell
Contractor B & B Drlg. Rig No. 2 Co. Rep. Orlin Phelps

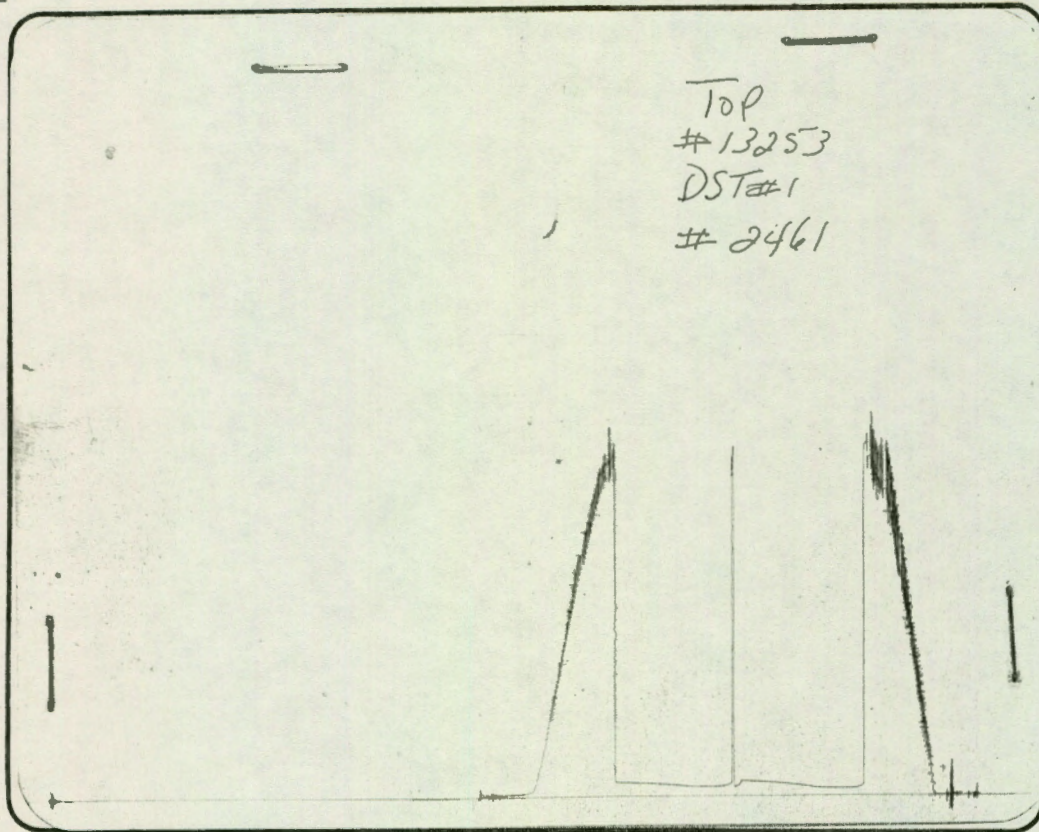
Engineering Data

Elevation 2,060 K.B.
Mud Viscosity 42
Mud Weight 9.9
Water Loss 36
Type of Mud Starch
Anchor Length 31'
Hole Size 7 7/8
Casing Size 8 5/8
Surface Choke 3/4
Bottom Choke 3/4
Drill Pipe Length 3,728 I.D. 3.8 In. _____
Weight Pipe Length _____ I.D. _____ In. _____
Drill Collar Length _____ I.D. _____ In. _____
Top Packer Depth. 3,776
Bottom Packer Depth 3,781
Tool Joint Size 4 1/2 XH
Test Tool Size 5 1/2
Packer Size 6 3/4
Reversed Out No
Recorder Type and No. AK-1 13235 Clock Range No. 23838 12 Hr.
Recorder Type and No. AK-1 13250 Clock Range No. 25109 12 Hr.
Extra Equipment _____
Remarks _____

CRUDE OIL TESTING INC.

Date 11/10/82

Test Ticket No. 2461



DST # 1

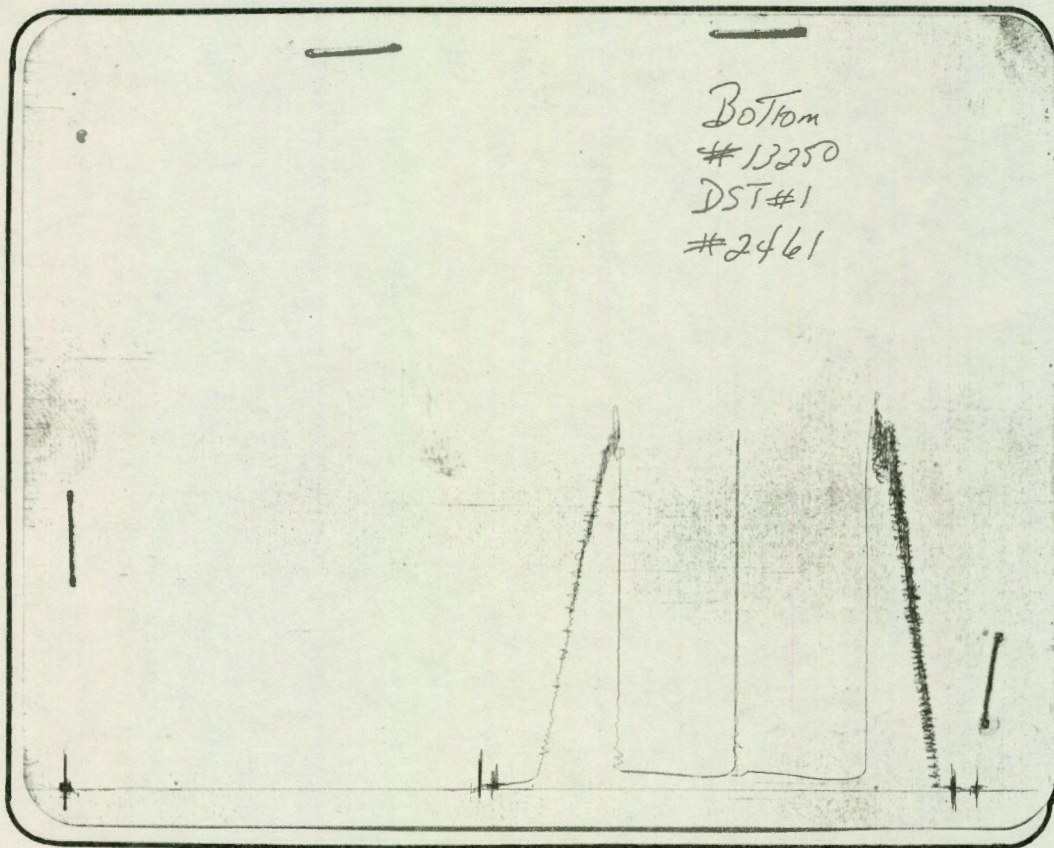
Formation Conglomerate Zone Sand Type of Test Conventional
Interval 3,781 To 3,812 Total Depth 3,812
Open 30 Shut In 60 Open 30 Shut In 60
Packer(s) Set 3:13 P. M. Started off Bottom 6:15 P. M.
Blow 1st Opening Weak Steady Blow 1" in Bucket
2nd Opening Very Weak Blow Died in 4 Min. Flushed Tool Good Surge No Help

Recovery
Total Feet 35
Recovered 35 Ft. of Slightly Oil Cut Mud
Recovered Ft. of
Recovered Ft. of
Recovered Ft. of

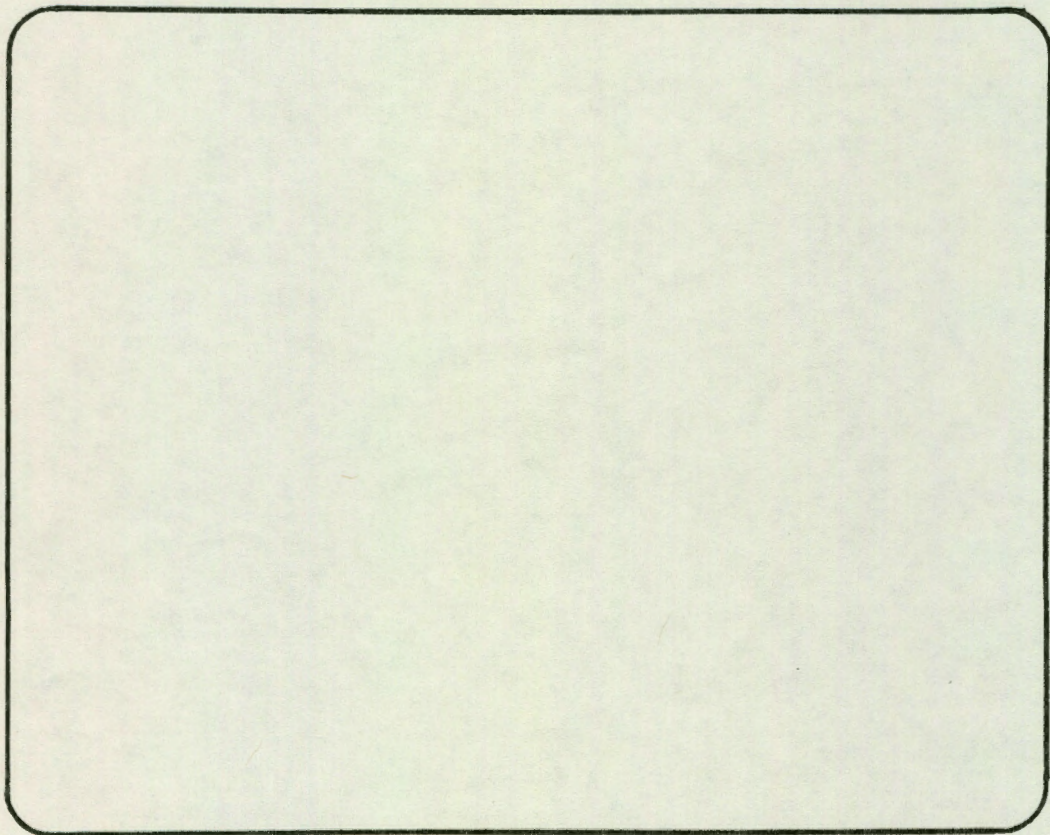
Calculated Recovery
Gas - Oil 1.05 WTR 1.4 MUD 32.55
Gravity (Oil) Corrected To Temp. °F Test Water Chlorides P.P.M.
Test Area Temperature 110 °F Mud System Chlorides 64,000 P.P.M.

	Field Reading	Office Reading	
PRESSURE (A) Initial Hydrostatic Mud	2,088		PSI
(B) First Initial Flow Pressure	46		PSI
(C) First Final Flow Pressure	46		PSI
(D) Initial Closed-in Pressure	93		PSI
(E) Second Initial Flow Pressure	46		PSI
(F) Second Final Flow Pressure	46		PSI
(G) Final Closed-in Pressure	81		PSI
(H) Final Hydrostatic Mud	2,076		PSI

CRUDE OIL TESTING INC.

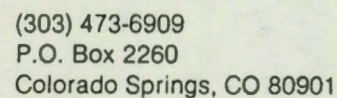


Extra recorder chart



Blank off recorder chart

These are actual photographs of recorder charts.

DST # 1

35' Slightly Oil Cut Mud

CALCULATED DST RECOVERY

[illegible][illegible][illegible][illegible]

WATER							
SAM- PLE #	TOTAL FOOT- AGE	x	%	=	Feet	CHLORIDES PPM	RESISTIVITY OHMS
1	35	x	4	=	1.4		
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
		x		=			
Totals						1.4	

GAS _____

OIL 1.05

MUD 32.55

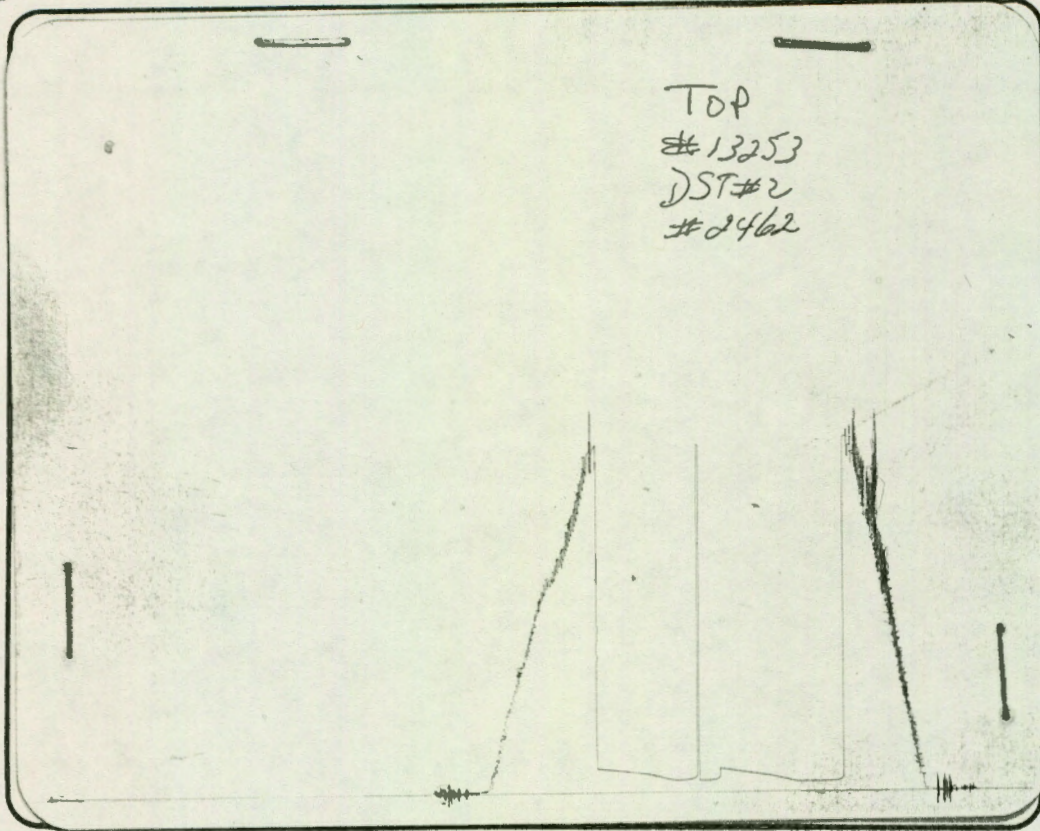
WTR 1.4

TOTAL FLUID 35

CRUDE OIL TESTING INC.

Date 11/11/82

Test Ticket No. 2462

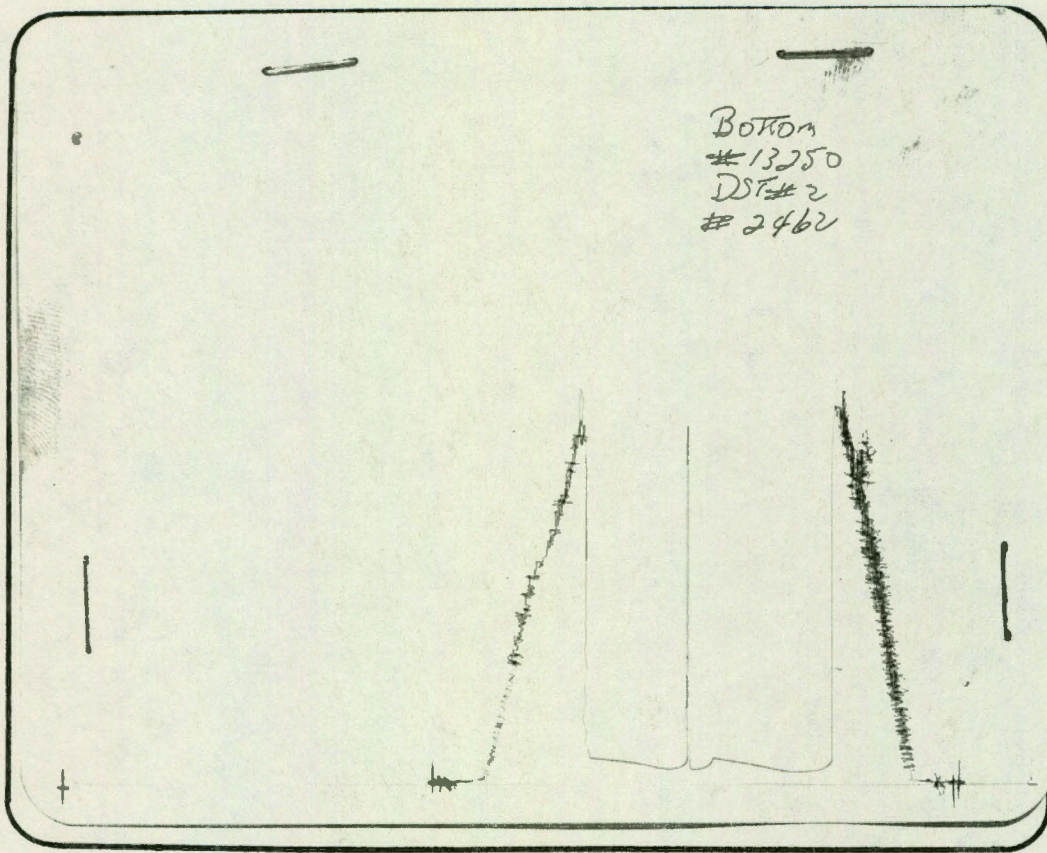


DST # 2

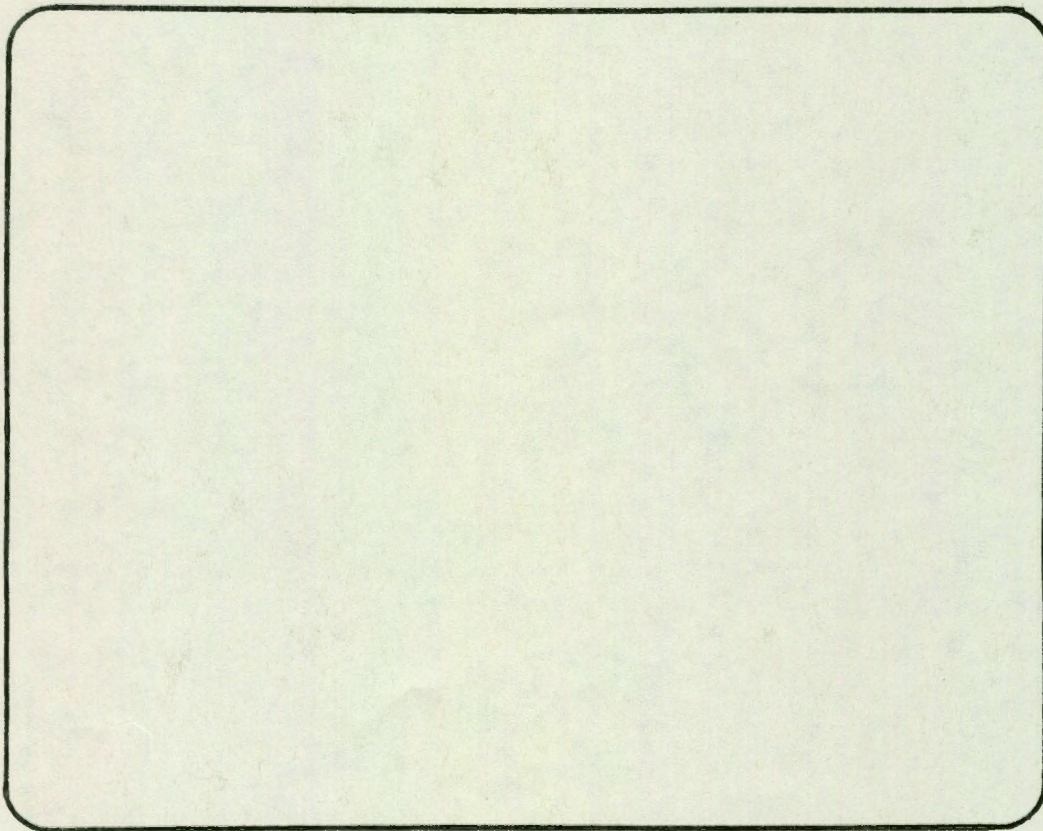
Formation Arbuckle Zone _____ Type of Test Conventional
Interval 3,781 To 3,835 Total Depth 3,835
Open 30 Shut In 60 Open 30 Shut In 60
Packer(s) Set 8:43 A.M. Started off Bottom 11:45 A.M.
Blow 1st Opening Weak Steady Blow 1" in Bucket
2nd Opening Weak Blow Died in 12 Min. Flushed Tool Good Surge Very Weak
Recovery Total Feet 45 Blow Died in 3 Min.
Recovered 45 Ft. of Drlg Mud W/Some Oil Stain
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Calculated Gas _____ Oil _____ WTR 3.15 MUD 41.85
Recovery Gravity (Oil) _____ Corrected To Temp. _____ °F Test Water Chlorides 64,000 P.P.M.
Test Area Temperature 114 °F Mud System Chlorides 55,000 P.P.M.

	Field Reading	Office Reading	
PRESSURE (A) Initial Hydrostatic Mud	2,099		PSI
(B) First Initial Flow Pressure	46		PSI
(C) First Final Flow Pressure	46		PSI
(D) Initial Closed-in Pressure	139		PSI
(E) Second Initial Flow Pressure	69		PSI
(F) Second Final Flow Pressure	69		PSI
(G) Final Closed-in Pressure	139		PSI
(H) Final Hydrostatic Mud	2,088		PSI

CRUDE OIL TESTING INC.



Extra recorder chart



Blank off recorder chart

These are actual photographs of recorder charts.



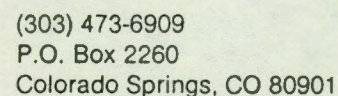
TEST REPORT

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

Company J.A. Allison Test Ticket No. 2462
Company Address 300 W. Douglas #305, Wichita, KS 67202 Date 11/11/82
Location: Sec. 14 Twp. 18S Rge. 18W Co. Rush State Kansas
Well Name And Number Renz #4 No. of Charts 5
Contractor B&B Drlg. Tester Bud O'Dell
Rig No. 2 Co. Rep. Orlin Phelps

Engineering Data

Elevation 2,060 K.B.
Mud Viscosity 58
Mud Weight 9.7
Water Loss 11.8
Type of Mud Starch
Anchor Length 54'
Hole Size 7 7/8
Casing Size 8 5/8
Surface Choke 3/4
Bottom Choke 3/4
Drill Pipe Length 3,706 I.D. 3.8 In. _____
Weight Pipe Length _____ I.D. _____ In. _____
Drill Collar Length _____ I.D. _____ In. _____
Top Packer Depth. 3,776
Bottom Packer Depth 3,781
Tool Joint Size 4 1/2 XH
Test Tool Size 5 1/2
Packer Size 6 3/4
Reversed Out No
Recorder Type and No. AK-1 13253 Clock Range No. 23838 12 Hr.
Recorder Type and No. AK-1 13250 Clock Range No. 25109 12 Hr.
Extra Equipment _____
Remarks _____



45' Mud W/Some Oil Stain

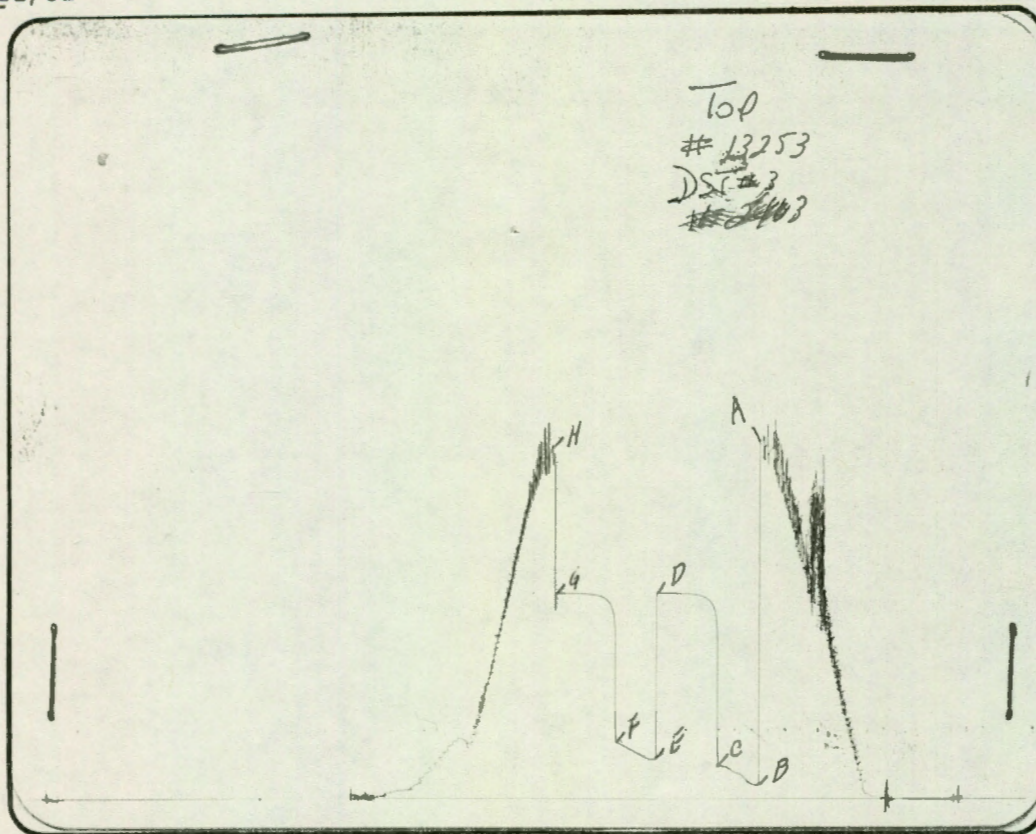
TOTAL FLUID 45

CRUDE OIL TESTING INC.

Date 11/11/82

Test Ticket No. 2463

DST # 3



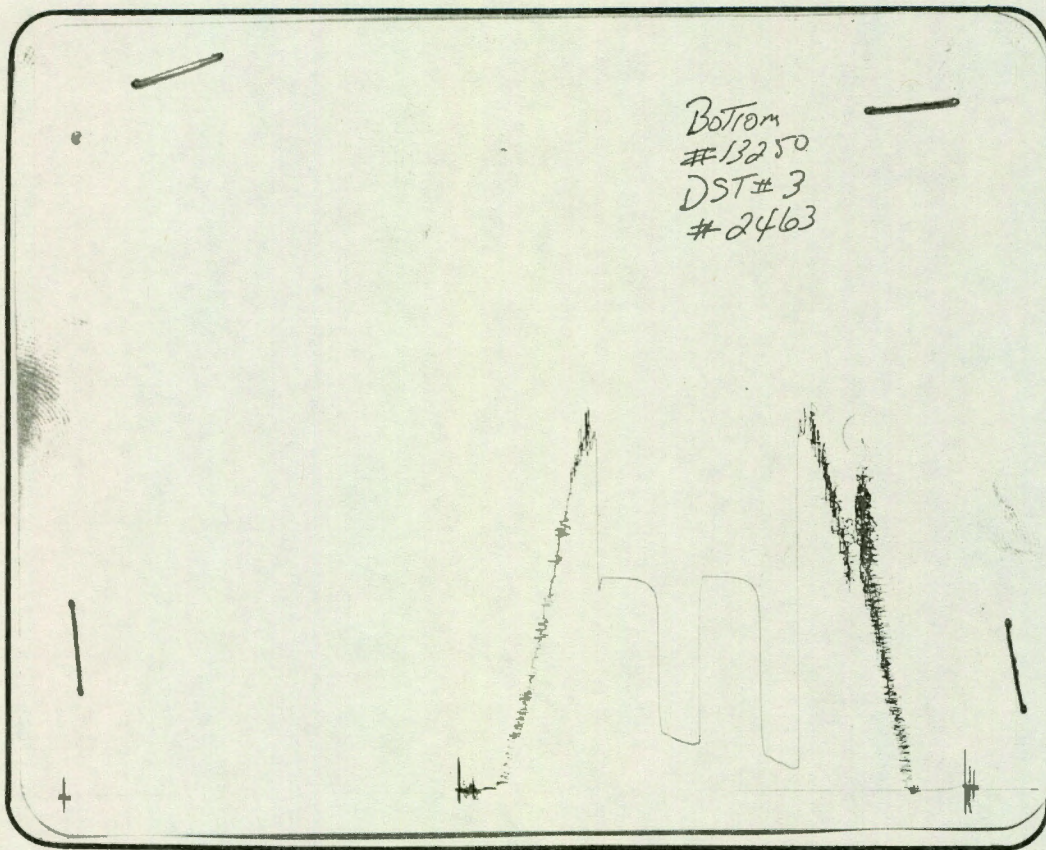
Formation Arbuckle Zone _____ Type of Test Conventional
Interval 3,782 To 3,841 Total Depth 3,841
Open 30 Shut In 45 Open 30 Shut In 45
Packer(s) Set _____ 10:43 P.M. Started off Bottom _____ 1:15 P.M.
Blow 1st Opening Strong Blow Off Bottom of Bucket in 7 Min.
2nd Opening Strong Blow Off Bottom of Bucket in 8 Min.

Recovery
Total Feet 650
Recovered 650 Ft. of Oil Cut Watery Mud
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____

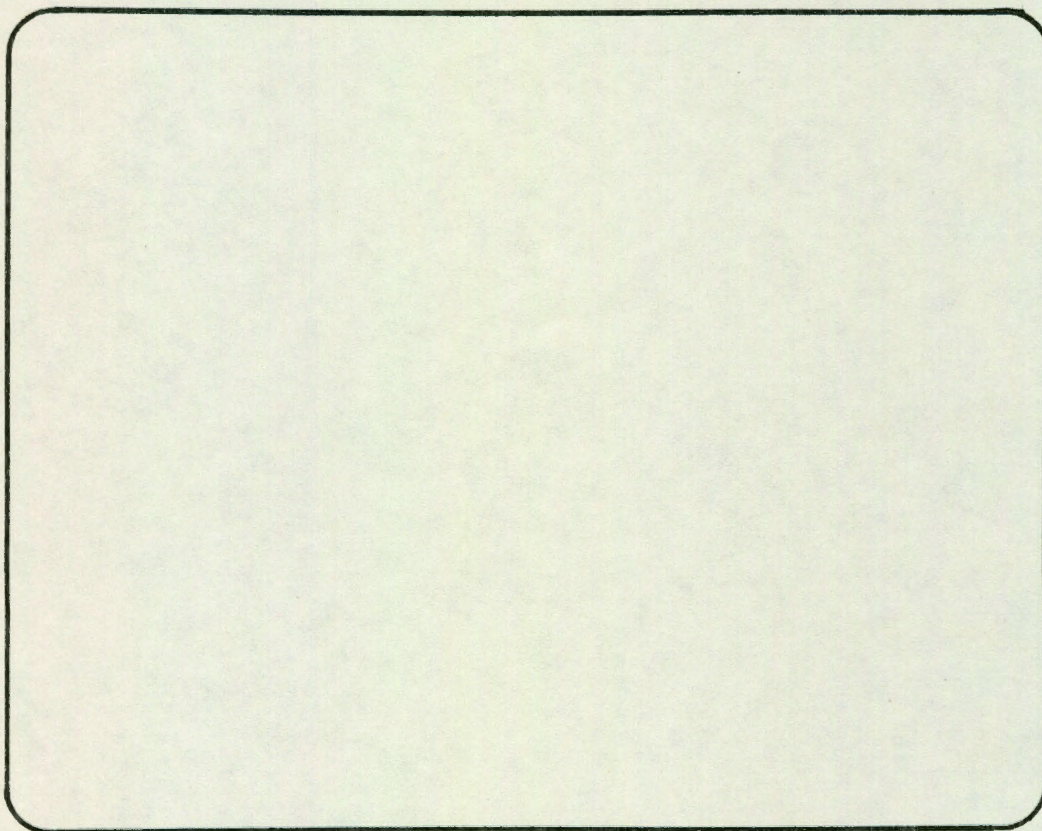
Calculated Recovery
Gas _____ Oil 76.48 WTR 159.10 MUD 414.42
Gravity (Oil) _____ Corrected To Temp. _____ °F Test Water Chlorides _____ P.P.M.
Test Area Temperature 102 °F Mud System Chlorides 55,000 P.P.M.

	Field Reading	Office Reading	
PRESSURE (A) Initial Hydrostatic Mud	2,122	2,108	PSI
(B) First Initial Flow Pressure	93	86	PSI
(C) First Final Flow Pressure	208	210	PSI
(D) Initial Closed-in Pressure	1,219	1,229	PSI
(E) Second Initial Flow Pressure	243	238	PSI
(F) Second Final Flow Pressure	347	343	PSI
(G) Final Closed-in Pressure	1,219	1,229	PSI
(H) Final Hydrostatic Mud	2,111	2,089	PSI

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Extra recorder chart



Blank off recorder chart

These are actual photographs of recorder charts.



TEST REPORT

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

Test Ticket No. 2463
Company J.A. Allison Date 11/11/82
Company Address 302 W. Douglas #305, Wichita, KS 67202 No. of Charts 5
Location: Sec. 14 Twp. 18S Rge. 18W Co. Rush State Kansas
Well Name And Number Renz #4 Tester Bud O'Dell
Contractor B&B Drlg. Rlg No. 2 Co. Rep. Orlin Phelps

Engineering Data

Elevation 2,060 K.B.
Mud Viscosity 58
Mud Weight 9.7
Water Loss 11.8
Type of Mud Starch
Anchor Length 59'
Hole Size 7 7/8
Casing Size 8 5/8
Surface Choke 3/4
Bottom Choke 3/4
Drill Pipe Length 3,702 I.D. 3.8 In. _____
Weight Pipe Length _____ I.D. _____ In. _____
Drill Collar Length _____ I.D. _____ In. _____
Top Packer Depth. 3,777
Bottom Packer Depth 3,882
Tool Joint Size 4 1/2 XH
Test Tool Size 5 1/2
Packer Size 6 3/4

Reversed Out _____

Recorder Type and No. AK-1 13253 Clock Range No. 23838 12 Hr.

Recorder Type and No. AK-1 13250 Clock Range No. 25109 12 Hr.

Extra Equipment _____

Remarks _____

CRUDE OIL TESTING

P.O. Box 2260

Colorado Springs, Colorado 80901

(303) 473-6909

Recorder Location 3,831 Ft. Recorder No. 13253 Test Ticket No. 2463

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: 6 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.

	Points Minutes	Press.	Points Minutes	Press.	Points Minutes	Press.	Points Minutes	Press.
P01	00	86	00	210	00	238	00	343
P02	05	90	05	1,179	05	241	05	1,184
P03	10	115	10	1,203	10	251	10	1,207
P04	15	152	15	1,215	15	381	15	1,216
P05	20	169	20	1,219	20	303	20	1,222
P06	25	195	25	1,222	25	326	25	1,224
P07	30	210	30	1,224	30	343	30	1,225
P08			35	1,225			35	1,226
P09			40	1,228			40	1,228
P10			45	1,229			45	1,229
P11								
P12								
P13								
P14								
P15								
P16								
P17								
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