



P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC. FORMATION TESTING

TICKET

N^o 18940

Elevation

1657 GL
1666 KB

Formation

Miss

Eff. Pay — Ft.

District

GT. Bend

Date

7-17-93

Customer Order No.

COMPANY NAME

STERLING Drilling Company

ADDRESS

P.O. Box 129 Sterling, KS 67579-0129

LEASE AND WELL NO.

BAINUM #1-12

COUNTY

Reno

STATE

Ks

Sec. 12

Twp. 25

Rge. 9W

Mail Invoice To

Same

No. Copies Requested

Reg

Mail Charts To

Same BAINUM #1-12

Address

No. Copies Requested

Reg

Formation Test No.

1

Interval Tested From

3790

ft. to

3865

ft. Total Depth

3865

ft.

Packer Depth

3785

ft.

Size

6 5/8

in.

Packer Depth

—

ft.

Size

—

in.

Packer Depth

3790

ft.

Size

6 5/8

in.

Packer Depth

—

ft.

Size

—

in.

Depth of Selective Zone Set

Top Recorder Depth (Inside)

3794

ft.

Recorder Number

10270

Cap.

4150

Bottom Recorder Depth (Outside)

3792

ft.

Recorder Number

13550

Cap.

4125

Below Straddle Recorder Depth

—

ft.

Recorder Number

—

Cap.

—

Drilling Contractor

STERLING rig 4

Drill Collar Length

428

I. D.

2.2

in.

Mud Type

Chemical

Viscosity

50

Weight Pipe Length

—

I. D.

—

in.

Weight

9.1

Water Loss

7.2

cc.

Drill Pipe Length

3335

I. D.

3.8

in.

Chlorides

10,000

P.P.M.

Test Tool Length

27

ft.

Tool Size

5 1/2

in.

Jars: Make

WTC

Serial Number

422

Anchor Length

75

ft.

Size

5 1/2

in.

Did Well Flow?

—

Reversed Out

—

Surface Choke Size

3/4

in.

Bottom Choke Size

3/4

in.

Main Hole Size

7 7/8

in.

Tool Joint Size

4 1/2 XH

in.

Blow:

IF - WEAK building to a strong blow in 14 min

FF - WEAK building to a good blow 1" to 7" blow

Recovered

460 ft. of GAS in Pipe

Recovered

80 ft. of Slightly oil cut mud

Recovered

2% oil 98% mud

Recovered

ft. of

Recovered

ft. of

Recovered

ft. of

Chlorides

P.P.M. Sample Jars used 2 Remarks:

JUL 21 1993

Time On Location

6:40

A.M.
P.M.

Time Pick Up Tool

7:10

A.M.
P.M.

Time Off Location

A.M.
P.M.

Time Set Packer(s)

8:35

A.M.
P.M.

Time Started Off Bottom

12:05

A.M.
P.M.

Maximum Temperature

124

Initial Hydrostatic Pressure

(A) 1838

P.S.I.

Initial Flow Period

Minutes 30

(B)

52

P.S.I. to (C)

52

P.S.I.

Initial Closed In Period

Minutes 30

(D)

479

P.S.I.

Final Flow Period

Minutes 60

(E)

62

P.S.I. to (F)

72

P.S.I.

Final Closed In Period

Minutes 90

(G)

956

P.S.I.

Final Hydrostatic Pressure

(H) 1827

P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By

Wayne Clebsack

Signature of Customer or his authorized representative

Western Representative

Ray Schwager

Thank
you

FIELD INVOICE

Open Hole Test	\$
Misrun	\$
Straddle Test	\$
Jars	\$
Selective Zone	\$
Safety Joint	\$
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage	\$
Fluid Sampler	\$
Extra Charts	\$
Insurance	\$
Telecopier	\$
TOTAL	\$

WESTERN TESTING CO., INC.

Pressure Data

Date 7-17-54

Test Ticket No. 18940

Recorder No. 10720

Capacity _____

Location _____

Ft. _____

Clock No. _____

Elevation _____

Well Temperature _____

°F _____

Point	Pressure	P.S.I.
A Initial Hydrostatic Mud	<u>1917</u>	P.S.I.
B First Initial Flow Pressure	<u>59</u>	P.S.I.
C First Final Flow Pressure	<u>64</u>	P.S.I.
D Initial Closed-in Pressure	<u>48.5</u>	P.S.I.
E Second Initial Flow Pressure	<u>78</u>	P.S.I.
F Second Final Flow Pressure	<u>84</u>	P.S.I.
G Final Closed-in Pressure	<u>95.5</u>	P.S.I.
H Final Hydrostatic Mud	<u>1860</u>	P.S.I.

Open Tool _____

First Flow Pressure _____

Initial Closed-in Pressure _____

Second Flow Pressure _____

Final Closed-in Pressure _____

Time Given

Time Computed

M

Mins. 30 Mins

Mins. 30 Mins

Mins. 65 Mins

Mins. 90 Mins

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: _____ Inc.

of 5 mins. and a

final inc. of 0 Min.

Initial Shut-In

Breakdown: _____ Inc.

of 3 mins. and a

final inc. of 0 Min.

Second Flow Pressure

Breakdown: _____ Inc.

of 5 mins. and a

final inc. of 0 Min.

Final Shut-In

Breakdown: _____ Inc.

of 3 mins. and a

final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>59</u>	0	<u>64</u>	0	<u>78</u>	0	<u>84</u>
P 2 5	<u>7</u>	3	<u>64</u>	5	<u>7</u>	3	<u>94</u>
P 3 10	<u>7</u>	6	<u>69</u>	10	<u>7</u>	6	<u>114</u>
P 4 15	<u>7</u>	9	<u>72</u>	15	<u>7</u>	9	<u>124</u>
P 5 20	<u>59</u>	12	<u>109</u>	20	<u>7</u>	12	<u>148</u>
P 6 25	<u>62</u>	15	<u>154</u>	25	<u>7</u>	15	<u>182</u>
P 7 30	<u>67</u>	18	<u>198</u>	30	<u>78</u>	18	<u>219</u>
P 8 35	<u>67</u>	21	<u>255</u>	35	<u>78</u>	21	<u>263</u>
P 9 40		24	<u>265</u>	40	<u>79</u>	24	<u>315</u>
P10 45		27	<u>392</u>	45	<u>80</u>	27	<u>360</u>
P11 50		30	<u>485</u>	50	<u>81</u>	30	<u>417</u>
P12 55		33		55	<u>82</u>	33	<u>475</u>
P13 60		36		60	<u>83</u>	36	<u>526</u>
P14 65		39		65	<u>84</u>	39	<u>567</u>
P15 70		42		70		42	<u>608</u>
P16 75		45		75		45	<u>651</u>
P17 80		48		80		48	<u>686</u>
P18 85		51		85		51	<u>718</u>
P19 90		54		90		54	<u>752</u>
P20 95		57		95		57	<u>789</u>
100		60		100		60	<u>804</u>

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 18940

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud _____	P.S.I.	Open Tool _____	M _____	
B First Initial Flow Pressure _____	P.S.I.	First Flow Pressure _____	Mins. _____	Mins. _____
C First Final Flow Pressure _____	P.S.I.	Initial Closed-in Pressure _____	Mins. _____	Mins. _____
D Initial Closed-in Pressure _____	P.S.I.	Second Flow Pressure _____	Mins. _____	Mins. _____
E Second Initial Flow Pressure _____	P.S.I.	Final Closed-in Pressure _____	Mins. _____	Mins. _____
F Second Final Flow Pressure _____	P.S.I.			
G Final Closed-in Pressure _____	P.S.I.			
H Final Hydrostatic Mud _____	P.S.I.			

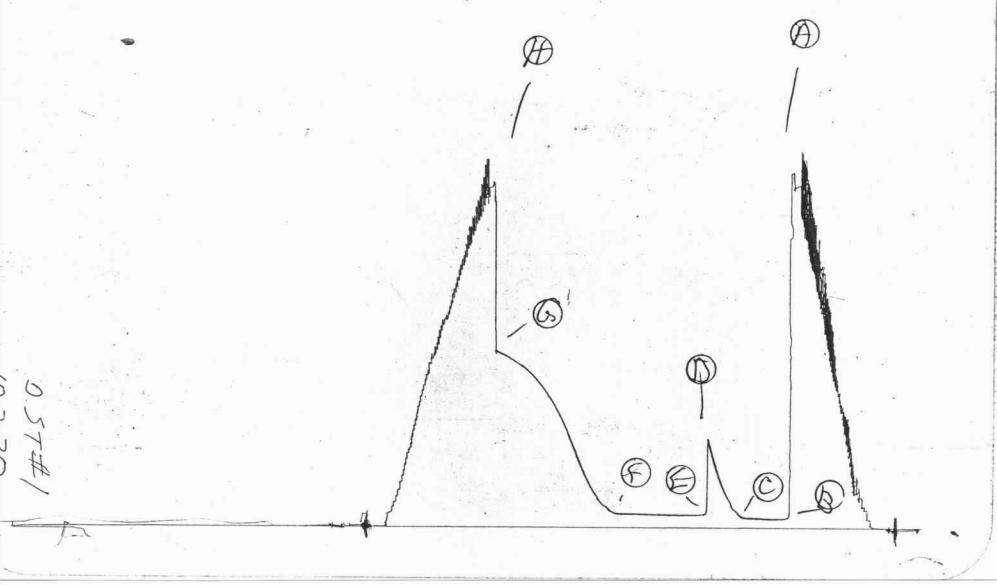
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ 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 1 105		63		105		63	829
P 2 110		66		110		66	852
P 3 115		69		115		69	867
P 4 120		72		120		72	880
P 5 125		75		125		75	895
P 6 130		78		130		78	910
P 7 135		81		135		81	913
P 8 140		84		140		84	934
P 9 145		87		145		87	946
P10 150		90		150		90	955
P11 155		93		155		93	
P12 160		96		160		96	
P13 165		99		165		99	
P14 170		102		170		102	
P15 175		105		175		105	
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	

KT 18940

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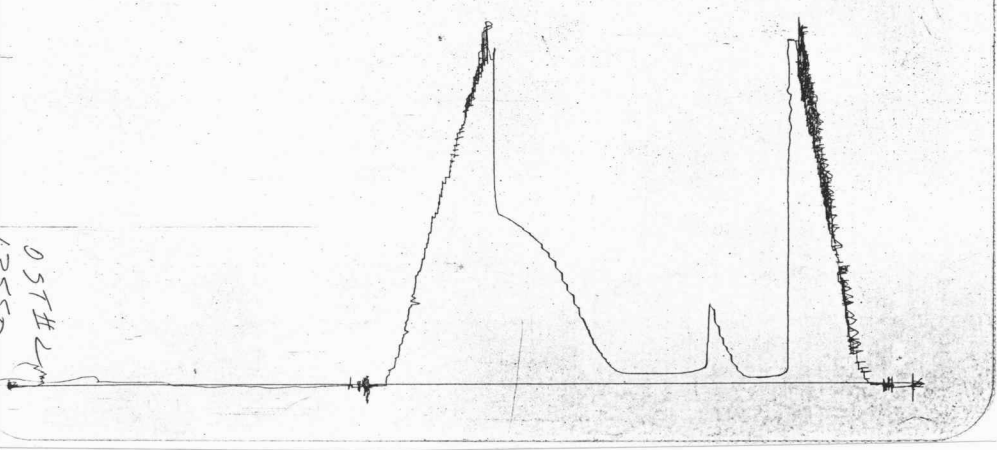
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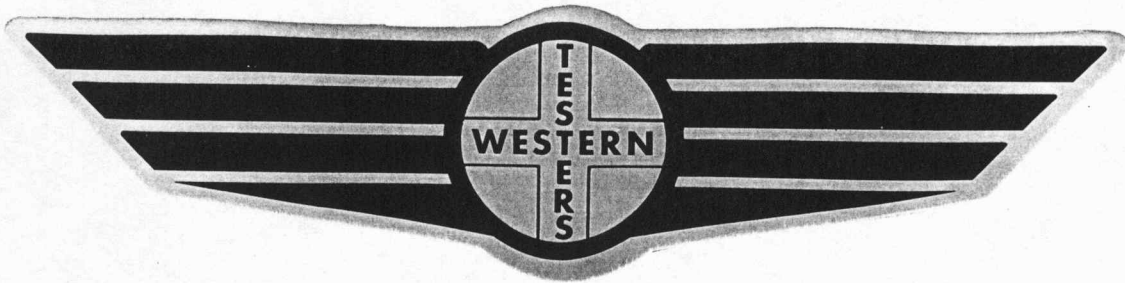
KT 18940

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0.5T#2



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 800-688- 7021**

DST REPORT

GENERAL INFORMATION

DATE : 7/17/93
CUSTOMER : STERLING DRILLING COMPANY
WELL : #1-12 TEST: 1
ELEVATION: 1666 KB
SECTION : 12
RANGE : 9W COUNTY: RENO
GAUGE SN#: 10270 RANGE : 4150

TICKET : 18940
LEASE : BAINUM
GEOLOGIST: LEBSACK
FORMATION: MISSISSIPPI
TOWNSHIP : 25S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3790.00 ft TO: 3865.00 ft TVD: 3865.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3794.0 ft 3797.0 ft
TEMPERATURE: 124.0

DRILL COLLAR LENGTH:	428.0 ft	I.D.:	2.200 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3335.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	27.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	75.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	3785.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3790.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : STERLING RIG 4
MUD TYPE : CHEMICAL
WEIGHT : 9.100 ppg
CHLORIDES : 10000 ppm
JARS-MAKE : WTC
DID WELL FLOW?: NO

VISCOSITY : 50.00 cp
WATER LOSS: 7.200 cc

SERIAL NUMBER: 422
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BUILDING TO A STRONG BLOW
IN 14 MINUTES. FINAL FLOW PERIOD WEAK BUILDING TO
A GOOD BLOW - 1 TO 7 INCH BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
80.0	2.0	0.0	0.0	98.0	SL OIL CUT MUD
0.0	0.0	0.0	0.0	0.0	460 FT GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.0075	STB	TOTAL FLOW TIME:	95.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	5.7010	STB/D
MUD VOLUME:	0.3686	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.3761	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1838.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	52.00	52.00
INITIAL SHUT-IN	30.00		479.00
FINAL FLOW	60.00	62.00	72.00
FINAL SHUT-IN	90.00		956.00

FINAL HYDROSTATIC PRESSURE: 1827.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1917.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	59.00	64.00
INITIAL SHUT-IN	30.00		482.00
FINAL FLOW	65.00	78.00	84.00
FINAL SHUT-IN	90.00		955.00

FINAL HYDROSTATIC PRESSURE: 1863.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 7/17/93	TICKET : 18940
CUSTOMER : STERLING DRILLING COMPANY	LEASE : BAINUM
WELL : #1-12 TEST: 1	GEOLOGIST: LEBSACK
ELEVATION: 1666 KB	FORMATION: MISSISSIPPI
SECTION : 12	TOWNSHIP : 25S
RANGE : 9W COUNTY: RENO	STATE : KS
GAUGE SN#: 10270 RANGE : 4150	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	59.00	59.00
5.00	59.00	0.00
10.00	59.00	0.00
15.00	59.00	0.00
20.00	59.00	0.00
25.00	62.00	3.00
30.00	64.00	2.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	66.00	66.00	0.00
6.00	69.00	3.00	0.00
9.00	92.00	23.00	0.00
12.00	109.00	17.00	0.00
15.00	154.00	45.00	0.00
18.00	198.00	44.00	0.00
21.00	255.00	57.00	0.00
24.00	315.00	60.00	0.00
27.00	392.00	77.00	0.00
30.00	482.00	90.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	78.00	78.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
5.00	78.00	0.00
10.00	78.00	0.00
15.00	78.00	0.00
20.00	78.00	0.00
25.00	78.00	0.00
30.00	78.00	0.00
35.00	78.00	0.00
40.00	79.00	1.00
45.00	80.00	1.00
50.00	81.00	1.00
55.00	82.00	1.00
60.00	83.00	1.00
65.00	84.00	1.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	94.00	94.00	0.00
6.00	114.00	20.00	0.00
9.00	124.00	10.00	0.00
12.00	148.00	24.00	0.00
15.00	183.00	35.00	0.00
18.00	219.00	36.00	0.00
21.00	263.00	44.00	0.00
24.00	313.00	50.00	0.00
27.00	360.00	47.00	0.00
30.00	417.00	57.00	0.00
33.00	475.00	58.00	0.00
36.00	526.00	51.00	0.00
39.00	567.00	41.00	0.00
42.00	608.00	41.00	0.00
45.00	651.00	43.00	0.00
48.00	686.00	35.00	0.00
51.00	718.00	32.00	0.00
54.00	752.00	34.00	0.00
57.00	780.00	28.00	0.00
60.00	804.00	24.00	0.00
63.00	829.00	25.00	0.00
66.00	852.00	23.00	0.00
69.00	867.00	15.00	0.00
72.00	880.00	13.00	0.00
75.00	895.00	15.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
78.00	910.00	15.00	0.00
81.00	923.00	13.00	0.00
84.00	936.00	13.00	0.00
87.00	946.00	10.00	0.00
90.00	955.00	9.00	0.00



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET

Last
N^o 18941

P. O. BOX 1599 PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation

1657 GL
1666 KB

Formation *N/A*

Eff. Pay *—* Ft.

District *GT. Bend*

Date *7-18-93*

Customer Order No. *—*

COMPANY NAME *STERLING Drilling Company*

ADDRESS *P.O. Box 129 Sterling, KS 67579-0129*

LEASE AND WELL NO. *Bainum #1-12* COUNTY *Reo*

STATE *KS*

Sec. *12* Twp. *25* Rge. *9^W*

Mail Invoice To *SAME*

No. Copies Requested *log*

Co. Name

Address

Mail Charts To *SAME*

No. Copies Requested *log*

Address

Formation Test No. *2* Interval Tested From *3690* ft. to *3970* ft. Total Depth *3970* ft.

Packer Depth *3685* ft. Size *6 5/8* in.

Packer Depth *—* ft. Size *—* in.

Packer Depth *3690* ft. Size *6 5/8* in.

Packer Depth *—* ft. Size *—* in.

Depth of Selective Zone Set *—*

Top Recorder Depth (Inside) *3710* ft.

Recorder Number *10270* Cap. *4150*

Bottom Recorder Depth (Outside) *3713* ft.

Recorder Number *13550* Cap. *4175*

Below Straddle Recorder Depth *—* ft.

Recorder Number *—* Cap. *—*

Drilling Contractor *STERLING rig 4*

Drill Collar Length *428* I. D. *2.2* in.

Mud Type *Chemical* Viscosity *48*

Weight Pipe Length *—* I. D. *—* in.

Weight *9.2* Water Loss *N/A* cc.

Drill Pipe Length *3235* I. D. *3.8* in.

Chlorides *10000* P.P.M.

Test Tool Length *27* ft. Tool Size *5 1/2* in.

Jars: Make *WTC* Serial Number *422*

Anchor Length *280* ft. Size *5 1/2* in.

Did Well Flow? *—* Reversed Out *—*

Surface Choke Size *3/4* in. Bottom Choke Size *3/4* in.

Main Hole Size *7 7/8* in. Tool Joint Size *4 1/2 X 4* in.

Blow: *IF - WEAK building to a STRONG blow in 2 min*

FF - WEAK building to a STRONG blow in 3 min

JUL 21 1993

Recovered *720* ft. of *GAS in Pipe*

Recovered *120* ft. of *Slightly oil cut gassy mud 1% oil 10% GAS 89% mud*

Recovered *120* ft. of *Oil + GAS cut mud 6% oil 12% GAS 10% WATER 72% mud*

Recovered *180* ft. of *Oil + GAS cut water mud 3% oil 20% GAS 32% WATER 45% mud*

Recovered *300* ft. of *Oil + GAS cut muddy water 3% oil 17% GAS 42% WATER 38% mud*

Chlorides *42000* P.P.M. Sample Jars used *13* Remarks:

300' Oil + GAS cut muddy water 2% oil 6% GAS 82% WATER 10% mud

Time On Location *1:00* *A.M.* Time Pick Up Tool *7:00* *A.M.* Time Off Location *—* *R.M.*

Time Set Packer(s) *8:45* *A.M.* Time Started Off Bottom *11:15* *A.M.* Maximum Temperature *125*

Initial Hydrostatic Pressure (A) *1827* P.S.I.

Initial Flow Period Minutes *15* (B) *197* P.S.I. to (C) *291* P.S.I.

Initial Closed In Period Minutes *30* (D) *1112* P.S.I.

Final Flow Period Minutes *45* (E) *385* P.S.I. to (F) *520* P.S.I.

Final Closed In Period Minutes *60* (G) *1112* P.S.I.

Final Hydrostatic Pressure (H) *1796* P.S.I.

COMPANY TERMS

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All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By *Wayne Lebrack*
Signature of Customer or his authorized representative

Western Representative *Ray Schwager*

*THANK
you*

FIELD INVOICE

Open Hole Test ☒ \$
Misrun \$
Straddle Test \$
Jars ☒ \$
Selective Zone \$
Safety Joint ☒ \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

Pressure Data

Test Ticket No. 1077

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	1862 P.S.I.		M
B First Initial Flow Pressure	202 P.S.I.		Mins 15 Mins
C First Final Flow Pressure	290 P.S.I.		Mins 20 Mins
D Initial Closed-in Pressure	115 P.S.I.		Mins 45 Mins
E Second Initial Flow Pressure	354 P.S.I.		Mins 60 Mins
F Second Final Flow Pressure	525 P.S.I.		
G Final Closed-in Pressure	1106 P.S.I.		
H Final Hydrostatic Mud	1288 P.S.I.		

Final Shut-In

Breakdown:_____Inc.

of 3 mins. and a

final inc. of 0 Min.

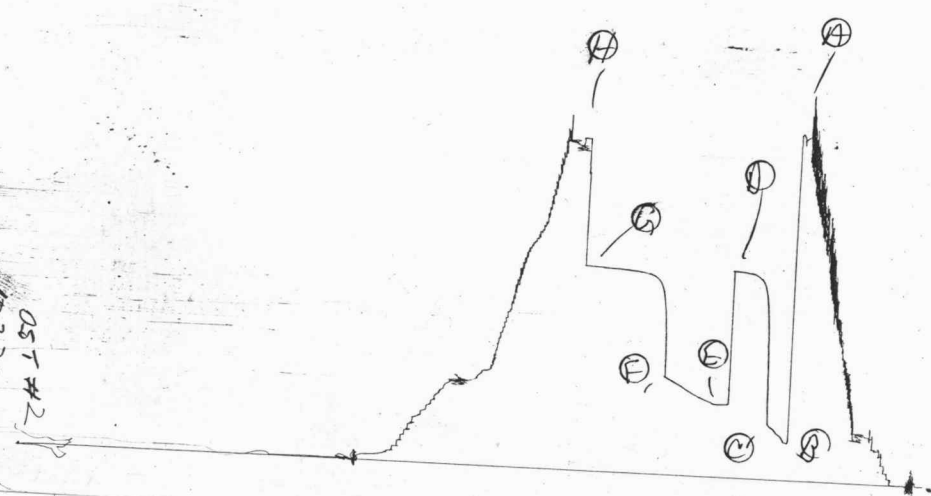
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	203	0	290	0	296	0	525
P 2 5	218	3	836	5	5	3	919
P 3 10	250	6	1029	10	296	6	1022
P 4 15	290	9	1022	15	404	9	1055
P 5 20		12	1090	20	412	12	1071
P 6 25		15	1104	25	458	15	1079
P 7 30		18	1107	30	454	18	1085
P 8 35		21	1109	35	482	21	1087
P 9 40		24	1111	40	502	24	1089
P10 45		27	1113	45	525	27	1091
P11 50		30	1115	50		30	1092
P12 55		33		55		33	1095
P13 60		36		60		36	1097
P14 65		39		65		39	1098
P15 70		42		70		42	1099
P16 75		45		75		45	1100
P17 80		48		80		48	1101
P18 85		51		85		51	1102
P19 90		54		90		54	1103
P20 95		57		95		57	1104
100		60		100		60	1105

100

HK+18941

I

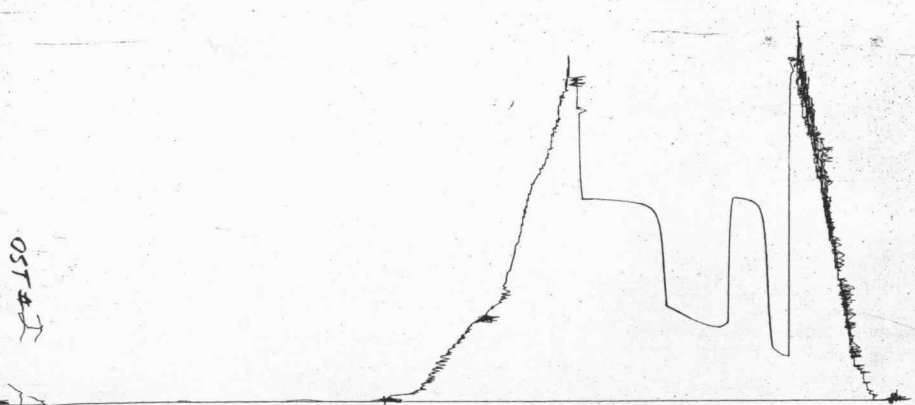
OST #2
10270



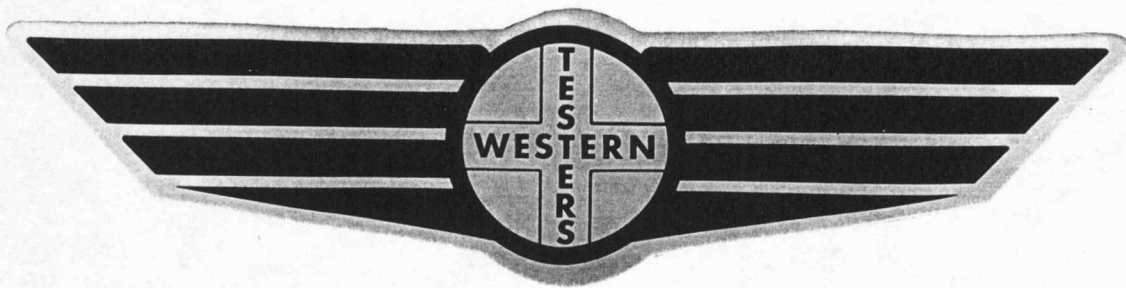
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OST #2
10550



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 800-688-7021**

DST REPORT

GENERAL INFORMATION

DATE : 7/18/93
CUSTOMER : STERLING DRILLING COMPANY
WELL : #1-12 TEST: 2
ELEVATION: 1666 KB
SECTION : 12
RANGE : 9W COUNTY: RENO
GAUGE SN#: 10270 RANGE : 4150

TICKET : 18941
LEASE : BAINUM
GEOLOGIST: LEBSACK
FORMATION: N/A
TOWNSHIP : 25S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3690.00 ft TO: 3970.00 ft TVD: 3970.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3710.0 ft 3713.0 ft
TEMPERATURE: 125.0

DRILL COLLAR LENGTH:	428.0 ft	I.D.:	2.200 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3235.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	27.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	280.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	3685.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3690.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : STERLING RIG 4
MUD TYPE : CHEMICAL
WEIGHT : 9.200 ppg
CHLORIDES : 10000 ppm
JARS-MAKE : WTC
DID WELL FLOW?: NO

VISCOSITY : 48.00 cp
WATER LOSS: 0.000 cc

SERIAL NUMBER: 422
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BUILDING TO A STRONG BLOW
IN 2 MINUTES. FINAL FLOW PERIOD WEAK BUILDING TO
A STRONG BLOW IN 3 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
120.0	1.0	10.0	0.0	89.0	SL OIL CUT GASSY MUD
120.0	6.0	12.0	10.0	72.0	OIL & GAS CUT MUD
180.0	3.0	20.0	32.0	45.0	OIL & GAS CUT WATERY MUD
300.0	3.0	17.0	42.0	38.0	OIL & GAS CUT MUDDY WATER
300.0	2.0	6.0	82.0	10.0	OIL & GAS CUT MUDDY WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 42000 PPM
0.0	0.0	0.0	0.0	0.0	720 FT GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.3122 STB	
GAS VOLUME:	8.2670 SCF	TOTAL FLOW TIME: 60.0000 min.
MUD VOLUME:	5.1325 STB	AVERAGE OIL RATE: 58.6026 STB/D
WATER VOLUME:	3.3988 STB	AVERAGE WATER RATE: 153.6410 STB/D
TOTAL FLUID :	8.8435 STB	

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1827.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	197.00	291.00
INITIAL SHUT-IN	30.00		1112.00
FINAL FLOW	45.00	385.00	520.00
FINAL SHUT-IN	60.00		1112.00

FINAL HYDROSTATIC PRESSURE: 1796.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1863.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	203.00	290.00
INITIAL SHUT-IN	30.00		1115.00
FINAL FLOW	45.00	396.00	525.00
FINAL SHUT-IN	63.00		1106.00

FINAL HYDROSTATIC PRESSURE: 1788.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 7/18/93	TICKET	: 18941
CUSTOMER	: STERLING DRILLING COMPANY	LEASE	: BAINUM
WELL	: #1-12	TEST: 2	GEOLOGIST: LEBSACK
ELEVATION:	1666 KB	FORMATION:	N/A
SECTION	: 12	TOWNSHIP	: 25S
RANGE	: 9W	STATE	: KS
GAUGE SN#:	10270	CLOCK	: 12
	COUNTY: RENO		
	RANGE : 4150		

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	203.00	203.00
5.00	218.00	15.00
10.00	250.00	32.00
15.00	290.00	40.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	836.00	836.00	0.00
6.00	1029.00	193.00	0.00
9.00	1072.00	43.00	0.00
12.00	1090.00	18.00	0.00
15.00	1104.00	14.00	0.00
18.00	1107.00	3.00	0.00
21.00	1109.00	2.00	0.00
24.00	1111.00	2.00	0.00
27.00	1113.00	2.00	0.00
30.00	1115.00	2.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	396.00	396.00
5.00	396.00	0.00
10.00	396.00	0.00
15.00	406.00	10.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

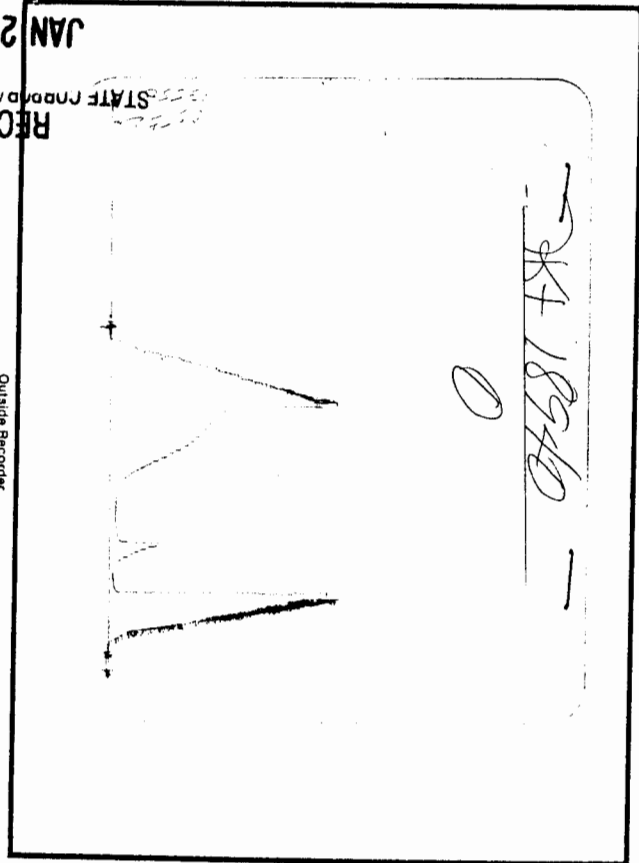
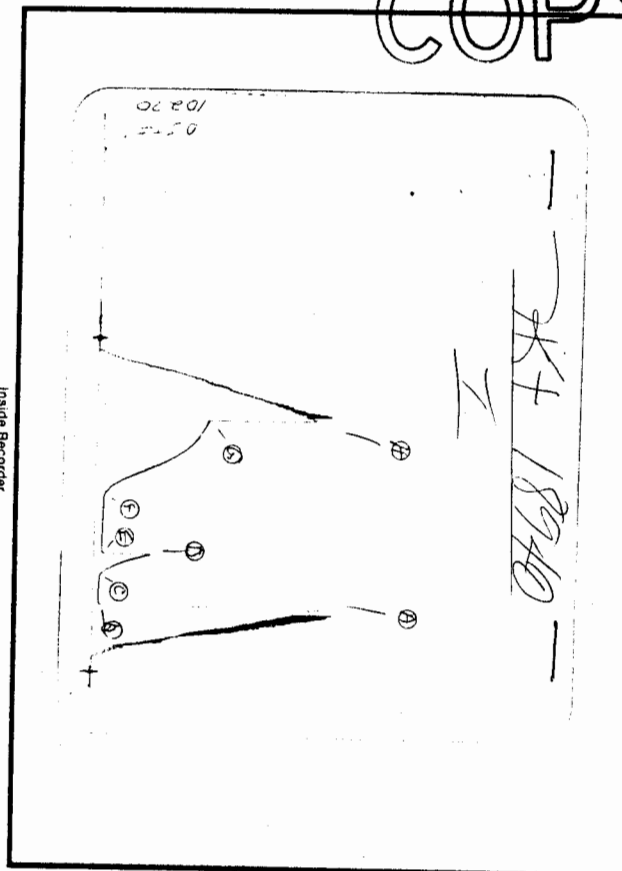
Time (min)	Pressure	Delta P
20.00	422.00	16.00
25.00	438.00	16.00
30.00	456.00	18.00
35.00	482.00	26.00
40.00	503.00	21.00
45.00	525.00	22.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	929.00	929.00	0.00
6.00	1022.00	93.00	0.00
9.00	1055.00	33.00	0.00
12.00	1071.00	16.00	0.00
15.00	1079.00	8.00	0.00
18.00	1085.00	6.00	0.00
21.00	1087.00	2.00	0.00
24.00	1089.00	2.00	0.00
27.00	1091.00	2.00	0.00
30.00	1093.00	2.00	0.00
33.00	1095.00	2.00	0.00
36.00	1097.00	2.00	0.00
39.00	1098.00	1.00	0.00
42.00	1099.00	1.00	0.00
45.00	1100.00	1.00	0.00
48.00	1101.00	1.00	0.00
51.00	1102.00	1.00	0.00
54.00	1103.00	1.00	0.00
57.00	1104.00	1.00	0.00
60.00	1105.00	1.00	0.00
63.00	1106.00	1.00	0.00

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96-5221



Computer Incorporated

FORMATION TEST REPORT



Home Office:
P.O. Box 1599

Wichita, Kansas 67201
Phone 1 - 800-688-7021

API# 15-155-21274

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STATE CORPORATION COMMISSION

CONSERVATION DIVISION

COPY

DST REPORT

DST REPORT (CONTINUED)

GENERAL INFORMATION

DATE : 7/17/93
CUSTOMER : STERLING DRILLING COMPANY
WELL : #1-12
ELEVATION : 1666 KB
SECTION : 12
RANGE : 9W
COUNTY : RENO
TICKET : 18940
LEASE : BAINUM
GEOLOGIST : LEBBACK
FORMATION : MISSISSIPPI
TOWNSHIP : 25S
STATE : KS
CLOCK : 12
GAUGE SN# : 10270
RANGE : 4150

WELL INFORMATION

PERFORATION INTERVAL FROM : 3790.00 ft TO : 3865.00 ft TVD : 3865.0 ft
DEPTH OF SELECTIVE ZONE : 3794.0 ft
DEPTH OF RECORDERS : 124.0
TEMPERATURE : 124.0
TEST TYPE : OIL
DRILL COLLAR LENGTH : 428.0 ft
WEIGHT PIPE LENGTH : 0.0 ft
DRILL PIPE LENGTH : 3335.0 ft
TEST TOOL LENGTH : 27.0 ft
ANCHOR LENGTH : 75.0 ft
SURFACE CHOKE SIZE : 0.750 in
MAIN HOLE SIZE : 7.875 in
PACKER DEPTH : 3790.0 ft
PACKER DEPTH : 3790.0 ft
PACKER DEPTH : 0.0 ft
PACKER DEPTH : 0.0 ft
PACKER DEPTH : 0.0 ft
I.D. : 2.200 in
I.D. : 0.000 in
I.D. : 3.800 in
TOOL SIZE : 5.500 in
ANCHOR SIZE : 5.500 in
BOTTOM CHOKES : 0.750 in
TOOL JOINT SIZE : 4.5XH
SIZE : 6.630 in
SIZE : 6.630 in
SIZE : 0.000 in
SIZE : 0.000 in
SIZE : 0.000 in

MUD INFORMATION

DRILLING CON. : STERLING RIG 4
MUD TYPE : CHEMICAL
WEIGHT : 9.100 PPg
CHLORIDES : 10000 PPM
JARS-MAKE : WTC
DID WELL FLOW? : NO
VISCOSITY : 50.00 CP
WATER LOSS : 7.200 CC
SERIAL NUMBER : 422
REVERSED OUT? : NO

COMMENTS

INITIAL FLOW PERIOD WEAK BUILDING TO A STRONG BLOW
IN 14 MINUTES. FINAL FLOW PERIOD WEAK BUILDING TO
A GOOD BLOW - 1 TO 7 INCH BLOW.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
80.0	2.0	0.0	0.0	98.0	SL OIL CUT MUD
0.0	0.0	0.0	0.0	0.0	460 FT GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME : 0.0075 STB
GAS VOLUME : 0.0000 SCF
MUD VOLUME : 0.3686 STB
WATER VOLUME : 0.0000 STB
TOTAL FLUID : 0.3761 STB
TOTAL FLOW TIME : 95.0000 min.
AVERAGE OIL RATE : 5.7010 STB/D
AVERAGE WATER RATE : 0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE : 1838.00

Description

Description	Duration	p1	p End
INITIAL FLOW	30.00	52.00	52.00
INITIAL SHUT-IN	30.00	62.00	479.00
FINAL FLOW	60.00		72.00
FINAL SHUT-IN	90.00		956.00

FINAL HYDROSTATIC PRESSURE : 1827.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE : 1917.00

Description

Description	Duration	p1	p End
INITIAL FLOW	30.00	59.00	64.00
INITIAL SHUT-IN	30.00		482.00
FINAL FLOW	65.00	78.00	84.00
FINAL SHUT-IN	90.00		955.00

FINAL HYDROSTATIC PRESSURE : 1863.00

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