



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

WESTERN TESTING CO., INC. *TURNKEY*
FORMATION TESTING

TICKET N^o 18535

Elevation *1841 KB* Formation *Arbuckle* Eff. Pay *-* Ft.

District *GT. Bend* Date *4-19-93* Customer Order No. *-*

COMPANY NAME *Sid Tomlinson*

ADDRESS *1802 Wildwood Drive STILLWATER, OKLAHOMA 74075*

LEASE AND WELL NO. *HOWARD #1* COUNTY *BARTON* STATE *Ko.* Sec. *21* Twp. *17^s* Rge. *11^w*

Mail Invoice To *Same* Co. Name *Duke* Address *-* No. Copies Requested *Reg*

Mail Charts To *Same* Address *-* No. Copies Requested *Reg*

Formation Test No. *1* Interval Tested From *3281* ft. to *3286* ft. Total Depth *3286* ft.

Packer Depth *3276* ft. Size *6 5/8* in. Packer Depth *-* ft. Size *-* in.

Packer Depth *3281* ft. Size *6 5/8* in. Packer Depth *-* ft. Size *-* in.

Depth of Selective Zone Set *-*

Top Recorder Depth (Inside) *3268* ft. Recorder Number *10270* Cap. *4150*

Bottom Recorder Depth (Outside) *3282* ft. Recorder Number *13550* Cap. *4175*

Below Straddle Recorder Depth *-* ft. Recorder Number *-* Cap. *-*

Drilling Contractor *Duke Drilling rig #1* Drill Collar Length *-* I. D. *-* in.

Mud Type *Chemical* Viscosity *44* Weight Pipe Length *630* I. D. *2.7* in.

Weight *9.1* Water Loss *11* cc. Drill Pipe Length *2626* I. D. *3.8* in.

Chlorides *5,200* P.P.M. Test Tool Length *25* ft. Tool Size *5 1/2* in.

Jars: Make *-* Serial Number *-* Anchor Length *5* 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 FH* in.

Blow: *IF - Strong Blow in 1 min*
FF - Strong Blow throughout

Recovered *120* ft. of *GAS in Pipe*

Recovered *240* ft. of *CLEAN OIL GRAVITY 39*

Recovered *210* ft. of *WATER cut gassy oil 41% oil 28% gas 1% mud 30% water*

Recovered *60* ft. of *SLIGHTLY OIL & GAS cut WATER 5% oil 4% gas 91% water*

Recovered *1020* ft. of *WATER*

Chlorides *13000* P.P.M. Sample Jars used *6* Remarks: *-*

APR 22 1993

Time On Location *10:30* *A.M.* Time Pick Up Tool *12:30* *P.M.* Time Off Location *8:00* *P.M.*

Time Set Packer(s) *2:15* *P.M.* Time Started Off Bottom *4:15* *P.M.* Maximum Temperature *114°*

Initial Hydrostatic Pressure (A) *1599* P.S.I.

Initial Flow Period (B) *30* Minutes (B) *93* P.S.I. to (C) *489* P.S.I.

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

Final Flow Period (E) *30* Minutes (E) *551* P.S.I. to (F) *749* P.S.I.

Final Closed In Period (G) *30* Minutes (G) *1112* P.S.I.

Final Hydrostatic Pressure (H) *1578* 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 *Ray L. Schwager*
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 4-19-92

Test Ticket No. 18535

Recorder No. 10270

Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1632</u> P.S.I.		M
B First Initial Flow Pressure	<u>94</u> P.S.I.	Mins. <u>10</u>	Mins.
C First Final Flow Pressure	<u>502</u> P.S.I.	Mins. <u>33</u>	Mins.
D Initial Closed-in Pressure	<u>1112</u> P.S.I.	Mins. <u>10</u>	Mins.
E Second Initial Flow Pressure	<u>554</u> P.S.I.	Mins. <u>10</u>	Mins.
F Second Final Flow Pressure	<u>750</u> P.S.I.		
G Final Closed-in Pressure	<u>1114</u> P.S.I.		
H Final Hydrostatic Mud	<u>1582</u> P.S.I.		

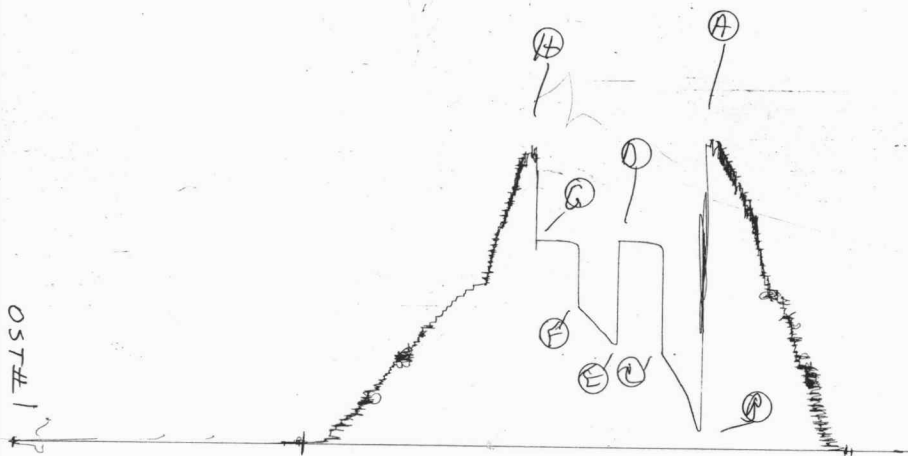
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>94</u>	<u>0</u>	<u>502</u>	<u>0</u>	<u>554</u>	<u>0</u>	<u>750</u>
P 2 <u>5</u>	<u>152</u>	<u>3</u>	<u>1086</u>	<u>5</u>	<u>577</u>	<u>3</u>	<u>1094</u>
P 3 <u>10</u>	<u>272</u>	<u>6</u>	<u>1099</u>	<u>10</u>	<u>618</u>	<u>6</u>	<u>1103</u>
P 4 <u>15</u>	<u>335</u>	<u>9</u>	<u>1102</u>	<u>15</u>	<u>657</u>	<u>9</u>	<u>1107</u>
P 5 <u>20</u>	<u>400</u>	<u>12</u>	<u>1105</u>	<u>20</u>	<u>695</u>	<u>12</u>	<u>1111</u>
P 6 <u>25</u>	<u>452</u>	<u>15</u>	<u>1109</u>	<u>25</u>	<u>728</u>	<u>15</u>	<u>1112</u>
P 7 <u>30</u>	<u>502</u>	<u>18</u>	<u>1110</u>	<u>30</u>	<u>750</u>	<u>18</u>	<u>1112</u>
P 8 <u>35</u>		<u>21</u>	<u>1110</u>	<u>35</u>		<u>21</u>	<u>1112</u>
P 9 <u>40</u>		<u>24</u>	<u>1111</u>	<u>40</u>		<u>24</u>	<u>1112</u>
P10 <u>45</u>		<u>27</u>	<u>1111</u>	<u>45</u>		<u>27</u>	<u>1114</u>
P11 <u>50</u>		<u>30</u>	<u>1111</u>	<u>50</u>		<u>30</u>	<u>1114</u>
P12 <u>55</u>		<u>33</u>	<u>1112</u>	<u>55</u>		<u>33</u>	
P13 <u>60</u>		<u>36</u>		<u>60</u>		<u>36</u>	
P14 <u>65</u>		<u>39</u>		<u>65</u>		<u>39</u>	
P15 <u>70</u>		<u>42</u>		<u>70</u>		<u>42</u>	
P16 <u>75</u>		<u>45</u>		<u>75</u>		<u>45</u>	
P17 <u>80</u>		<u>48</u>		<u>80</u>		<u>48</u>	
P18 <u>85</u>		<u>51</u>		<u>85</u>		<u>51</u>	
P19 <u>90</u>		<u>54</u>		<u>90</u>		<u>54</u>	
P20 <u>95</u>		<u>57</u>		<u>95</u>		<u>57</u>	
<u>100</u>		<u>60</u>		<u>100</u>		<u>60</u>	

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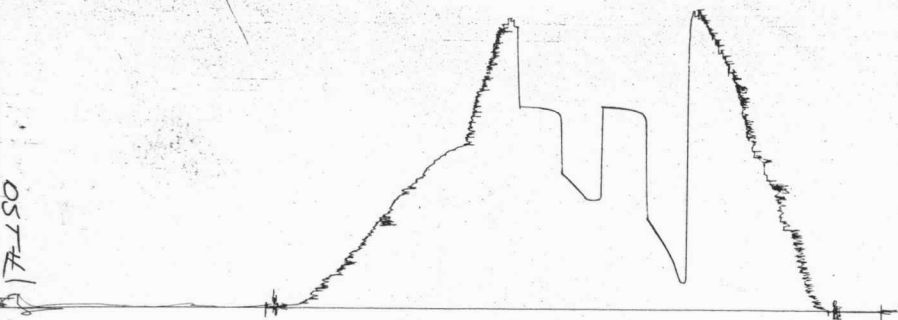
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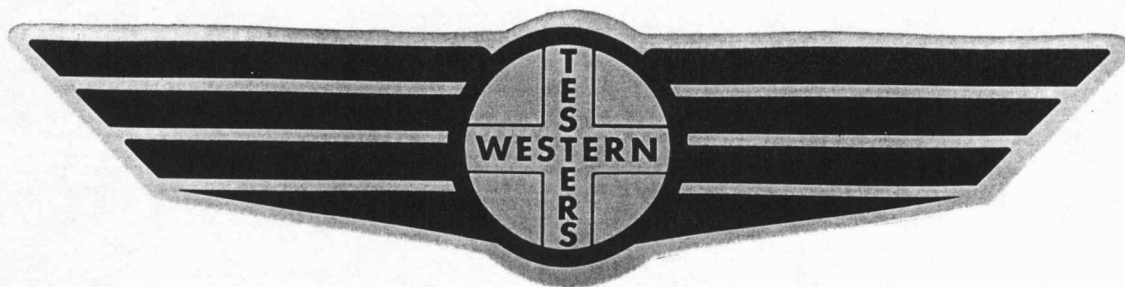
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OST#1



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

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

COMPANY SID TOMLINSON

LEASE & WELL NO. HOWARD #1

SEC. 21 TWP. 17S RGE. 11W TEST NO. 1 DATE 4/19/93

DST REPORT

GENERAL INFORMATION

DATE : 4/19/93
CUSTOMER : SID TOMLINSON
WELL : #1 TEST: 1
ELEVATION: 1841 KB
SECTION : 21
RANGE : 11W COUNTY: BARTON
GAUGE SN#: 10270 RANGE : 4150

TICKET : 18535
LEASE : HOWARD
GEOLOGIST: MCLEOD
FORMATION: ARBUCKLE
TOWNSHIP : 17S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3281.00 ft TO: 3286.00 ft TVD: 3286.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3268.0 ft 3282.0 ft
TEMPERATURE: 114.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	630.0 ft	I.D.:	2.700 in
DRILL PIPE LENGTH :	2626.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	25.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	5.0 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 :	4.5FH
PACKER DEPTH:	3276.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3281.0 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. : DUKE RIG 1
MUD TYPE : CHEMICAL
WEIGHT : 9.100 ppg
CHLORIDES : 5200 ppm
JARS-MAKE :
DID WELL FLOW?: NO

VISCOSITY : 44.00 cp
WATER LOSS: 11.000 cc

SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW IN 1 MINUTE.
FINAL FLOW PERIOD STRONG BLOW THROUGHOUT.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
240.0	100.0	0.0	0.0	0.0	CLEAN OIL GRAVITY 39
210.0	41.0	28.0	30.0	1.0	WATER CUT GASSY OIL
60.0	5.0	4.0	91.0	0.0	SL OIL & GAS CUT WATER
1020.0	0.0	0.0	100.0	0.0	WATER CHLORIDES 13000PPM
0.0	0.0	0.0	0.0	0.0	120 FT GAS ABOVE FLUID
0.0	0.0	0.0	0.0	0.0	

RATE INFORMATION

OIL VOLUME:	4.6161	STB	
GAS VOLUME:	4.8200	SCF	
MUD VOLUME:	0.0295	STB	
WATER VOLUME:	11.5809	STB	
TOTAL FLUID :	16.2264	STB	
			TOTAL FLOW TIME: 60.0000 min.
			AVERAGE OIL RATE: 111.1940 STB/D
			AVERAGE WATER RATE: 278.2407 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1599.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	93.00	489.00
INITIAL SHUT-IN	30.00		1112.00
FINAL FLOW	30.00	551.00	749.00
FINAL SHUT-IN	30.00		1112.00

FINAL HYDROSTATIC PRESSURE: 1578.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1632.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	94.00	502.00
INITIAL SHUT-IN	33.00		1112.00
FINAL FLOW	30.00	554.00	750.00
FINAL SHUT-IN	30.00		1114.00

FINAL HYDROSTATIC PRESSURE: 1582.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 4/19/93	TICKET	: 18535
CUSTOMER	: SID TOMLINSON	LEASE	: HOWARD
WELL	: #1	GEOLOGIST	: MCLEOD
ELEVATION	: 1841 KB	FORMATION	: ARBUCKLE
SECTION	: 21	TOWNSHIP	: 17S
RANGE	: 11W	STATE	: KS
GAUGE SN#	: 10270	CLOCK	: 12
	TEST: 1		
	COUNTY: BARTON		
	RANGE : 4150		

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	94.00	94.00
5.00	152.00	58.00
10.00	272.00	120.00
15.00	335.00	63.00
20.00	400.00	65.00
25.00	452.00	52.00
30.00	502.00	50.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1086.00	1086.00	0.00
6.00	1099.00	13.00	0.00
9.00	1102.00	3.00	0.00
12.00	1105.00	3.00	0.00
15.00	1109.00	4.00	0.00
18.00	1110.00	1.00	0.00
21.00	1110.00	0.00	0.00
24.00	1111.00	1.00	0.00
27.00	1111.00	0.00	0.00
30.00	1111.00	0.00	0.00
33.00	1112.00	1.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
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PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
0.00	554.00	554.00
5.00	577.00	23.00
10.00	618.00	41.00
15.00	657.00	39.00
20.00	695.00	38.00
25.00	728.00	33.00
30.00	750.00	22.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1094.00	1094.00	0.00
6.00	1103.00	9.00	0.00
9.00	1107.00	4.00	0.00
12.00	1111.00	4.00	0.00
15.00	1112.00	1.00	0.00
18.00	1112.00	0.00	0.00
21.00	1113.00	1.00	0.00
24.00	1113.00	0.00	0.00
27.00	1114.00	1.00	0.00
30.00	1114.00	0.00	0.00



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No

LAST
18536

P. O. BOX 1599

PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation

1841 KB

Formation

LANSING

Eff. Pay — Ft.

District

GT. Bend

Date

4-20-93

Customer Order No.

COMPANY NAME Sid Tomlinson

ADDRESS 1802 Wildwood Drive STILLWATER, OKLAHOMA 74075

LEASE AND WELL NO. HOWARD #1

COUNTY BARTON

STATE KS

Sec. 21

Twp. 17

Rge. 11

Mail Invoice To SAME

Co. Name

Address

No. Copies Requested Reg

Mail Charts To SAME

Address

No. Copies Requested Reg

Formation Test No. 2 Interval Tested From 3182 ft. to 3230 ft. Total Depth 3352 ft.

Packer Depth 3177 ft. Size 6 7/8 in.

Packer Depth 3230 ft. Size 6 7/8 in.

Packer Depth 3182 ft. Size 6 7/8 in.

Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3185 ft.

Recorder Number 10270 Cap. 4150

Bottom Recorder Depth (Outside) 3188 ft.

Recorder Number 13550 Cap. 4175

Below Straddle Recorder Depth 3250 ft.

Recorder Number 13401 Cap. 4000

Drilling Contractor Duke Drilling

Drill Collar Length — I. D. — in.

Mud Type Chemical Viscosity 38

Weight Pipe Length 510 I. D. 2.7 in.

Weight 9.3 Water Loss 11 cc.

Drill Pipe Length 2646 I. D. 3.8 in.

Chlorides 6000 P.P.M.

Test Tool Length 26 ft. Tool Size 5 1/2 in.

Jars: Make — Serial Number —

Anchor Length 48 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 FH in.

Blow: IF - WEAK Blow Throughout 1 1/2" Blow

FF - WEAK Blow Throughout 2" Blow

Recovered 45 ft. of GAS in Pipe

Recovered 15 ft. of OIL cut mud 5% oil 95% mud

Recovered — ft. of

Recovered — ft. of

Recovered — ft. of

Recovered — ft. of

Chlorides — P.P.M. Sample Jars used 1 Remarks:

APR 22 1993

Time On Location 2:10 A.M. Time Pick Up Tool 2:30 A.M. Time Off Location — A.M.

Time Set Packer(s) 4:30 A.M. Time Started Off Bottom 6:45 A.M. Maximum Temperature 103°

Initial Hydrostatic Pressure (A) 1547 P.S.I.

Initial Flow Period Minutes 30 (B) 20 P.S.I. to (C) 20 P.S.I.

Initial Closed In Period Minutes 30 (D) 249 P.S.I.

Final Flow Period Minutes 45 (E) 31 P.S.I. to (F) 31 P.S.I.

Final Closed In Period Minutes 30 (G) 177 P.S.I.

Final Hydrostatic Pressure (H) 1547 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

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 4-20-91
Recorder No. 10570

Test Ticket No. 18536
Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

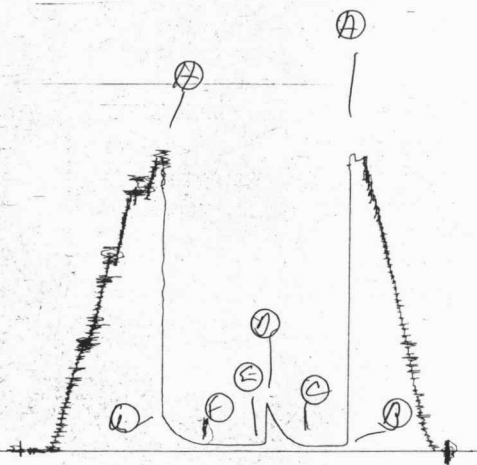
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1562</u> P.S.I.	Open Tool	M	
B First Initial Flow Pressure	<u>35</u> P.S.I.	First Flow Pressure	Mins. <u>10</u>	Mins.
C First Final Flow Pressure	<u>35</u> P.S.I.	Initial Closed-in Pressure	Mins. <u>10</u>	Mins.
D Initial Closed-in Pressure	<u>258</u> P.S.I.	Second Flow Pressure	Mins. <u>45</u>	Mins.
E Second Initial Flow Pressure	<u>39</u> P.S.I.	Final Closed-in Pressure	Mins. <u>30</u>	Mins.
F Second Final Flow Pressure	<u>41</u> P.S.I.			
G Final Closed-in Pressure	<u>188</u> P.S.I.			
H Final Hydrostatic Mud	<u>1541</u> 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 <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>25</u>	0	<u>25</u>	0	<u>29</u>	0	<u>41</u>
P 2 5		3	<u>38</u>	5		3	<u>45</u>
P 3 10		6	<u>45</u>	10		6	<u>47</u>
P 4 15		9	<u>51</u>	15		9	<u>52</u>
P 5 20		12	<u>70</u>	20		12	<u>60</u>
P 6 25		15	<u>82</u>	25	<u>39</u>	15	<u>69</u>
P 7 30	<u>25</u>	18	<u>109</u>	30	<u>39</u>	18	<u>84</u>
P 8 35		21	<u>138</u>	35	<u>40</u>	21	<u>96</u>
P 9 40		24	<u>174</u>	40	<u>41</u>	24	<u>114</u>
P10 45		27	<u>222</u>	45	<u>41</u>	27	<u>147</u>
P11 50		30	<u>258</u>	50		30	<u>188</u>
P12 55		33		55		33	
P13 60		36		60		36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

KT 18536

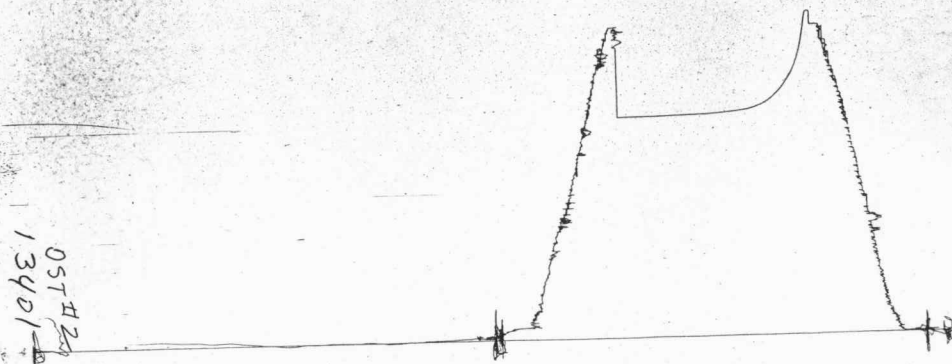
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OST#2

KT 18536

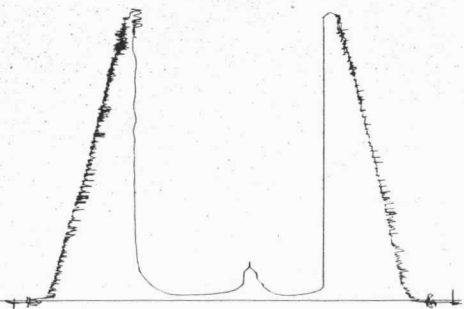
Below Straddle



OST#2
13401

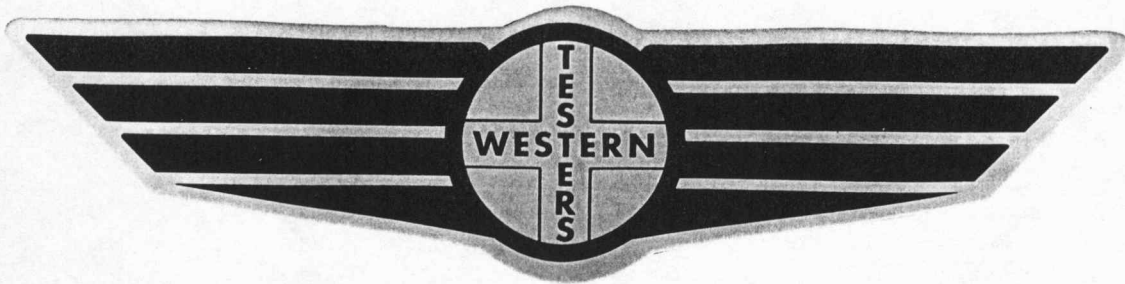
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OST#2

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

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

DST REPORT

GENERAL INFORMATION

DATE : 4/20/93
CUSTOMER : SID TOMLINSON
WELL : #1 TEST: 2
ELEVATION: 1841 KB
SECTION : 21
RANGE : 11W COUNTY: BARTON
GAUGE SN#: 10270 RANGE : 4150

TICKET : 18536
LEASE : HOWARD
GEOLOGIST: MCLEOD
FORMATION: LANSING
TOWNSHIP : 17S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3182.00 ft TO: 3230.00 ft TVD: 3352.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3185.0 ft 3188.0 ft
TEMPERATURE: 103.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	510.0 ft	I.D.:	2.700 in
DRILL PIPE LENGTH :	2646.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	26.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	48.0 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 :	4.5FH
PACKER DEPTH:	3177.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3182.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3230.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG 1
MUD TYPE : CHEMICAL
WEIGHT : 9.300 ppg
CHLORIDES : 6000 ppm
JARS-MAKE :
DID WELL FLOW?: NO

VISCOSITY : 38.00 cp
WATER LOSS: 11.000 cc

SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW THROUGHOUT - 1 1/2
INCH BLOW. FINAL FLOW PERIOD WEAK BLOW THROUGHOUT
2 INCH BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
15.0	5.0	0.0	0.0	95.0	OIL CUT MUD
0.0	0.0	0.0	0.0	0.0	45 FT GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.0053	STB		
GAS VOLUME:	0.0000	SCF		
MUD VOLUME:	0.1009	STB	TOTAL FLOW TIME:	75.0000 min.
WATER VOLUME:	0.0000	STB	AVERAGE OIL RATE:	2.0394 STB/D
TOTAL FLUID :	0.1062	STB	AVERAGE WATER RATE:	0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1547.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	20.00	20.00
INITIAL SHUT-IN	30.00		249.00
FINAL FLOW	45.00	31.00	31.00
FINAL SHUT-IN	30.00		177.00

FINAL HYDROSTATIC PRESSURE: 1547.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1562.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	35.00	35.00
INITIAL SHUT-IN	30.00		258.00
FINAL FLOW	45.00	39.00	41.00
FINAL SHUT-IN	30.00		188.00

FINAL HYDROSTATIC PRESSURE: 1541.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 4/20/93	TICKET	: 18536
CUSTOMER	: SID TOMLINSON	LEASE	: HOWARD
WELL	: #1	GEOLOGIST	: MCLEOD
ELEVATION	: 1841 KB	FORMATION	: LANSING
SECTION	: 21	TOWNSHIP	: 17S
RANGE	: 11W	STATE	: KS
GAUGE SN#	: 10270	CLOCK	: 12
	TEST: 2		
	COUNTY: BARTON		
	RANGE : 4150		

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	35.00	35.00
5.00	35.00	0.00
10.00	35.00	0.00
15.00	35.00	0.00
20.00	35.00	0.00
25.00	35.00	0.00
30.00	35.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	38.00	38.00	0.00
6.00	45.00	7.00	0.00
9.00	51.00	6.00	0.00
12.00	70.00	19.00	0.00
15.00	83.00	13.00	0.00
18.00	109.00	26.00	0.00
21.00	138.00	29.00	0.00
24.00	174.00	36.00	0.00
27.00	222.00	48.00	0.00
30.00	258.00	36.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	39.00	39.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
5.00	39.00	0.00
10.00	39.00	0.00
15.00	39.00	0.00
20.00	39.00	0.00
25.00	39.00	0.00
30.00	39.00	0.00
35.00	40.00	1.00
40.00	41.00	1.00
45.00	41.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	43.00	43.00	0.00
6.00	47.00	4.00	0.00
9.00	52.00	5.00	0.00
12.00	60.00	8.00	0.00
15.00	69.00	9.00	0.00
18.00	84.00	15.00	0.00
21.00	96.00	12.00	0.00
24.00	116.00	20.00	0.00
27.00	147.00	31.00	0.00
30.00	188.00	41.00	0.00