CRUDE OIL TESTING INC.

WELL FILE

TEST REPORT

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

Test Ticket No. 1154

Company K & E Petroleum Inc. Date 5/25/81

Company Address 816 Union Center - Wichita No. of Charts 5

Location: Sec. 19 Twp. 11 Rge. 24 Co. Trego State Kansas

Well Name And Number McIntosh #1-A Tester Rod Lewis

Contractor Abercrombie Rig No. #8 Co. Rep. Jack Childers

Formation Lansing Zone C - F Type of Test Conventional

DST# 1

Interval 3,785 To 3,840 Total Depth 3,840

Open 45 Shut In 45 Open 75 Shut In 75

Packer(s) Set 3:58 ~~A.M.~~ P.M. Started off Bottom 8:00 ~~A.M.~~ P.M.

Blow Weak steady blow throughout both flow periods.

Recovery

Total Feet 365

Recovered 5 Ft. of Slightly mud cut oil.

Recovered 60 Ft. of Oil cut mud.

Recovered 60 Ft. of Slightly oil cut mud.

Recovered 60 Ft. of Watery mud.

Recovered 180 Ft. of Muddy water.

Recovered Ft. of

Gravity (Oil) Corrected To Temp. Water Chlorides 41,000

Pressures & Temp. (Office Reading If Applicable)

Initial Hydrostatic Pressure 1,961 Final Hydrostatic Pressure 1,932

Initial Closed In Pressure 1,263 Final Closed In Pressure 1,263

Initial Flow Pressure 65 To 108 Final Flow Pressure 130 To 184

Test Area Temperature 120

Engineering Date

Elevation 2,428 K. B.

Mud Viscosity 48 Mud Weight 9.4 Water Loss 13.6

Chlorides 8,000 P.P.M. Type of Mud Chemical Anchor Length 55

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

Drill Pipe Length 2,960 I.D. 3.8 In. Weight Pipe Length 532 I.D. 2.76 In.

Drill Collar Length I.D. In.

Top Packer Depth. 3,780 Bottom Packer Depth. 3,785 Packer Size 6 3/4

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

Did Well Flow No Reversed Out No

Recorder Type and No. Kuster #10993 Clock Range No. #22347 12 Hr.

Recorder Type and No. Kuster #10992 Clock Range No. #23935 12 Hr.

Extra Equipment None

Remarks Open Hole Test - $660.00

Thank-you

Price of Job $660.00

CRUDE OIL TESTING COMPANY

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

Date 5/25/81 Test Ticket No. 1154

Recorder No. Kuster AK-1 #10993 Capacity 4,250 PSI Location 3,830 Ft.

Clock No. #22347 Elevation 2,428 K. B. Well Temperature 120 °F

Point	Pressure		Field Time	Time Computed
A Initial Hydrostatic Mud	1,969	P.S.I.	Open Tool 4:00 PM	
B First Initial Flow Pressure	60	P.S.I.	First Flow Pressure 45 Mins.	Mins.
C First Final Flow Pressure	113	P.S.I.	Initial Closed-in Pressure 45 Mins.	Mins.
D Initial Closed-in Pressure	1,267	P.S.I.	Second Flow Pressure 75 Mins.	70 Mins.
E Second Initial Flow Pressure	133	P.S.I.	Final Closed-in Pressure 75 Mins.	Mins.
F Second Final Flow Pressure	194	P.S.I.		
G Final Closed-in Pressure	1,270	P.S.I.		
H Final Hydrostatic Mud	1,937	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 9 Inc.		Breakdown: 9 Inc.		Breakdown: 14 Inc.		Breakdown: 15 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	60	00	113	00	133	00	194
P 2 05	64	05	1,048	05	135	05	1,004
P 3 10	66	10	1,148	10	137	10	1,104
P 4 15	71	15	1,184	15	141	15	1,144
P 5 20	80	20	1,206	20	146	20	1,168
P 6 25	89	25	1,224	25	151	25	1,188
P 7 30	95	30	1,238	30	155	30	1,201
P 8 35	102	35	1,249	35	159	35	1,213
P 9 40	108	40	1,259	40	166	40	1,224
P10 45	113	45	1,267	45	170	45	1,233
P11				50	176	50	1,240
P12				55	180	55	1,247
P13				60	185	60	1,255
P14				65	190	65	1,261
P15				70	194	70	1,266
P16						75	1,270
P17							
P18							
P19							
P20							

CRUDE OIL TESTING INC

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DRILL STEM TEST RECOVERY ANALYSIS

COMPANY: K & E Petro. Inc. LEASE: McIntosh #1-A DST# 1

SEC: 19 Twp: 11 Rge: 24 COUNTY: Trego STATE: Kansas

VISUAL DST RECOVERY:

5' Slightly oil cut mud. - 60' Oil cut mud. - 60' Slightly oil cut mud. - 60' Watery mud. - 180' Muddy water.

CENTIFUDGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	5		75	25	
2	60		5	25	70
3	60		3	27	70
4	60		scum	70	30
5	180			80	20

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		×		=		75	×	5	=	3.75	25	×	5	=	1.25		×		=	
2	60		×		=		5	×	60	=	3	25	×	60	=	15	70	×	60	=	42
3	60		×		=		3	×	60	=	1.8	27	×	60	=	16.2	70	×	60	=	42
4	60		×		=		scum	×		=		70	×	60	=	42	30	×	60	=	18
5	180		×		=			×		=		80	×	180	=	144	20	×	180	=	36
Totals											8.55					218.45					138

CALCULATED DST RECOVERY =

GAS

OIL 8.55

WTR 218.45

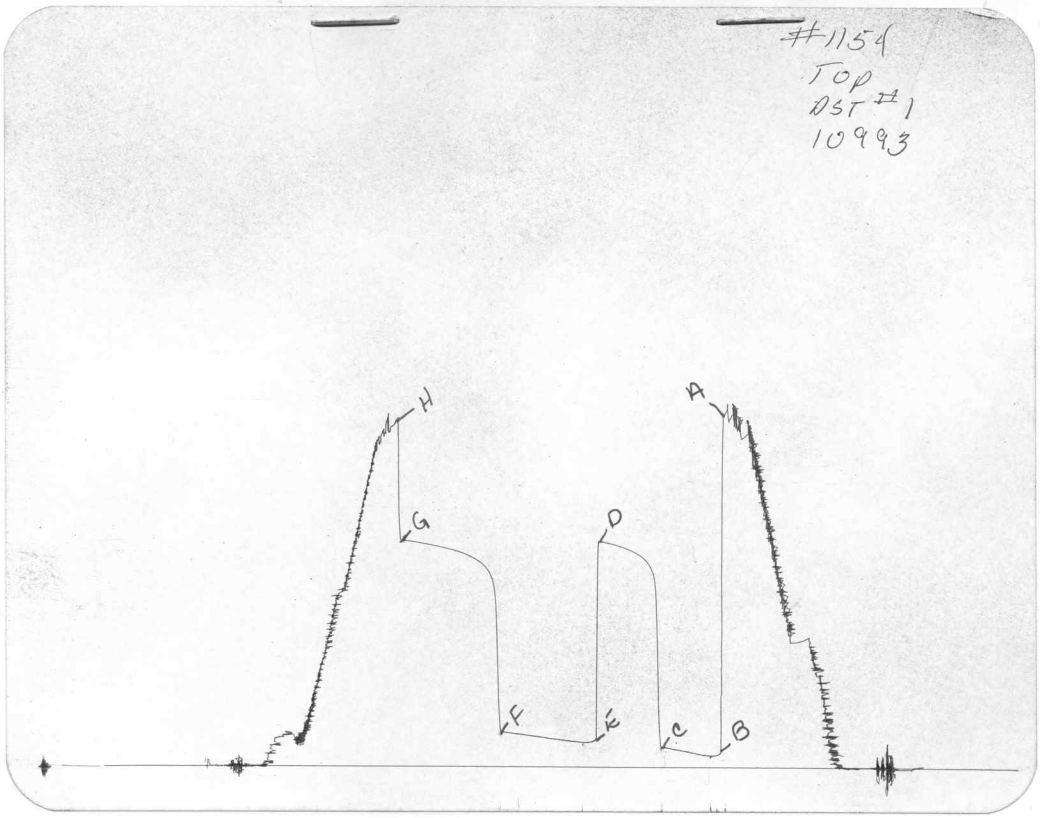
MUD 138

TOTAL FLUID 365'

CHLORIDES MUD SYSTEM 8,000

CHLORIDES DST WATER 41,000

GRAVITY OF OIL



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1,961	1,969	PSI
(B)	First Initial Flow Pressure	65	60	PSI
(C)	First Final Flow Pressure	108	113	PSI
(D)	Initial Closed-in Pressure	1,263	1,267	PSI
(E)	Second Initial Flow Pressure	130	133	PSI
(F)	Second Final Flow Pressure	184	194	PSI
(G)	Final Closed-in Pressure	1,263	1,270	PSI
(H)	Final Hydrostatic Mud	1,932	1,937	PSI

CRUDE OIL TESTING INC.

WELL FILE

TEST REPORT

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

Test Ticket No. 1155

Company K & E Petro. Inc. Date 5/26/81

Company Address 816 Union Center - Wichita No. of Charts 5

Location: Sec. 19 Twp. 11 Rge. 24 Co. Trego State Kansas

Well Name And Number Mcintosh #1-A Tester Rod Lewis

Contractor Abercrombie Rig No. #8 Co. Rep. Jack Childers

Formation Lansing Zone 160' Type of Test Conventional

DST# 2

Interval 3,890 To 3,925 Total Depth 3,925

Open 45 Shut In 45 Open 75 Shut In 75

Packer(s) Set 11:58 ~~A.M.~~ ~~P.M.~~ Started off Bottom 4:00 ~~A.M.~~ ~~P.M.~~

Blow 1st Open: Surging intermitent weak. 2nd Open: Very weak dead in 10 min. into opening.

Recovery

Total Feet 30

Recovered 30 Ft. of Oil specked mud.

Recovered _____ Ft. of _____

Recovered _____ Ft. of _____

Recovered _____ Ft. of (Read bottom chart)

Recovered _____ Ft. of _____

Recovered _____ Ft. of _____

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

Pressures & Temp. (Office Reading If Applicable)

Initial Hydrostatic Pressure 2,044 Final Hydrostatic Pressure 2,023

Initial Closed In Pressure 1,735 Final Closed In Pressure 1,553

Initial Flow Pressure 54 To 54 Final Flow Pressure 54 To 54

Test Area Temperature 114

Engineering Date

Elevation 2,428 K. B.

Mud Viscosity 40 Mud Weight 9.4 Water Loss 13.6

Chlorides 8,000 P.P.M. Type of Mud Chem. Mud Anchor Length 35

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

Drill Pipe Length 3,045 I.D. 3.8 In. Weight Pipe Length 532 I.D. 2.76 In.

Drill Collar Length _____ I.D. _____ In.

Top Packer Depth. 3,885 Bottom Packer Depth. 3,890 Packer Size 6 3/4

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

Did Well Flow No Reversed Out No

Recorder Type and No. Kuster #10993 Clock Range No. #22347 12 Hr.

Recorder Type and No. Kuster #10992 Clock Range No. #23935 12 Hr.

Extra Equipment None

Remarks Open Hole Test - $660.00

Thank-you

Price of Job $660.00

CRUDE OIL TESTING COMPANY

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

Date 5/26/81 Test Ticket No. 1155

Recorder No. Kuster AK-1 #10993 Capacity 4,250 PSI Location 3,915 Ft.

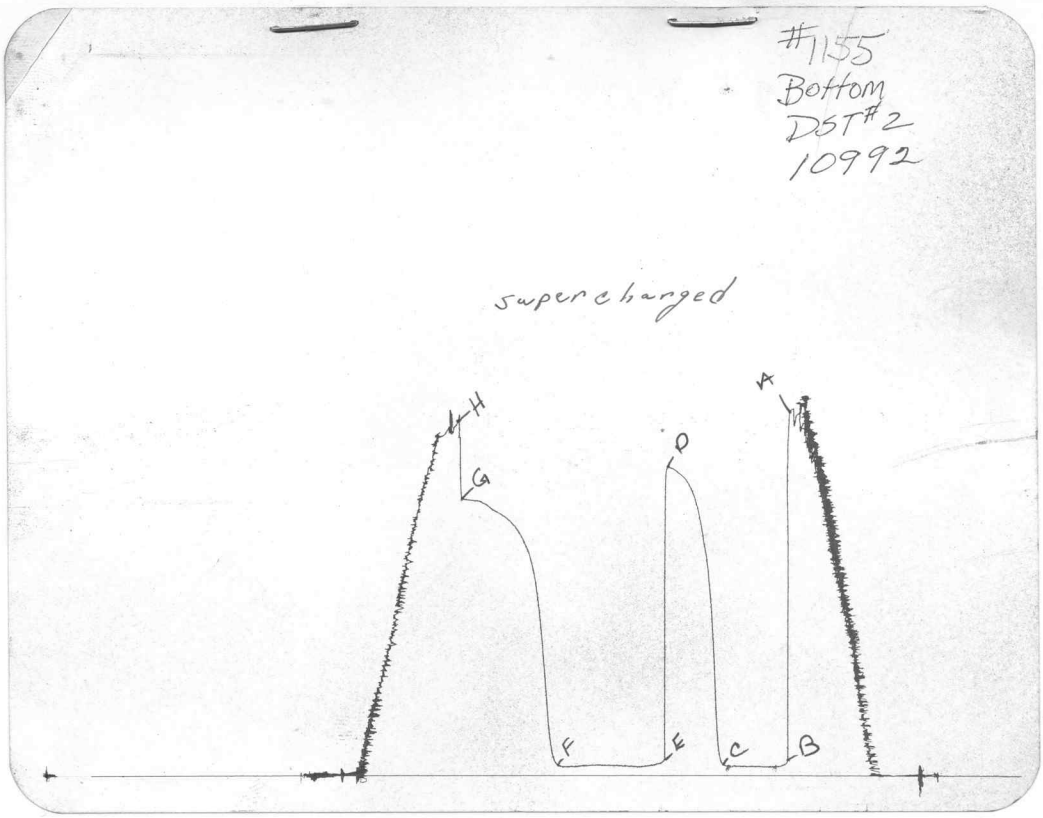
Clock No. #22347 Elevation 2,428 K. B. Well Temperature 114 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2,049	P.S.I.
B	First Initial Flow Pressure	43	P.S.I.
C	First Final Flow Pressure	55	P.S.I.
D	Initial Closed-in Pressure	1,732	P.S.I.
E	Second Initial Flow Pressure	41	P.S.I.
F	Second Final Flow Pressure	57	P.S.I.
G	Final Closed-in Pressure	1,550	P.S.I.
H	Final Hydrostatic Mud	1,995	P.S.I.

	Field Time	Time Computed
Open Tool	12:00 P M	
First Flow Pressure	45 Mins.	Mins.
Initial Closed-in Pressure	45 Mins.	Mins.
Second Flow Pressure	75 Mins.	70 Mins.
Final Closed-in Pressure	75 Mins.	Mins.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 9 Inc.		Breakdown: 9 Inc.		Breakdown: 14 Inc.		Breakdown: 15 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	43	00	55	00	41	00	57
P 2 05	46	05	134	05	41	05	71
P 3 10	50	10	835	10	45	10	302
P 4 15	50	15	1,242	15	47	15	794
P 5 20	52	20	1,454	20	50	20	1,096
P 6 25	52	25	1,587	25	52	25	1,256
P 7 30	52	30	1,660	30	53	30	1,340
P 8 35	52	35	1,696	35	54	35	1,399
P 9 40	53	40	1,723	40	56	40	1,436
P10 45	55	45	1,732	45	56	45	1,464
P11				50	57	50	1,484
P12				55	57	55	1,512
P13				60	57	60	1,535
P14				65	57	65	1,540
P15				70	57	70	1,545
P16						75	1,550
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2,044	2,049	PSI
(B)	First Initial Flow Pressure	54	43	PSI
(C)	First Final Flow Pressure	54	55	PSI
(D)	Initial Closed-in Pressure	1,735	1,732	PSI
(E)	Second Initial Flow Pressure	54	41	PSI
(F)	Second Final Flow Pressure	54	57	PSI
(G)	Final Closed-in Pressure	1,553	1,550	PSI
(H)	Final Hydrostatic Mud	2,023	1,995	PSI

WELL FILE

TEST REPORT

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

Company K & E Petro. Inc. Test Ticket No. 1156
Company Address 816 Union Center - Wichita Date 5/27/81
Location: Sec. 19 Twp. 11 Rge. 24 Co. Trego State Kansas No. of Charts 5
Well Name And Number McIntosh #1-A Tester Rod Lewis
Contractor Abercrombie Rig No. #8 Co. Rep. Jack Childers

Formation Lansing Zone _____ Type of Test Conventional

DST# 3
Interval 3,921 To 3,945 Total Depth 3,945
Open 30 Shut In 30 Open 30 Shut In 30
Packer(s) Set 3:13 AM PM Started off Bottom 5:15 AM PM
Blow Very weak died in 8 min. into first opening.

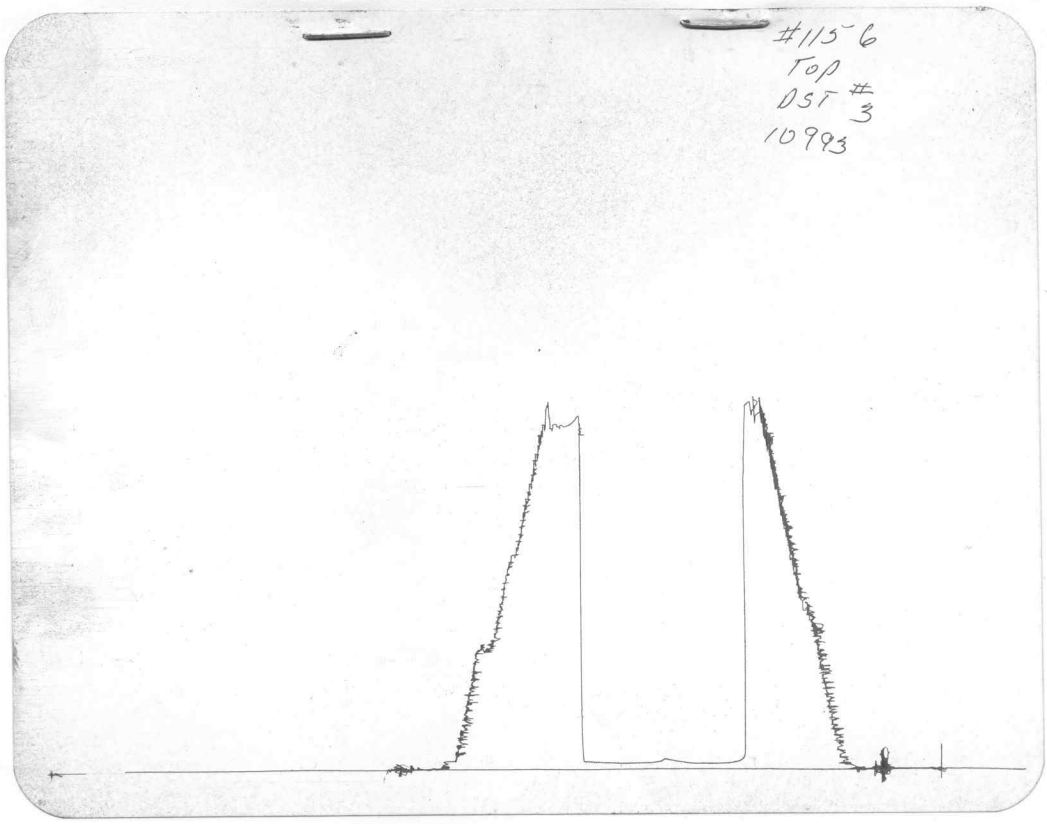
Recovery
Total Feet 05
Recovered 05 Ft. of Drilling mud with very slight show of oil.
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Recovered _____ Ft. of _____
Gravity (Oil) _____ Corrected To Temp. _____ Water Chlorides _____

Pressures & Temp. (Office Reading if Applicable)
Initial Hydrostatic Pressure 2,036 Final Hydrostatic Pressure 2,014
Initial Closed In Pressure 65 Final Closed In Pressure 43
Initial Flow Pressure 32 To 32 Final Flow Pressure 32 To 32
Test Area Temperature 108

Engineering Date
Elevation 2,428 K. B.
Mud Viscosity 41 Mud Weight 9.5 Water Loss 12.8
Chlorides 9,000 P.P.M. Type of Mud Chem. Mud Anchor Length 24
Hole Size 7 7/8 Casing Size 8 5/8 Surface Choke 3/4 Bottom Choke 3/4
Drill Pipe Length 3,068 I.D. 3.8 In. Weight Pipe Length 532 I.D. 2.76 In.
Drill Collar Length _____ I.D. _____ In.
Top Packer Depth. 3,916 Bottom Packer Depth. 3,921 Packer Size 6 3/4
Test Tool Size 5½ In. Tool Joint Size 4½ XH In.
Did Well Flow No Reversed Out No
Recorder Type and No. Kuster #10993 Clock Range No. #22347 12 Hr.
Recorder Type and No. Kuster #10992 Clock Range No. #23935 12 Hr.
Extra Equipment None
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	2,036	PSI
(B)	First Initial Flow Pressure	32	PSI
(C)	First Final Flow Pressure	32	PSI
(D)	Initial Closed-in Pressure	65	PSI
(E)	Second Initial Flow Pressure	32	PSI
(F)	Second Final Flow Pressure	32	PSI
(G)	Final Closed-in Pressure	43	PSI
(H)	Final Hydrostatic Mud	2,014	PSI

WELL FILE

TEST REPORT

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

Test Ticket No. 1185

Company K & E Petro. Inc. Date 5/27/81

Company Address 816 Union Center - Wichita No. of Charts 5

Location: Sec. 19 Twp. 11 Rge. 24 Co. Trego State Kansas

Well Name And Number McIntosh #1-A Tester Rod Lewis

Contractor Abercrombie Rig No. #8 Co. Rep. Jack Childers

Formation Lansing Zone _____ Type of Test Conventional

DST# 4

Interval 3,934 To 3,984 Total Depth 3,984

Open 30 Shut In 30 Open 30 Shut In 30

Packer(s) Set 7:43 ~~A.M.~~ P.M. Started off Bottom 8:45 ~~A.M.~~ P.M.

Blow 1st Open: Very weak died in 9 min. 2nd Open: No blow.

Recovery

Total Feet 05

Recovered 05 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 2,047 Final Hydrostatic Pressure 2,025

Initial Closed In Pressure 65 Final Closed In Pressure 54

Initial Flow Pressure 54 To 54 Final Flow Pressure 54 To 54

Test Area Temperature 108

Engineering Date

Elevation 2,428 K. B.

Mud Viscosity 52 Mud Weight 9.2 Water Loss 13.6

Chlorides 9,000 P.P.M. Type of Mud Chem. Mud Anchor Length 50

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

Drill Pipe Length 3,104 I.D. 3.8 In. Weight Pipe Length 532 I.D. 2.76 In.

Drill Collar Length _____ I.D. _____ In.

Top Packer Depth. 3,929 Bottom Packer Depth. 3,934 Packer Size 6 3/4

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

Did Well Flow No Reversed Out No

Recorder Type and No. Kuster #10993 Clock Range No. #22347 12 Hr.

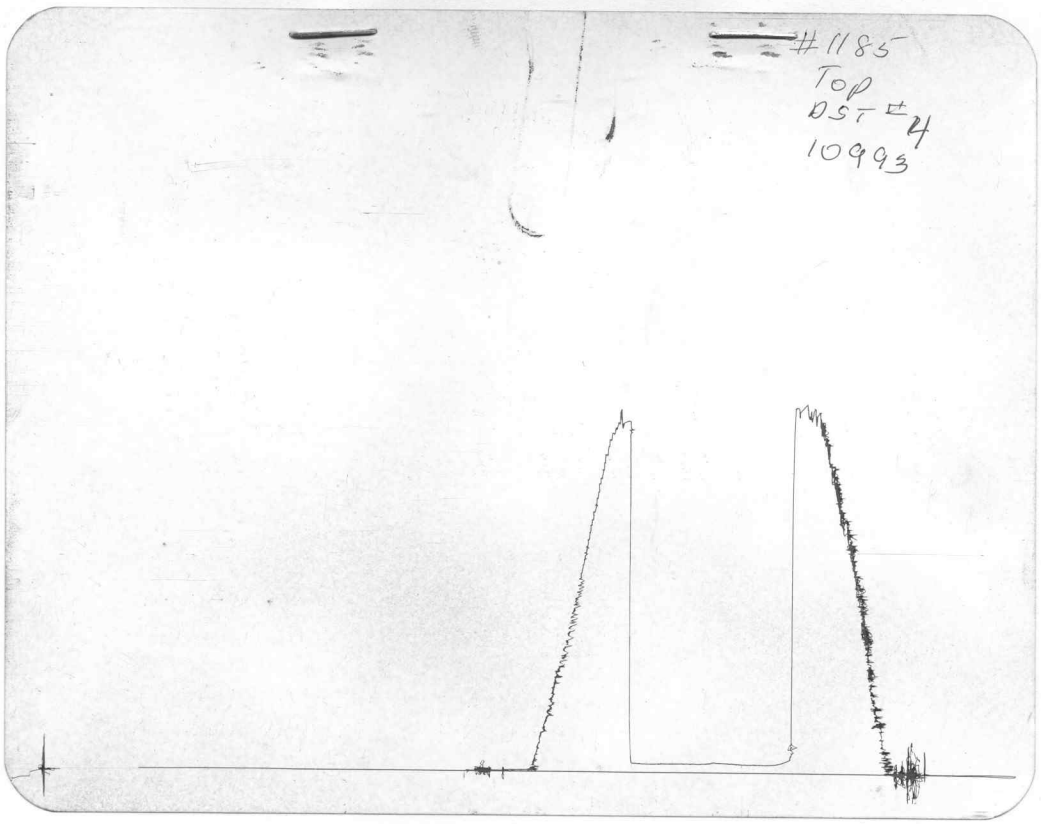
Recorder Type and No. Kuster #10992 Clock Range No. #23935 12 Hr.

Extra Equipment None

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	2,047		PSI
(B)	First Initial Flow Pressure	54		PSI
(C)	First Final Flow Pressure	54		PSI
(D)	Initial Closed-in Pressure	65		PSI
(E)	Second Initial Flow Pressure	54		PSI
(F)	Second Final Flow Pressure	54		PSI
(G)	Final Closed-in Pressure	54		PSI
(H)	Final Hydrostatic Mud	2,025		PSI