



CHEMICAL & TECHNICAL SERVICES, INC.

P. O. Box 728
HILL CITY, KANSAS

Test No. 1

Formation Testing Data

Ticket No. 954

Date 11-18-61	Lease & Well No. BERGNER #1	Location	County PRATT	State KANSAS	Field
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OWNER IMPERIAL OIL OF KANSAS, INC.	CONTRACTOR COMPANY TOOLS
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Truck Called Out	On Location	Job Began	Job Completed
Date 12:30 P.M.	Date 1:00 P.M.	Date 2:30 P.M.	Date 10:00 P.M.

Elevation		Initial Closed In Time	30	Min.
Total Depth	4530	Tool Open Flow Period	5-120	Min.
Hole Size	7-7/8	Final Closed In Time	30	Min.
Length Anchor	17'	Type Pressure Recorders Used		
Formation Tested	VIOLA	Top Gauge	Bottom Gauge	
Top Packer Depth		H&T	H&T	
Bottom Packer Depth	4513		Field	Office Corrected
Size Packer	6-3/4	Initial Hydro Mud Pressure	2370	
Size Drill Pipe	4-1/2	Initial Closed In Pressure	1460	1480
Mud Weight	9.9	Initial Flow Pressure	120	
Viscosity	45	Final Flow Pressure	110	
Size Bottom Choke	3/4	Final Closed In Pressure	1190	
Size Surface Choke	1"	Final Hydro Mud Pressure	2370	

CONSOLIDATED-SALINA-41557-600 SHS-1-61

Remarks: GAS 2 MINUTES 400,000 DECREASE IN 60 MINUTES TO 200,000 AND STEADY

RECEIVED 150' GROTHY OIL CUT MUD 60' HEAVY OIL CUT MUD 189' MUD OIL

180' CLEAN OIL

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Chemical & Technical Services, Inc., nor whether resulting from the acts or omissions of Chemical & Technical Services, Inc., or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

It is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be bound by any agreement, not herein contained, and no agent or representative connected with or employed by Chemical & Technical Services Inc., has authority to alter or extend the terms of this agreement. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

Tester ALBERT N. PARKS	Date 11-18-61	Time 7:00	A.M. P.M.	By RAYMOND R. DOMBAUGH
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Owner, Operator or his Agent



CHEMICAL & TECHNICAL SERVICES, INC.

P. O. Box 728
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Ticket No. 954

Date <u>11-18-61</u>	Lease & Well No. <u>BERGNER #1</u>	Location	County <u>PRATT</u>	State <u>KANSAS</u>	Field
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OWNER <u>IMPERIAL OIL OF KANSAS, INC.</u>	CONTRACTOR <u>COMPANY TOOLS</u>
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Truck Called Out	On Location	Job Began	Job Completed
Date <u>12:30</u> A.M. P.M.	Date <u>1:00</u> A.M. P.M.	Date <u>2:30</u> A.M. P.M.	Date <u>10:00</u> A.M. P.M.

Elevation		Initial Closed In Time	<u>30</u>	Min.
Total Depth	<u>4530</u>	Tool Open Flow Period	<u>5-120</u>	Min.
Hole Size	<u>7-7/8</u>	Final Closed In Time	<u>30</u>	Min.
Length Anchor	<u>17'</u>	Type Pressure Recorders Used		
Formation Tested	<u>VIOLA</u>	Top Gauge	Bottom Gauge	
Top Packer Depth		<u>H&T</u>	<u>H&T</u>	
Bottom Packer Depth	<u>4513</u>		Field	Office Corrected
Size Packer	<u>6-3/4</u>	Initial Hydro Mud Pressure	<u>2370</u>	
Size Drill Pipe	<u>4-1/2</u>	Initial Closed In Pressure	<u>1460</u> ^{130"}	<u>1480</u>
Mud Weight	<u>9.9</u>	Initial Flow Pressure	<u>120</u> ^{15"}	
Viscosity	<u>45</u>	Final Flow Pressure	<u>110</u> ^{1120"}	
Size Bottom Choke	<u>3/4</u>	Final Closed In Pressure	<u>1190</u> ^{130"}	
Size Surface Choke	<u>1"</u>	Final Hydro Mud Pressure	<u>2370</u>	

CONSOLIDATED-SALINA-41857-600 SHS-1-61

Remarks: GAS 2 MINUTES 400,000 DECREASE IN 60 MINUTES TO 200,000 AND STEADY

RECEIVED 150' BROTHY OIL CUT MUD + 60' HEAVY OIL CUT MUD ¹⁸⁰
180' MUD OIL +
180' CLEAN OIL

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It is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be bound by any agreement, not herein contained, and no agent or representative connected with or employed by Chemical & Technical Services Inc., has authority to alter or extend the terms of this agreement. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

Tester ALBERT N. PARKS

Date <u>11-18-61</u>	Time <u>7:00</u>	A.M. P.M.	By
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RAYMOND R. DOMBAUGH

Owner, Operator or his Agent



CHEMICAL & TECHNICAL SERVICES, INC.

P. O. Box 728
HILL CITY, KANSAS

Test No. 1

Formation Testing Data

Ticket No. 954

Date 11-18-61	Lease & Well No. BERGNER #1	Location	County PRATT	State KANSAS	Field
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OWNER IMPERIAL OIL OF KANSAS, INC.	CONTRACTOR COMPANY TOOLS
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Truck Called Out Date 12:30 PM	On Location Date 1:00 PM	Job Began Date 2:30 XXXX	Job Completed Date 10:00 PM
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Elevation		Initial Closed In Time	30	Min.
Total Depth	4530	Tool Open Flow Period	5-120	Min.
Hole Size	7-7/8	Final Closed In Time	30	Min.
Length Anchor	17'	Type Pressure Recorders Used		
Formation Tested	VIOLA	Top Gauge	Bottom Gauge	
Top Packer Depth		H&T	H&T	
Bottom Packer Depth	4513		Field	Office Corrected
Size Packer	6-3/4	Initial Hydro Mud Pressure	2370	
Size Drill Pipe	4-1/2	Initial Closed In Pressure	1460 (2)	1480
Mud Weight	9.9	Initial Flow Pressure	120 (1)	
Viscosity	45	Final Flow Pressure	110 (3)	(stab last 60")
Size Bottom Choke	3/4	Final Closed In Pressure	1190 (4)	STILL BUILDING
Size Surface Choke	1"	Final Hydro Mud Pressure	2370	

CONSOLIDATED-SALINA-41537-000 SHS-1-61

Remarks: **GAS 2 MINUTES 400,000 DECREASE IN 60 MINUTES TO 200,000 AND STEADY (stab last 60")**

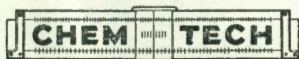
RECEIVED 150' GROTHY OIL CUT MUD 60' HEAVY OIL CUT MUD 180' MUD OIL

180' CLEAN OIL

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Tester ALBERT N. PARKS			
Date 11-18-61	A.M. PM	Time 7:00	By RAYMOND R. DOMBAUGH
			<i>Owner, Operator or his Agent</i>



CHEMICAL & TECHNICAL SERVICES, INC.

P. O. Box 728
HILL CITY, KANSAS

Test No. 1

Ticket No. 954

Formation Testing Data

Date 11-18-61	Lease & Well No. BERGNER #1	Location	County PRATT	State KANSAS	Field
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OWNER IMPERIAL OIL OF KANSAS, INC.	CONTRACTOR COMPANY TOOLS
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Truck Called Out Date 12:30 P.M.	On Location Date 1:00 P.M.	Job Began Date 2:30 P.M.	Job Completed Date 10:00 P.M.
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Elevation		Initial Closed In Time	30	Min.
Total Depth	4530	Tool Open Flow Period	5-120	Min.
Hole Size	7-7/8	Final Closed In Time	30	Min.
Length Anchor	17'	Type Pressure Recorders Used		
Formation Tested	VIOLA	Top Gauge	Bottom Gauge	
Top Packer Depth		H&T	H&T	
Bottom Packer Depth	4513		Field	Office Corrected
Size Packer	6-3/4	Initial Hydro Mud Pressure	2370	
Size Drill Pipe	4-1/2	Initial Closed In Pressure	1460 (2)	1480
Mud Weight	9.9	Initial Flow Pressure	120 (1)	
Viscosity	45	Final Flow Pressure	110 (3)	<i>(stab. last 60')</i>
Size Bottom Choke	3/4	Final Closed In Pressure	1190 (4)	<i>STILL BUILDING</i>
Size Surface Choke	1"	Final Hydro Mud Pressure	2370	

CONSOLIDATED-SALINA-41557-600 SHS-1-61

Remarks: **GAS 2 MINUTES 400,000 DECREASE IN 60 MINUTES TO 200,000 AND STEADY**

RECEIVED 150' GROTHY OIL CUT MUD 60' HEAVY OIL CUT MUD 180' MUD OIL

180' CLEAN OIL

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Chemical & Technical Services, Inc., nor whether resulting from the acts or omissions of Chemical & Technical Services, Inc., or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

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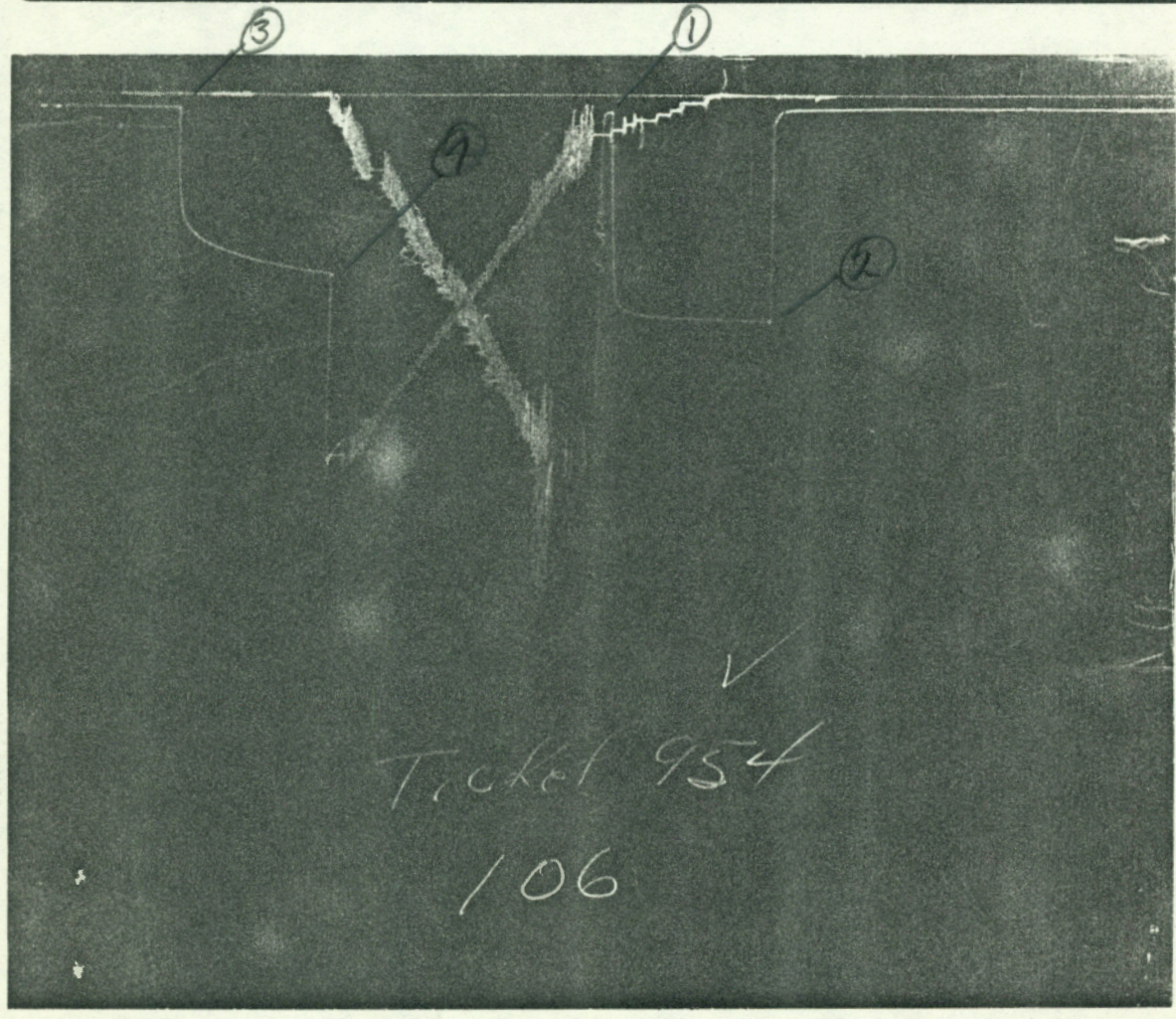
Tester **ALBERT N. PARKS**

Date 11-18-61	Time 7:00 P.M.	By RAYMOND R. DOMBAUGH
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Owner, Operator or his Agent



Ticket 954
106



Ticket 954
106



CHEMICAL & TECHNICAL SERVICES, INC.

P. O. Box 728
HILL CITY, KANSAS

Test No. 2

Ticket No. 955

Formation Testing Data

Date	Lease & Well No.	Location	County	State	Field
11-19-61	BERGNER #1		PRATT	KANSAS	

OWNER	CONTRACTOR
IMPERIAL OIL OF KANSAS, INC.	COMPANY TOOLS

Truck Called Out	On Location	Job Began	Job Completed
Date	Date	Date	Date
A.M.	A.M.	A.M.	A.M.
P.M.	P.M.	10:30 P.M.	3:30 P.M.

Elevation		Initial Closed In Time	30	Min.
Total Depth	4569	Tool Open Flow Period	5-30	Min.
Hole Size	7-7/8	Final Closed In Time	30	Min.
Length Anchor	19'	Type Pressure Recorders Used		
Formation Tested	SIMPSON	Top Gauge	Bottom Gauge	
Top Packer Depth	4545	H&T	H&T	
Bottom Packer Depth	4550		Field	Office Corrected
Size Packer	6-3/4	Initial Hydro Mud Pressure		
Size Drill Pipe	4-1/2	Initial Closed In Pressure	0	
Mud Weight	9.9	Initial Flow Pressure	0	
Viscosity	43	Final Flow Pressure	0	
Size Bottom Choke	3/4	Final Closed In Pressure	0	
Size Surface Choke	1"	Final Hydro Mud Pressure		

CONSOLIDATED-SALINA-41557-600 SHS-1-61

Remarks: WEAK BLOW DEAD IN 6 MINUTES

RECEIVED 40' MUD

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Chemical & Technical Services, Inc., nor whether resulting from the acts or omissions of Chemical & Technical Services, Inc., or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

It is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be bound by any agreement, not herein contained, and no agent or representative connected with or employed by Chemical & Technical Services Inc., has authority to alter or extend the terms of this agreement. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

Tester	ALBERT N. PARKS			
Date	Time	By		
11-19-61	1:00 P.M.	RAYMOND R. DOMBAUGH		

Owner, Operator or his Agent



CHEMICAL & TECHNICAL SERVICES, INC.

P. O. Box 728
HILL CITY, KANSAS

Test No. 3

Ticket No. 956

Formation Testing Data

Date 11-20-61	Lease & Well No. BERGNER	Location	County PRATT	State KANSAS	Field
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OWNER IMPERIAL OIL OF KANSAS, INC.	CONTRACTOR COMPANY TOOLS
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Truck Called Out	On Location	Job Began	Job Completed
Date	Date	Date	Date
A.M.	A.M.	A.M.	A.M.
P.M.	P.M.	P.M.	P.M.
		8:30	

Elevation		Initial Closed In Time	30	Min.
Total Depth	4574	Tool Open Flow Period	5-120	Min.
Hole Size	7-7/8	Final Closed In Time	30	Min.
Length Anchor	24'	Type Pressure Recorders Used		
Formation Tested	SIMPSON	Top Gauge	Bottom Gauge	
Top Packer Depth	4545	H&T	H&T	
Bottom Packer Depth	4550		Field	Office Corrected
Size Packer	6-3/4	Initial Hydro Mud Pressure	2400	
Size Drill Pipe	4-1/2	Initial Closed In Pressure	1100	
Mud Weight	9.8	Initial Flow Pressure	0	
Viscosity	43	Final Flow Pressure	170	
Size Bottom Choke	3/4"	Final Closed In Pressure	1100	
Size Surface Choke	1"	Final Hydro Mud Pressure	2400	

CONSOLIDATED-SALINA-41557-600 SHS-1-61

Remarks: WEAK BLOW THROUGH TEST

RECEIVED 260 MUDDY WATER 240' WATER

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Chemical & Technical Services, Inc., nor whether resulting from the acts or omissions of Chemical & Technical Services, Inc., or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

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Tester ALBERT N. PARKS	
Date 11-20-61	A.M. Time 2:00 XXXX By RAYMOND R. DOMBAUGH Owner, Operator or his Agent



CHEMICAL & TECHNICAL SERVICES, INC.

P. O. Box 728
HILL CITY, KANSAS

Test No. 4

Formation Testing Data

Ticket No. 957

Date 11-20-61	Lease & Well No. BERGNER #1	Location	County PRATT	State KANSAS	Field
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OWNER IMPERIAL OIL OF KANSAS, INC.	CONTRACTOR COMPANY TOOLS
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Truck Called Out	On Location	Job Began	Job Completed
Date 12:30 P.M.	Date 1:00 P.M.	Date 2:30 P.M.	Date 7:00 P.M.

Elevation		Initial Closed In Time	20	Min.
Total Depth	4608	Tool Open Flow Period	10-20	Min.
Hole Size	7-7/8	Final Closed In Time	20	Min.
Length Anchor	5	Type Pressure Recorders Used		
Formation Tested	SIMPSON	Top Gauge	Bottom Gauge	
Top Packer Depth	4598	H&T	H&T	
Bottom Packer Depth	4603		Field	Office Corrected
Size Packer	6-3/4	Initial Hydro Mud Pressure		
Size Drill Pipe	4-1/2	Initial Closed In Pressure	0	
Mud Weight	9.9	Initial Flow Pressure	0	
Viscosity	45	Final Flow Pressure	0	
Size Bottom Choke	3/4"	Final Closed In Pressure	0	
Size Surface Choke	1"	Final Hydro Mud Pressure		

CONSOLIDATED-SALINA-41557-600 SHS-1-61

Remarks: WEAK BLOW DEAD IN 40 MINUTES

51 MUD

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Chemical & Technical Services, Inc., shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Chemical & Technical Services, Inc., nor whether resulting from the acts or omissions of Chemical & Technical Services, Inc., or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

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Tester ALBERT N. PARKS

Date 11-20-61	Time 4:00	AM P.M.	By
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RAYMOND R. DOMBAUGH

Owner, Operator or his Agent