

Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Kirkman	Well No.	1	Date	3-13-80
County	Barton	Sec.	15	Twp.	19
		Rng.	13	Elevation	
Company	L.G. Stephenson & Co. ⁸			Test No.	1
Contractor	Red Tiger Drilling #4			Zone Tested	Lansing
Charge To	L.G. Stephenson & Co.			Ticket #	3628
Approved By	James W. Spellman			Tester	Richard Bowman

Initial Hydro Mud Press. _____ P.S.I.

Initial Flow Press. _____ To _____ P.S.I. Initial Flow Period _____ Min.

Initial Shut-in Press. _____ P.S.I. Initial Shut-in _____ Min.

Final Flow Press. _____ To _____ P.S.I. Final Flow Period _____ Min.

Final Shut-in Press. _____ P.S.I. Final Shut-in _____ Min.

Final Hydro Mud Press. _____ P.S.I. TIME TOOL OPEN _____

Temperature _____

Mud Weight _____ 10.2 _____ Viscosity _____ 40 _____

Fluid Loss _____ 15.8 _____

Interval Tested _____ 3183 _____ To _____ 3250 _____

Top Packer Depth _____ 3178 _____ Surface Choke Size _____

Bottom Packer Depth _____ 3183 _____ Bottom Choke Size _____

Total Depth _____ 3250 _____ Main Hole Size _____

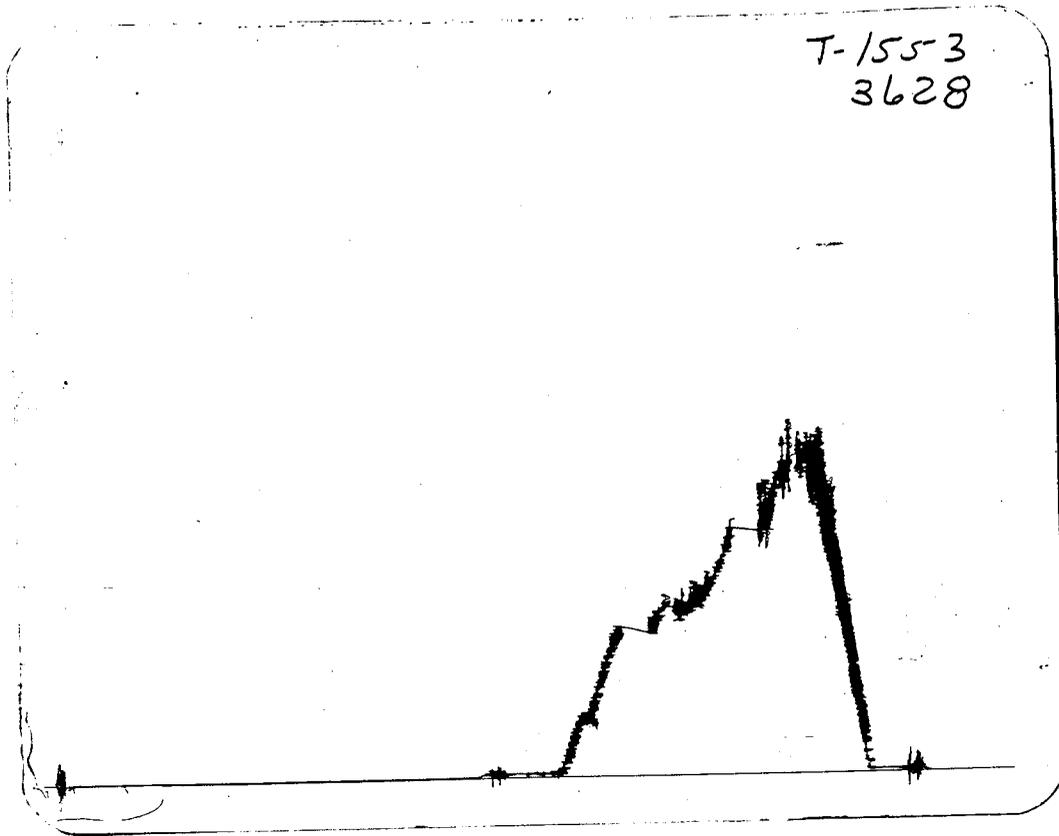
Drill Pipe Size _____ 4½XH _____ Wt _____ 4½XH _____ Rubber Size _____

Drill Collar I.D. _____ 2.25 _____ Ft. Run _____ None _____

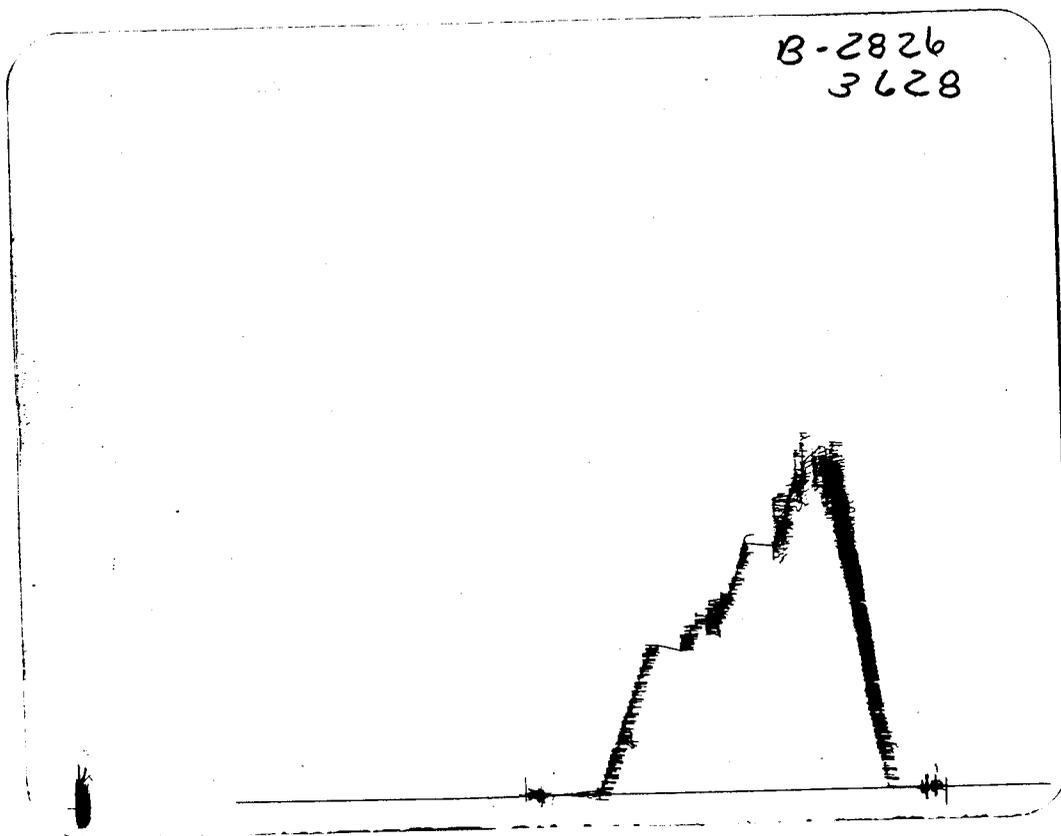
Blow _____ Mis Run "Hole in drill pipe" _____

Recovery _____

TOP



BOTTOM



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Lease	Kirkman	Well No.	1	Date	3-14-80
County	Barton	Sec.	15	Twp.	19
		Rng.	13	Elevation	
Company	L.G. Stephenson & Co.			Test No.	2
Contractor	Red Tiger Drilling #4			Zone Tested	Lansing
Charge To	L. G. Stephenson & Co.			Ticket #	3629
Approved By	James W. Spellman			Tester	Richard Bowman

Initial Hydro Mud Press. 1299 P.S.I.

Initial Flow Press. 90 To 92 P.S.I. Initial Flow Period 45 Min.

Initial Shut-in Press. 1051 P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 112 To 127 P.S.I. Final Flow Period 45 Min.

Final Shut-in Press. 896 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1288 P.S.I. TIME TOOL OPEN 2:00 p.m.

Temperature 103°

Mud Weight 10.2 Viscosity 38

Fluid Loss 15.8

Interval Tested 3183 To 3250

Top Packer Depth 3178 Surface Choke Size _____

Bottom Packer Depth 3183 Bottom Choke Size 5/8

Total Depth 3250 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2XH Wt 4 1/2XH Rubber Size 6 3/4

Drill Collar I.D. 2.25 Ft. Run None

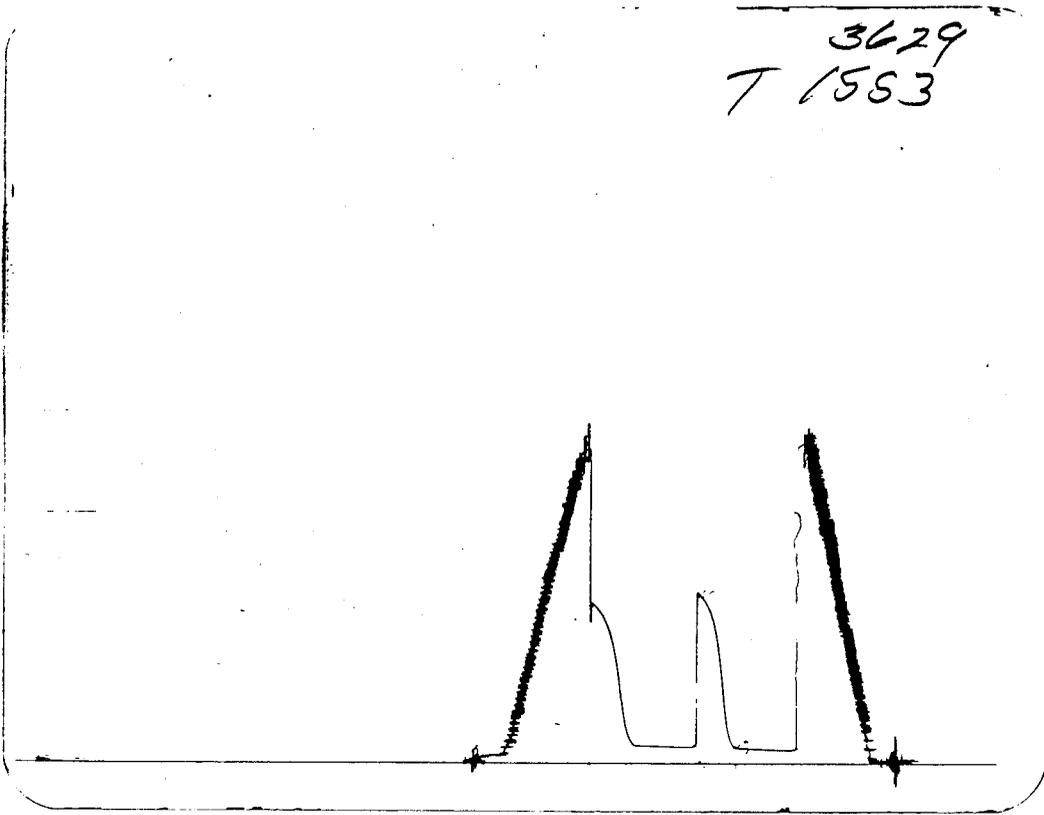
Blow Weak blow

Recovery 65' slightly oil cut mud

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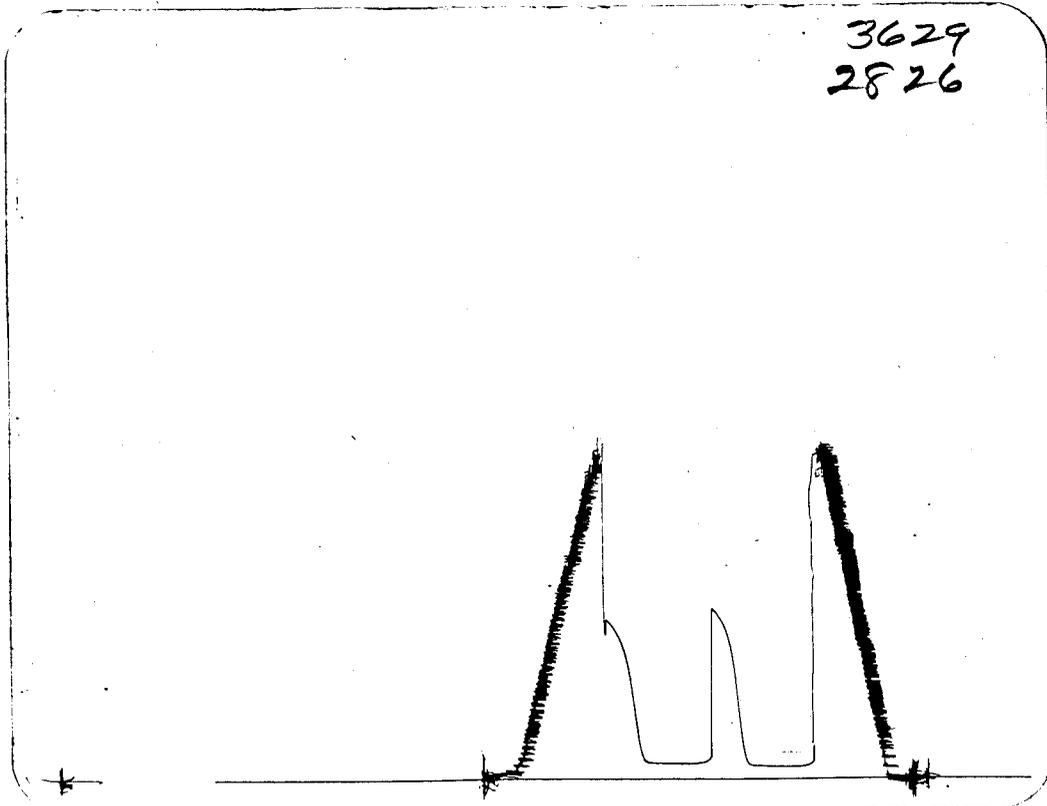
TOP

3629
T 1553



BOTTOM

3629
2826



Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Kirkman	Well No.	1	Date	3-15-80
County	Barton	Sec.	15	Twp.	19
		Rng.	13	Elevation	
Company	L.G. Stephenson & Co.			Test No.	3
Contractor	Red Tiger Drilling #4			Zone Tested	KC
Charge To	L. G. Stephenson & Co.			Ticket #	3630
Approved By	Jim Spellman			Tester	Richard Bowman

Initial Hydro Mud Press. 1988 P.S.I.

Initial Flow Press. 55 To 55 P.S.I. Initial Flow Period ... 30 Min.

Initial Shut-in Press. 412 P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 66 To 66 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 189 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. ... 1977 P.S.I. TIME TOOL OPEN 1:15 a.m.

Temperature 103°

Mud Weight 10.2 Viscosity 36

Fluid Loss 17.6

Interval Tested ... 3245 To 3267

Top Packer Depth ... 3240 Surface Choke Size

Bottom Packer Depth ... 3245 Bottom Choke Size ... 5/8

Total Depth ... 3267 Main Hole Size ... 7 7/8

Drill Pipe Size 4 1/2 XH Wt 4 1/2 XH Rubber Size ... 6 3/4

Drill Collar I.D. 2.25 Ft. Run ... None

Blow ... Very weak blow Second Flow - no blow Flushed tool in 10 min
 Good surge - no help

Recovery 15' mud

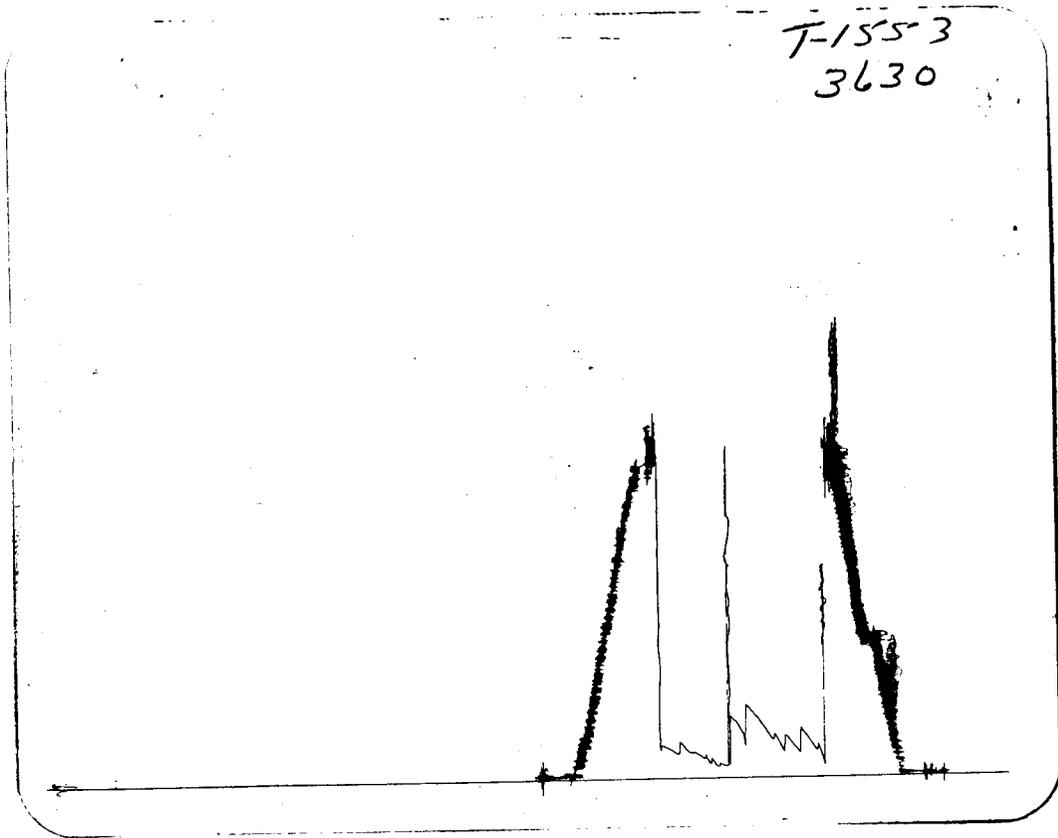
.....

..... Slid tool 3' to bottom

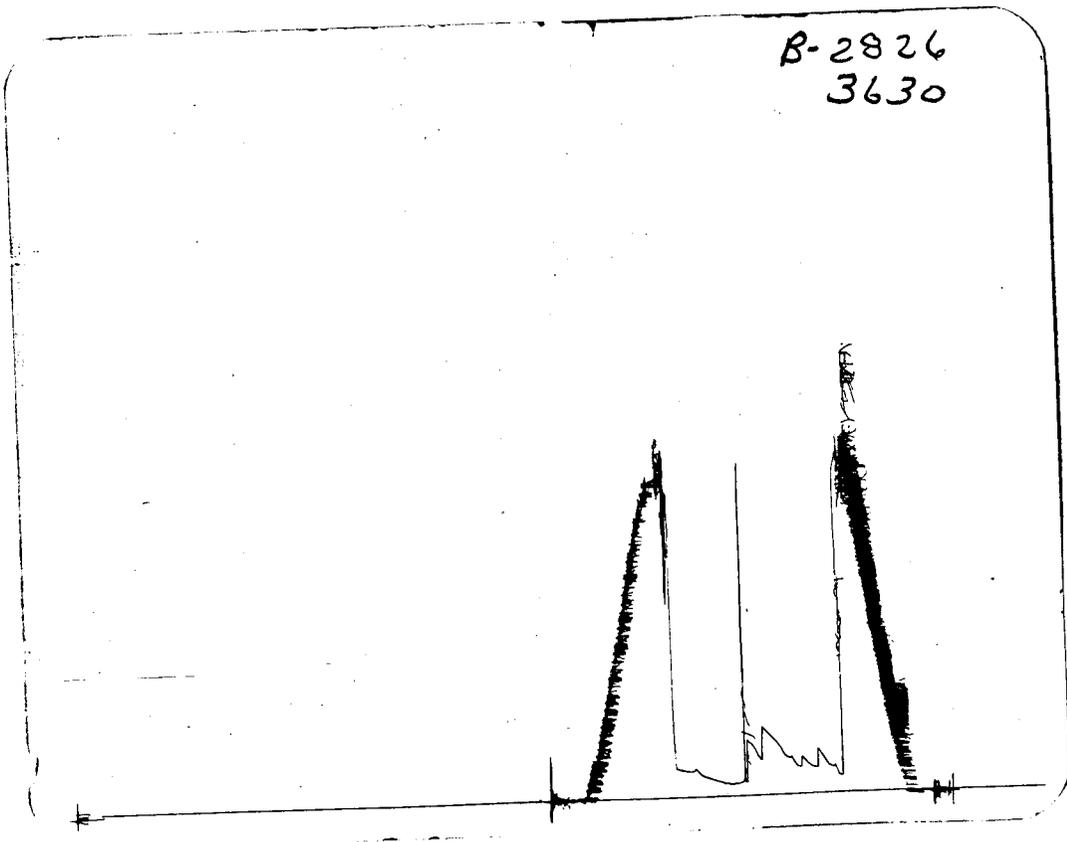
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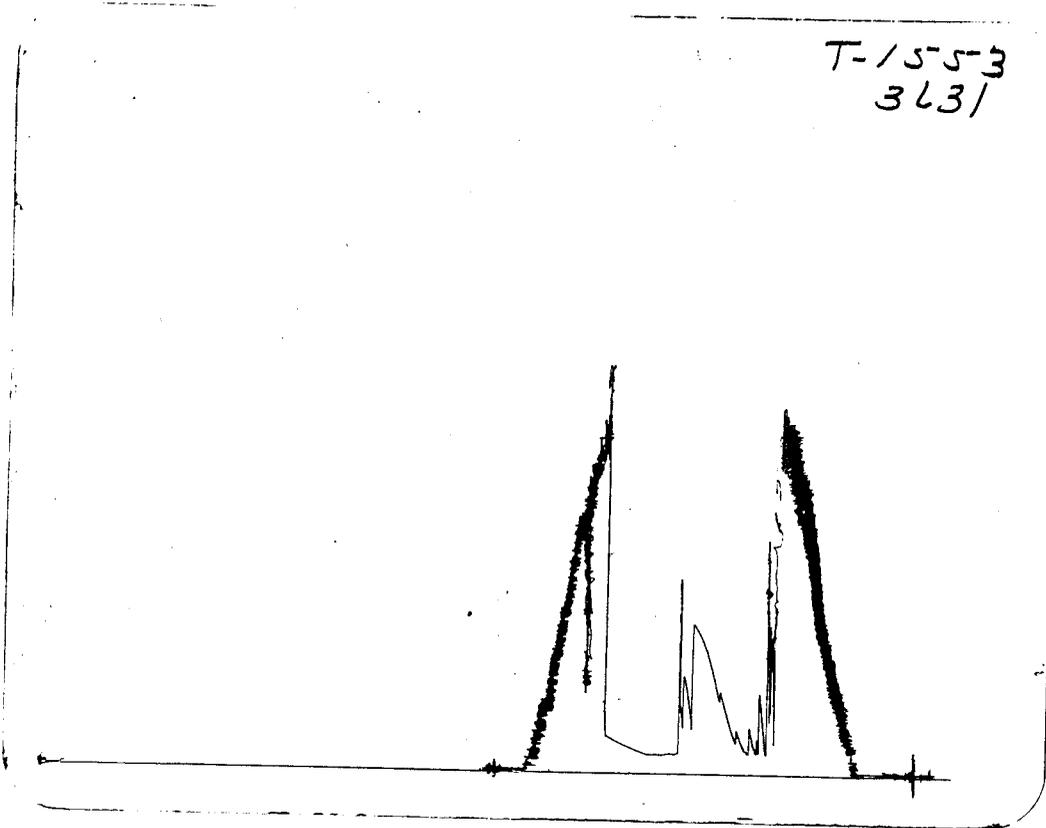
TOP



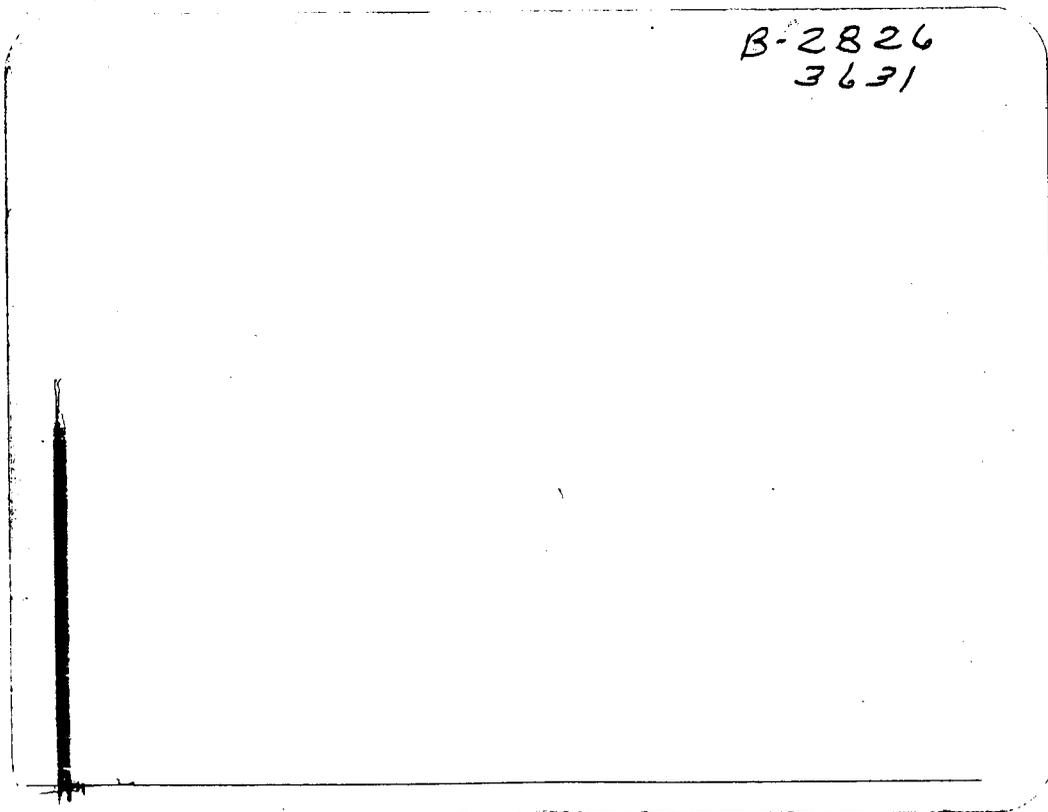
BOTTOM



TOP



BOTTOM



Sun Oil Well Cementing, Inc.

DRILL STEM TEST DATA

P.O. Box 169

Great Bend, Kansas 67530

Lease	Kirkman	Well No.	1	Date	3-16-80
County	Barton	Sec.	15	Twp.	19 Rng. 13
Company	L.G. Stephenson & Co.			Test No.	5
Contractor	Red Tiger Drilling #4			Zone Tested	Arbuckle
Charge To	L.G. Stephenson & Co.			Ticket #	3632
Approved By	James W. Spellman			Tester	Richard Bowman

Initial Hydro Mud Press. 1988 P.S.I.

Initial Flow Press. None To None P.S.I. Initial Flow Period 30 Min.

Initial Shut-in Press. None P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 112 To 112 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 212 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1977 P.S.I. TIME TOOL OPEN 2:00 p.m.

Temperature 104°

Mud Weight 10.2 Viscosity 42

Fluid Loss 14.8

Interval Tested 3403 To 3441

Top Packer Depth 3398 Surface Choke Size

Bottom Packer Depth 3403 Bottom Choke Size 5/8

Total Depth 3441 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 XH Wt 4 1/2 XH Rubber Size 6 3/4

Drill Collar I.D. 2.25 Ft. Run None

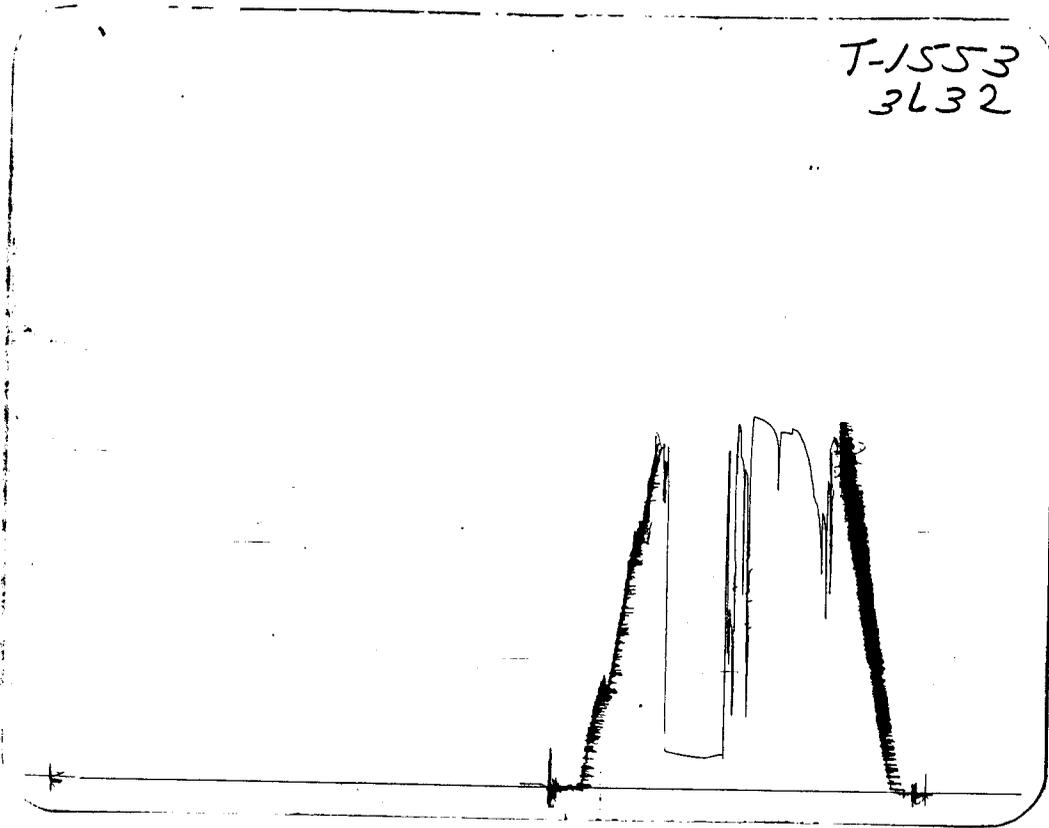
Blow Very weak blow Second flow - No blow Flushed tool in 10 min.
Good Surge Very weak blow died in 4 min.

Recovery 5' mud

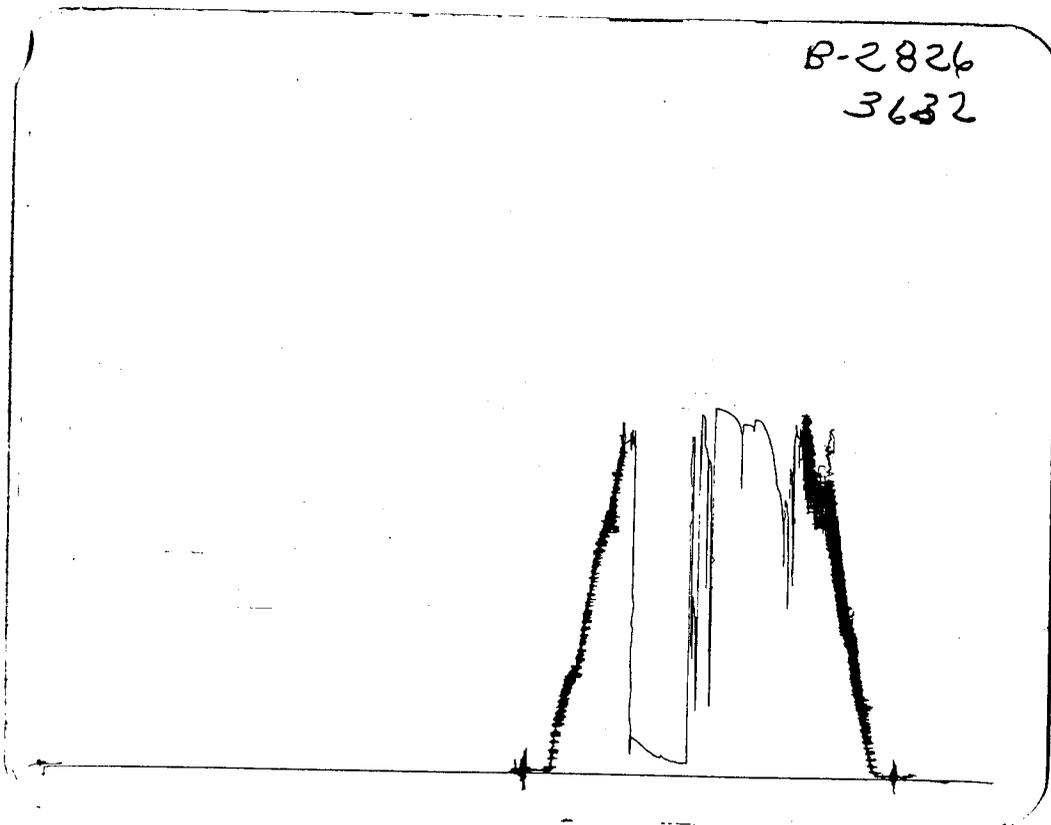
Tool Plugged on Initial flow & shut in

Slid tool 5' to bottom

TOP



BOTTOM



Lease	Kirkman	Well No.	1	Date	3-17-80
County	Barton	Sec.	15	Twp.	19
		Rng.	13	Elevation	
Company	L. G. Stephenson & Co.			Test No.	6
Contractor	Red Tiger Drilling #4			Zone Tested	ARbuckle
Charge To	L. G. Stephenson & Co.			Ticket #	3633
Approved By	Jim Spellman			Tester	Richard Bowman

Initial Hydro Mud Press.1988... P.S.I.

Initial Flow Press.67..... To67... P.S.I. Initial Flow Period ...30..... Min.

Initial Shut-in Press.156..... P.S.I. Initial Shut-in30..... Min.

Final Flow Press. ...67... To ...67..... P.S.I. Final Flow Period ...30..... Min.

Final Shut-in Press.122..... P.S.I. Final Shut-in30..... Min.

Final Hydro Mud Press.1977... P.S.I. TIME TOOL OPEN4:45 a.m.....

Temperature105^o.....

Mud Weight10.2..... Viscosity42.....

Fluid Loss14.8.....

Interval Tested3402..... To3453.....

Top Packer Depth3397..... Surface Choke Size

Bottom Packer Depth3402..... Bottom Choke Size ...5/8.....

Total Depth3453..... Main Hole Size7 7/8.....

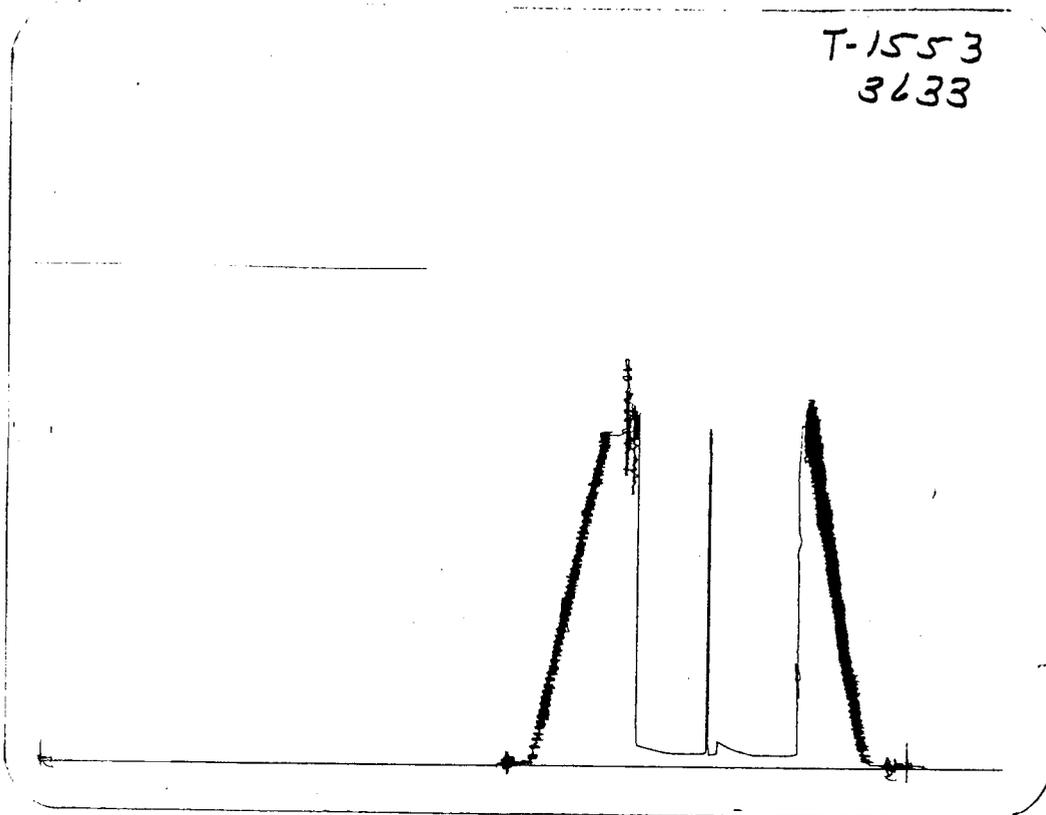
Drill Pipe Size ...4½XH... Wt ...4½XH... Rubber Size6 3/4.....

Drill Collar I.D. ...2.25... Ft. RunNone.....

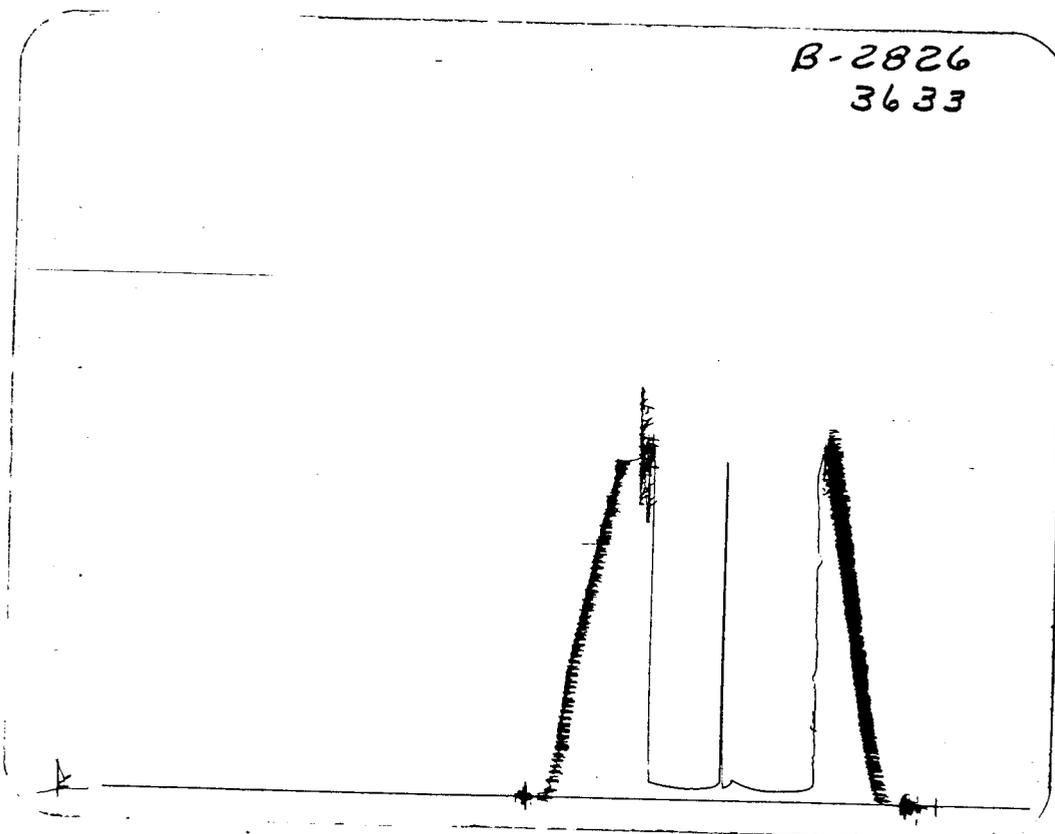
Blow ...Very weak blow... Second Flow = very weak blow flushed tool in
5 min. good surge very weak blow

Recovery ...15' mud... No show.....

TOP



BOTTOM



P.O. Box 169

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Lease <i>Kirkman</i>	Well No. <i>1</i>	Date <i>3-13-80</i>
County <i>Barton</i> Sec. <i>15</i> Twp. <i>19</i> Rng. <i>13</i>		Elevation
Company <i>L.G. Stephenson & Co. Inc.</i>		Test No. <i>1</i>
Contractor <i>Red Tiger Drilling Co. #4</i>		Zone Tested <i>Lansing</i>
Charge To <i>L.G. Stephenson & Co. Inc.</i>		Time Tool Opened _____ A.M. P.M.
Approved By <i>X James W. Spellman</i>		Tester <i>Richard Bowman</i>

Initial Hydro Mud Press. _____ P.S.I.

Initial Flow Press. _____ To _____ P.S.I. Initial Flow Period _____ Min.

Initial Shut-in Press. _____ P.S.I. Initial Shut-in _____ Min.

Final Flow Press. _____ To _____ P.S.I. Final Flow Period _____ Min.

Final Shut-in Press. _____ P.S.I. Final Shut-in _____ Min.

Final Hydro Mud Press. _____ P.S.I.

Temperature _____

Mud Weight *10.2* Viscosity *40*

Fluid Loss *15.8*

Interval Tested *3183* To *3250*

Price Job	<i>250.00</i>
Other Charges	_____
Total	<i>\$ 250.00</i>

Top Packer Depth *3178* Surface Choke Size _____

Bottom Packer Depth *3183* Bottom Choke Size _____

Total Depth *3250* Main Hole Size _____

Drill Pipe Size *4 1/2 x 4* Wt *4 1/2 x 4* Rubber Size _____

Drill Collar I.D. *2.25* Ft. Run *None*

Blow _____
massive "Holes in drill pipe"

Recovery _____

Remarks _____

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Lease <i>Kirkman</i>	Well No. <i>1</i>	Date <i>3-14-80</i>
County <i>Barton</i> Sec. <i>15</i> Twp. <i>19</i> Rng. <i>13</i>		Elevation
Company <i>L G Stephenson & Co. Inc.</i>		Test No. <i>2</i>
Contractor <i>Red Tiger Drilling Co. #4</i>		Zone Tested <i>Lansing</i>
Charge To <i>L G Stephenson & Co. Inc.</i>		Time Tool Opened <i>2:00</i> A.M. P.M.)
Approved By <i>James W. Sullivan</i>		Tester <i>Richard Bourman</i>

Initial Hydro Mud Press. *1299* P.S.I.
 Initial Flow Press. *90* To *92* P.S.I. Initial Flow Period *45* Min.
 Initial Shut-in Press. *1051* P.S.I. Initial Shut-in *30* Min.
 Final Flow Press. *112* To *117* P.S.I. Final Flow Period *45* Min.
 Final Shut-in Press. *896* P.S.I. Final Shut-in *30* Min.
 Final Hydro Mud Press. *1288* P.S.I.

Temperature *103*
 Mud Weight *10.2* Viscosity *38*
 Fluid Loss *15.8*
 Interval Tested *3183* To *3250*

Price Job	<i>460.00</i>
Other Charges	
Total	<i>460.00</i>

Top Packer Depth *3178* Surface Choke Size _____
 Bottom Packer Depth *3183* Bottom Choke Size *5/8*
 Total Depth *3250* Main Hole Size *7 7/8*
 Drill Pipe Size *4 1/2 x H* Wt *4 1/2 x H* Rubber Size *6 3/4*
 Drill Collar I.D. *2.25* Ft. Run *None*
 Blow *Went to blow*

Recovery *65' & slightly oil cut mud*

Remarks _____

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Lease <i>Kirkman</i>	Well No. <i>1</i>	Date <i>3-15-80</i>
County <i>Barton</i>	Sec. <i>15</i> Twp. <i>19</i> Rng. <i>13</i>	Elevation
Company <i>L.G. Stephenson & Co. Inc.</i>		Test No. <i>3</i>
Contractor <i>Red Tag Drilling Co. #4</i>		Zone Tested <i>K.C.</i>
Charge To <i>L.G. Stephenson & Co. Inc.</i>		Time Tool Opened <i>1:15</i> (A.M.) P.M.
Approved By <i>[Signature]</i>		Tester <i>Richard Bowman</i>

Initial Hydro Mud Press. *1988* P.S.I.
 Initial Flow Press. *55* To *55* P.S.I. Initial Flow Period *30* Min.
 Initial Shut-in Press. *412* P.S.I. Initial Shut-in *30* Min.
 Final Flow Press. *66* To *66* P.S.I. Final Flow Period *30* Min.
 Final Shut-in Press. *189* P.S.I. Final Shut-in *30* Min.

Final Hydro Mud Press. *1977* P.S.I.
 Temperature *103°*
 Mud Weight *102* Viscosity *36*
 Fluid Loss *17.6*
 Interval Tested *3245* To *3267*

Price Job	<i>460.00</i>
Other Charges	
Total	<i>460.00</i>

Top Packer Depth *3240* Surface Choke Size _____
 Bottom Packer Depth *3245* Bottom Choke Size *5/8*
 Total Depth *3267* Main Hole Size *7 7/8*
 Drill Pipe Size *4 1/2 x 11* Wt *4 1/2 x 11* Rubber Size *6 3/4*
 Drill Collar I.D. *2.25* Ft. Run *None*

Blow *Very unstable second flow - No flow observed
 tool in 10 min. Good surge - No help.*

Recovery *15' mud*

Remarks *3rd tool 3' to Bottom*

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Lease <i>Kirkman</i>	Well No. <i>1</i>	Date <i>3-16-80</i>
County <i>Barton</i> Sec. <i>15</i> Twp. <i>19</i> Rng. <i>13</i>		Elevation
Company <i>L.G. Stephenson & Co. Inc.</i>		Test No. <i>4</i>
Contractor <i>Red Tiger Drilling Co. #41</i>		Zone Tested <i>K.G.</i>
Charge To <i>L.G. Stephenson & Co. Inc.</i>		Time Tool Opened <i>2:30</i> A.M. P.M.
Approved By <i>[Signature]</i>		Tester <i>Richard Bowmer</i>

Initial Hydro Mud Press. *1988* P.S.I.

Initial Flow Press. *100* To *100* P.S.I. Initial Flow Period *30* Min.

Initial Shut-in Press. *243* P.S.I. Initial Shut-in *30* Min.

Final Flow Press. *100* To *100* P.S.I. Final Flow Period *30* Min.

Final Shut-in Press. *212* P.S.I. Final Shut-in *30* Min.

Final Hydro Mud Press. *1977* P.S.I.

Temperature *104°*

Mud Weight *10.2* Viscosity *38*

Fluid Loss *18.6*

Interval Tested *3306* To *3410*

Price Job	<i>460.00</i>
Other Charges	
Total	<i>460.00</i>

Top Packer Depth *3301* Surface Choke Size

Bottom Packer Depth *3306* Bottom Choke Size *5/8*

Total Depth *3410* Main Hole Size *7 7/8*

Drill Pipe Size *4 1/2" x 11* Wt *4 1/2" x 11* Rubber Size *6 3/4*

Drill Collar I.D. *2.25* Ft. Run *None*

Blow *Very weak blow second flow - No blow*
Exceeded tool 10 min Good Surge No help.

Recovery *30' & slightly Oil Cut mud*

Remarks *Slid tool 4' to Bottom*

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Lease <u>Kirkerman</u>	Well No. <u>1</u>	Date <u>3-16-80</u>
County <u>Barton</u> Sec. <u>15</u> Twp. <u>19</u> Rng. <u>13</u>		Elevation
Company <u>L.G. Stephenson & Co. Inc.</u>		Test No. <u>5</u>
Contractor <u>Red Tiger Drilling Co. #4</u>		Zone Tested <u>Arbuckle</u>
Charge To <u>L.G. Stephenson & Co. Inc.</u>		Time Tool Opened <u>2:00</u> A.M. P.M.
Approved By <u>(Signature)</u>		Tester <u>Richard Bowmen</u>

Initial Hydro Mud Press. 1988 P.S.I.

Initial Flow Press. None To None P.S.I. Initial Flow Period 30 Min.

Initial Shut-in Press. None P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 112 To 112 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 212 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1977 P.S.I.

Temperature 104

Mud Weight 10.2 Viscosity 42

Fluid Loss 14.8

Interval Tested 3403 To 3441

Price Job <u>460.00</u>
Other Charges
Total <u>460.00</u>

Top Packer Depth 3398 Surface Choke Size _____

Bottom Packer Depth 3403 Bottom Choke Size 5/8

Total Depth 3441 Main Hole Size 7 7/8

Drill Pipe Size 1 1/2^{XH} Wt 4 1/2^{XH} Rubber Size 6 3/4

Drill Collar I.D. 2.25 Ft. Run None

Blow Very weak blow. Second flow - hollow flushed tool in 10 min. Good surge very weak flow died in 1 min.

Recovery 5' mud

Remarks 8 led Tool 5' to bottom

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Lease <u>Kickman</u>	Well No. <u>1</u>	Date <u>3-17-80</u>
County <u>Boston</u> Sec. <u>15</u> Twp. <u>19</u> Rng. <u>13</u>		Elevation
Company <u>L. G. Stephenson & Co. Inc.</u>		Test No. <u>6</u>
Contractor <u>Red Tiger Drilling Co. #4</u>		Zone Tested <u>Asbuckle</u>
Charge To <u>L. G. Stephenson & Co. Inc.</u>		Time Tool Opened <u>4:45</u> ^{A.M.} / _{P.M.}
Approved By <u>Tom SPELLMAN</u>		Tester <u>Richard Bowman</u>

Initial Hydro Mud Press. 1998 P.S.I.

Initial Flow Press. 67 To 67 P.S.I. Initial Flow Period 30 Min.

Initial Shut-in Press. 156 P.S.I. Initial Shut-in 30 Min.

Final Flow Press. 67 To 67 P.S.I. Final Flow Period 30 Min.

Final Shut-in Press. 122 P.S.I. Final Shut-in 30 Min.

Final Hydro Mud Press. 1977 P.S.I.

Temperature 105

Mud Weight 10.2 Viscosity 42

Fluid Loss 14.8

Interval Tested 3402 To 3453

Price Job <u>460.00</u>
Other Charges
Total <u>460.00</u>

Top Packer Depth 3397 Surface Choke Size

Bottom Packer Depth 3402 Bottom Choke Size 5/8

Total Depth 3453 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 X H Wt 4 1/2 X H Rubber Size 6 3/4

Drill Collar I.D. 2.25 Ft. Run None

Blow Down wash blow seen flow - very weak flow

Flush at 5 min food during very weak blow.

Recovery 15' around no show

Remarks

Remarks

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