



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No 18516

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

WICHITA, KANSAS 67201

Elevation 2272 GR Formation Fort Scott Eff. Pay Ft.

District Colby Date Sept 9 1993 Customer Order No.

COMPANY NAME Ritchie Exploration, Inc.

ADDRESS 125 N Market Suite 1000 Wichita, KS.

LEASE AND WELL NO. McCreight 2-B#1 COUNTY Hodgeman STATE KS Sec. 2 Twp. 21 Rge. 24

Mail Invoice To #1 McCreight Same Co. Name No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 4302 ft. to 4344 ft. Total Depth 4344 ft.

Packer Depth 4297 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4302 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set - 13260

Top Recorder Depth (Inside) 4305 ft. Recorder Number 13470 Cap. 3950

Bottom Recorder Depth (Outside) 4308 ft. Recorder Number 13400 Cap. 3950

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

Drilling Contractor Duke Rig #4 Drill Collar Length 30 I. D. 2.2 in.

Mud Type Chemical Viscosity 47 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 88 cc. Drill Pipe Length 4252 I. D. 3.8 in.

Chlorides 6000 P.P.M. Test Tool Length 20 ft. Tool Size 5/200 in.

Jars: Make VC Serial Number - Anchor Length 42 ft. Size 5/200 in.

Did Well Flow? VC Reversed Out VC 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 in.

Blow: IFP- Weak blow died in 2 min

FFP- no blow- flushed tool- surged & died

Recovered 5 ft. of mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

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

Time On Location 530 A.M. Time Pick Up Tool 630 A.M. Time Off Location A.M.

Time Set Packer(s) 755 P.M. Time Started Off Bottom 955 P.M. Maximum Temperature MR

Initial Hydrostatic Pressure (A) 2105 P.S.I.

Initial Flow Period Minutes 30 (B) 24 P.S.I. to (C) 24 P.S.I.

Initial Closed In Period Minutes 30 (D) 24 P.S.I.

Final Flow Period Minutes 30 (E) 24 P.S.I. to (F) 24 P.S.I.

Final Closed In Period Minutes 30 (G) 24 P.S.I.

Final Hydrostatic Pressure (H) 2085 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 [Signature] Signature of Customer or his authorized representative

Western Representative Mike Schubert

Thanks!

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 9-9-92 Test Ticket No. 18514
 Recorder No. 15670 B2100 Capacity _____ Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

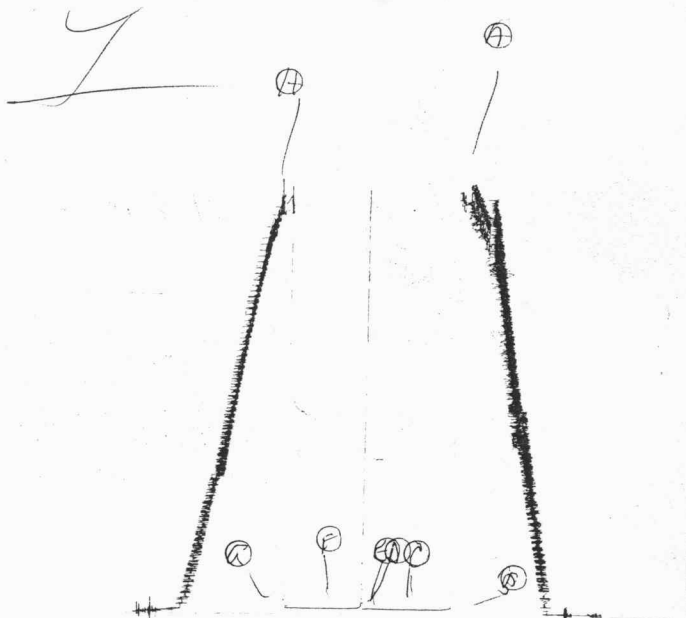
Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud <u>2098</u>	P.S.I.		M	
B First Initial Flow Pressure _____	P.S.I.	First Flow Pressure	Mins. <u>2</u>	Mins.
C First Final Flow Pressure _____	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure _____	P.S.I.	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 <u>2074</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>25</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>25</u>
P 2 <u>5</u>		<u>3</u>	<u>25</u>	<u>5</u>	<u>25</u>	<u>3</u>	
P 3 <u>10</u>		<u>6</u>	<u>25</u>	<u>10</u>	<u>27 FT</u>	<u>6</u>	
P 4 <u>15</u>		<u>9</u>	<u>25</u>	<u>15</u>	<u>27</u>	<u>9</u>	
P 5 <u>20</u>		<u>12</u>	<u>25</u>	<u>20</u>	<u>27</u>	<u>12</u>	
P 6 <u>25</u>		<u>15</u>	<u>25</u>	<u>25</u>	<u>24</u>	<u>15</u>	
P 7 <u>30</u>	<u>25</u>	<u>18</u>	<u>25</u>	<u>30</u>	<u>24</u>	<u>18</u>	
P 8 <u>35</u>		<u>21</u>		<u>35</u>		<u>21</u>	
P 9 <u>40</u>		<u>24</u>		<u>40</u>		<u>24</u>	
P10 <u>45</u>		<u>27</u>		<u>45</u>		<u>27</u>	
P11 <u>50</u>		<u>30</u>	<u>25</u>	<u>50</u>		<u>30</u>	<u>26</u>
P12 <u>55</u>		<u>33</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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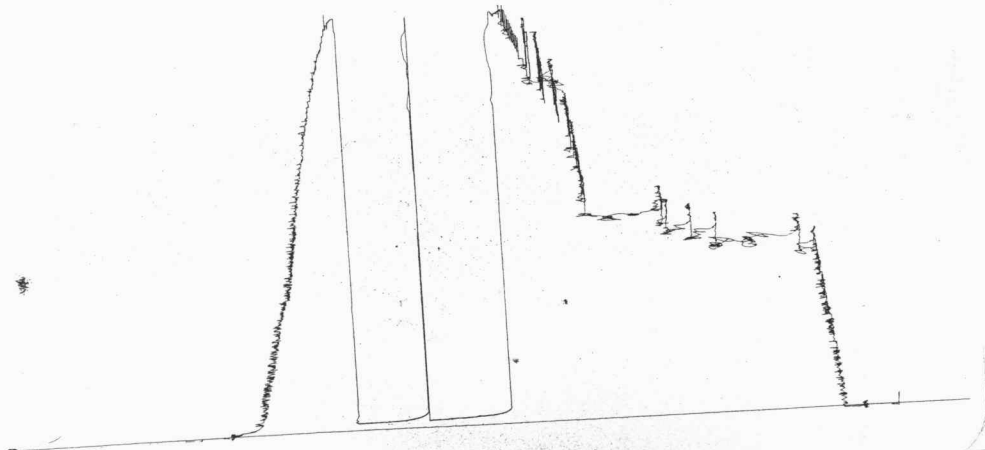
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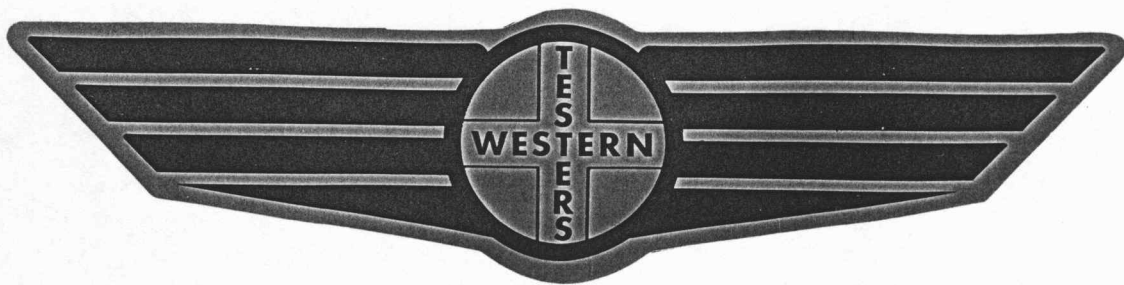
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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 80 - 688 - 7021**

DST REPORT

GENERAL INFORMATION

DATE	: 9-9-93	TICKET	: 18516
CUSTOMER	: RITCHIE EXPLORATION	LEASE	: MCCREIGHT 2-B
WELL	: #1	TEST: 1	GEOLOGIST: KITT NOAH
ELEVATION	: 2272 G.L.	FORMATION	: FORT SCOTT
SECTION	: 2	TOWNSHIP	: 21S
RANGE	: 24W	COUNTY: HODGEMAN	STATE : KS
GAUGE SN#	: 18760	RANGE : 3950	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	4302.00 ft	TO:	4344.00 ft	TVD:	4344.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	4305.0 ft		4308.0 ft		
TEMPERATURE:	0.0				
DRILL COLLAR LENGTH:	30.0 ft	I.D.:		2.200 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	4252.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	42.0 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:	4297.0 ft	SIZE:		6.750 in	
PACKER DEPTH:	4302.0 ft	SIZE:		6.750 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	DUKE #4	VISCOSITY :	47.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	8.800 cc
WEIGHT :	9.300 ppg	SERIAL NUMBER:	
CHLORIDES :	6000 ppm	REVERSED OUT?:	NO
JARS-MAKE :	NO		
DID WELL FLOW?:	NO		

COMMENTS

Comment

WEAK BLOW DIED IN 2 MINUTES ON INITIAL FLOW PERIOD
NO BLOW FLUSHED TOOL SURGED AND DIED ON FINAL FLOW
PERIOD.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
5.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.0235	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.0235	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2105.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	24.00	24.00
INITIAL SHUT-IN	30.00		24.00
FINAL FLOW	30.00	24.00	24.00
FINAL SHUT-IN	30.00		24.00

FINAL HYDROSTATIC PRESSURE: 2085.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2098.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	25.00	25.00
INITIAL SHUT-IN	30.00		25.00
FINAL FLOW	30.00	25.00	26.00
FINAL SHUT-IN	30.00		26.00

FINAL HYDROSTATIC PRESSURE: 2076.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 9-9-93	TICKET	: 18516
CUSTOMER	: RITCHIE EXPLORATION	LEASE	: MCCREIGHT 2-B
WELL	: #1	GEOLOGIST	: KITT NOAH
ELEVATION	: 2272 G.L.	FORMATION	: FORT SCOTT
SECTION	: 2	TOWNSHIP	: 21S
RANGE	: 24W	STATE	: KS
GAUGE SN#	: 18760	CLOCK	: 12
	COUNTY: HODGEMAN		
	RANGE : 3950		

INITIAL FLOW

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

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	25.00	25.00	0.00
6.00	25.00	0.00	0.00
9.00	25.00	0.00	0.00
12.00	25.00	0.00	0.00
15.00	25.00	0.00	0.00
18.00	25.00	0.00	0.00
21.00	25.00	0.00	0.00
24.00	25.00	0.00	0.00
27.00	25.00	0.00	0.00
30.00	25.00	0.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	25.00	25.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
5.00	25.00	0.00
10.00	27.00	2.00
15.00	27.00	0.00
20.00	27.00	0.00
25.00	26.00	-1.00
30.00	26.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	26.00	26.00	0.00
6.00	26.00	0.00	0.00
9.00	26.00	0.00	0.00
12.00	26.00	0.00	0.00
15.00	26.00	0.00	0.00
18.00	26.00	0.00	0.00
21.00	26.00	0.00	0.00
24.00	26.00	0.00	0.00
27.00	26.00	0.00	0.00
30.00	26.00	0.00	0.00



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 18517

Elevation 2272 GR Formation Miss Eff. Pay Ft.

District Colby Date Sept 10 1993 Customer Order No. _____

COMPANY NAME Ritchie Exploration, Inc

ADDRESS 125 N Market Suite 1000 Wichita KS.

LEASE AND WELL NO. McCreight # 2-B#1 COUNTY Hodgeman STATE KS. Sec. 2 Twp 21 Rge 24

Mail Invoice To Same Co. Name _____ Address _____ No. Copies Requested Req

Mail Charts To Same Address _____ No. Copies Requested Req

Formation Test No. 2 Interval Tested From 4359 ft. to 4430 ft. Total Depth 4430 ft.

Packer Depth 4354 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4359 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4362 ft. Recorder Number 13670 Cap. 3950

Bottom Recorder Depth (Outside) 4365 ft. Recorder Number 13400 Cap. 3950

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Duke Rig #4 Drill Collar Length 30 I. D. 2.2 in.

Mud Type Chemical Viscosity 42 Weight Pipe Length _____ I. D. _____ in.

Weight 9.4 Water Loss 11.2 cc. Drill Pipe Length 4309 I. D. 3.8 in.

Chlorides 8000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 CD in.

Jars: Make NO Serial Number _____ Anchor Length 71 ft. Size 5 1/2 CD in.

Did Well Flow? NO Reversed Out NO 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 NH in.

Blow: IFP - Weak blow died in 2 min

FFP - Weak blow died in 10 min - flushed tool - surged & died

Recovered 5 ft. of oil

Recovered 60 ft. of 12 1/2 oil 88 1/2 mud

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Chlorides _____ P.P.M. Sample Jars used _____ Remarks: _____

Time On Location Stayed on loc A.M. Time Pick Up Tool 3 15 A.M. Time Off Location _____ A.M.

Time Set Packer(s) 4 25 A.M. Time Started Off Bottom 6 25 A.M. Maximum Temperature _____ P.M.

Initial Hydrostatic Pressure _____ (A) 2115 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 39 P.S.I. to (C) 48 P.S.I.

Initial Closed In Period _____ Minutes 30 (D) 1122 P.S.I.

Final Flow Period _____ Minutes 30 (E) 48 P.S.I. to (F) 53 P.S.I.

Final Closed In Period _____ Minutes 30 (G) 1151 P.S.I.

Final Hydrostatic Pressure _____ (H) 2105 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 Shitt Noah Signature of Customer or his authorized representative

Western Representative Mike Shults

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 9-10-93

Test Ticket No. 18517

Recorder No. 12760

Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

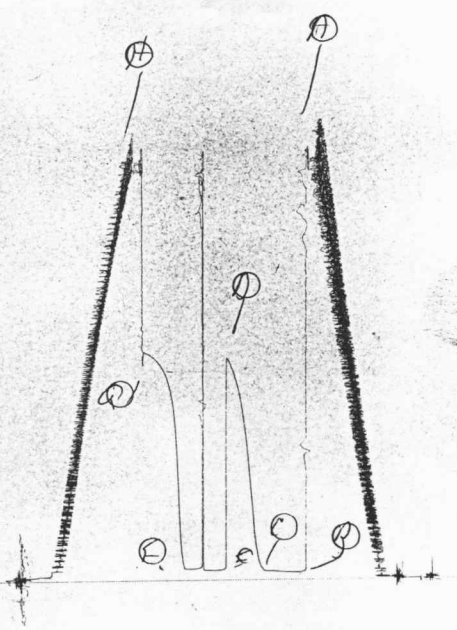
Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2140</u> P.S.I.			M
B First Initial Flow Pressure	_____ P.S.I.	First Flow Pressure	_____ Mins.	_____ Mins.
C First Final Flow Pressure	_____ P.S.I.	Initial Closed-in Pressure	_____ Mins.	_____ Mins.
D Initial Closed-in Pressure	_____ 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	<u>2112</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>38</u>	0	<u>43</u>	0	<u>48</u>	0	<u>55</u>
P 2 5	<u>38</u>	3	<u>70</u>	5		3	<u>285</u>
P 3 10	<u>38</u>	6	<u>1100</u>	10		6	<u>240</u>
P 4 15	<u>38</u>	9	<u>380</u>	15	<u>48</u>	9	<u>221</u>
P 5 20	<u>39</u>	12	<u>620</u>	20	<u>57-1</u>	12	<u>104</u>
P 6 25	<u>41</u>	15	<u>777</u>	25	<u>55</u>	15	<u>1071</u>
P 7 30	<u>43</u>	18	<u>929</u>	30	<u>55</u>	18	<u>1097</u>
P 8 35		21	<u>1020</u>	35		21	<u>1117</u>
P 9 40		24	<u>1075</u>	40		24	<u>1134</u>
P10 45		27	<u>1121</u>	45		27	<u>1150</u>
P11 50		30		50		30	<u>1157</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	

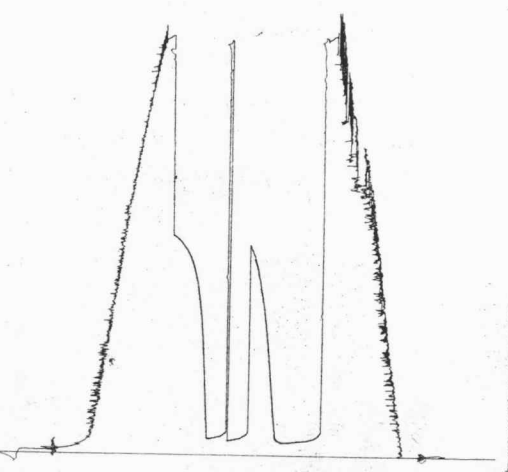
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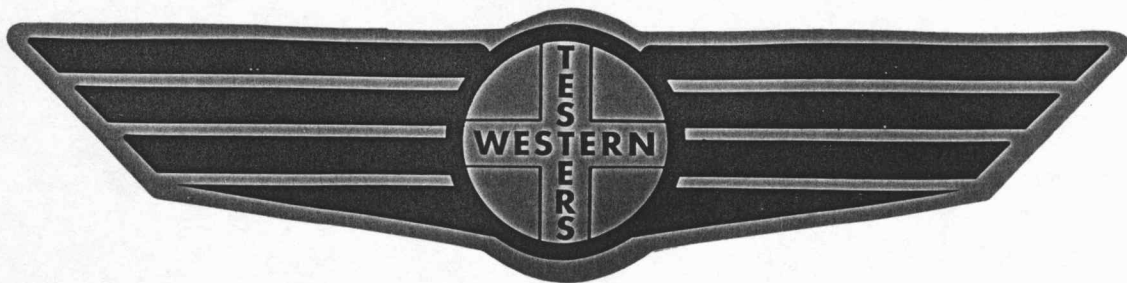


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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1-80-688-7021

DST REPORT

GENERAL INFORMATION

DATE	: 9-10-93	TICKET	: 18517
CUSTOMER	: RITCHIE EXPLORATION	LEASE	: MCCREIGHT 2-B
WELL	: #1	TEST: 2	GEOLOGIST: KITT NOAH
ELEVATION	: 2272 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 2	TOWNSHIP	: 21S
RANGE	: 24W	COUNTY: HODGEMAN	STATE : KS
GAUGE SN#	: 18760	RANGE : 3950	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	4359.00 ft	TO:	4430.00 ft	TVD:	4430.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	4362.0 ft	4365.0 ft			
TEMPERATURE:	0.0				
DRILL COLLAR LENGTH:	30.0 ft	I.D.:	2.200 in		
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in		
DRILL PIPE LENGTH :	4309.0 ft	I.D.:	3.800 in		
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in		
ANCHOR LENGTH :	71.0 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:	4354.0 ft	SIZE:	6.750 in		
PACKER DEPTH:	4359.0 ft	SIZE:	6.750 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		

MUD INFORMATION

DRILLING CON. :	DUKE #4	VISCOSITY :	42.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	11.200 cc
WEIGHT :	9.100 ppg	SERIAL NUMBER:	
CHLORIDES :	8000 ppm	REVERSED OUT?:	NO
JARS-MAKE :	NO		
DID WELL FLOW?:	NO		

COMMENTS

Comment

WEAK BLOW DIED IN 2 MINUTES ON INITIAL FLOW PERIOD
WEAK BLOW DIED IN 10 MUNUTES FLUSHED TOOL SURGED
AND DIED ON FINAL FLOW PERIOD.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
5.0	100.0	0.0	0.0	0.0	OIL
60.0	12.0	0.0	0.0	88.0	OIL CUT MUD

RATE INFORMATION

OIL VOLUME:	0.1376	STB		
GAS VOLUME:	0.0000	SCF		
MUD VOLUME:	0.4944	STB	TOTAL FLOW TIME:	60.0000 min.
WATER VOLUME:	0.0000	STB	AVERAGE OIL RATE:	15.1671 STB/D
TOTAL FLUID :	0.6320	STB	AVERAGE WATER RATE:	0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2115.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	39.00	48.00
INITIAL SHUT-IN	30.00		1122.00
FINAL FLOW	30.00	48.00	53.00
FINAL SHUT-IN	30.00		1151.00

FINAL HYDROSTATIC PRESSURE: 2105.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2142.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	38.00	43.00
INITIAL SHUT-IN	27.00		1121.00
FINAL FLOW	30.00	48.00	55.00
FINAL SHUT-IN	30.00		1157.00

FINAL HYDROSTATIC PRESSURE: 2113.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 9-10-93	TICKET : 18517
CUSTOMER : RITCHIE EXPLORATION	LEASE : MCCREIGHT 2-B
WELL : #1 TEST: 2	GEOLOGIST: KITT NOAH
ELEVATION: 2272 G.L.	FORMATION: MISSISSIPPI
SECTION : 2	TOWNSHIP : 21S
RANGE : 24W COUNTY: HODGEMAN	STATE : KS
GAUGE SN#: 18760 RANGE : 3950	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	38.00	38.00
5.00	38.00	0.00
10.00	38.00	0.00
15.00	38.00	0.00
20.00	39.00	1.00
25.00	41.00	2.00
30.00	43.00	2.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	70.00	70.00	0.00
6.00	160.00	90.00	0.00
9.00	380.00	220.00	0.00
12.00	620.00	240.00	0.00
15.00	777.00	157.00	0.00
18.00	929.00	152.00	0.00
21.00	1020.00	91.00	0.00
24.00	1075.00	55.00	0.00
27.00	1121.00	46.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	48.00	48.00
5.00	48.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
10.00	48.00	0.00
15.00	48.00	0.00
20.00	57.00	9.00
25.00	55.00	-2.00
30.00	55.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	283.00	283.00	0.00
6.00	743.00	460.00	0.00
9.00	931.00	188.00	0.00
12.00	1021.00	90.00	0.00
15.00	1071.00	50.00	0.00
18.00	1097.00	26.00	0.00
21.00	1117.00	20.00	0.00
24.00	1134.00	17.00	0.00
27.00	1150.00	16.00	0.00
30.00	1157.00	7.00	0.00



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 18518

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

Elevation 2272 GR Formation Miss Eff. Pay Ft.

District Colby Date Sept 10 1993 Customer Order No.
COMPANY NAME Ritchie Exploration, Inc.
ADDRESS 125 N Market Suite 1000 Wichita KS.
LEASE AND WELL NO. McCreight 2-B #1 COUNTY Hodgeman STATE KS Sec. 2 Twp. 21 Rge. 24
Mail Invoice To Co. Name Same Address No. Copies Requested Reg
Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 3 Interval Tested From 4429 ft. to 4439 ft. Total Depth 4439 ft.
Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.
Packer Depth 4429 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 4432 ft. Recorder Number 13760 Cap. 3950
Bottom Recorder Depth (Outside) 4437 ft. Recorder Number 13400 Cap. 3950
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Duke Rig #4 Drill Collar Length 30 I. D. 2.2 in.
Mud Type Chemical Viscosity 49 Weight Pipe Length - I. D. - in.
Weight 9.14 Water Loss 11.2 cc. Drill Pipe Length 4384 I. D. 3.8 in.
Chlorides 8.000 P.P.M. Test Tool Length 15 ft. Tool Size 5 1/2 OD in.
Jars: Make J6 Serial Number - Anchor Length 10 ft. Size 5 1/2 OD in.
Did Well Flow? J6 Reversed Out J6 Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: 1PB - Misrun Packer Failure

Recovered 65 ft. of mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides P.P.M. Sample Jars used Remarks:

Time On Location Stayed A.M. Time Pick Up Tool 2 30 A.M. Time Off Location A.M.
Time Set Packer(s) 430 A.M. Time Started Off Bottom 415 P.M. Maximum Temperature
Initial Hydrostatic Pressure (A) 2180 P.S.I.
Initial Flow Period Minutes (B) P.S.I. to (C) P.S.I.
Initial Closed In Period Minutes (D) P.S.I.
Final Flow Period Minutes (E) P.S.I. to (F) P.S.I.
Final Closed In Period Minutes (G) P.S.I.
Final Hydrostatic Pressure (H) 2157 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 [Signature] Signature of Customer or his authorized representative

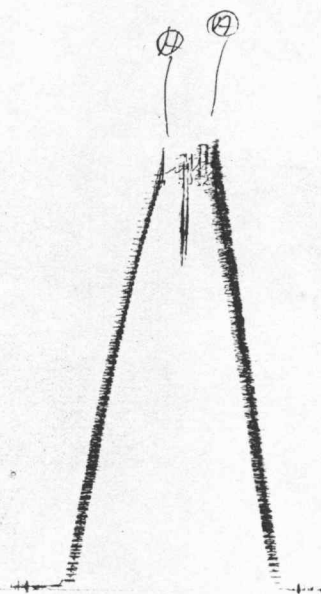
Western Representative [Signature]

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 \$

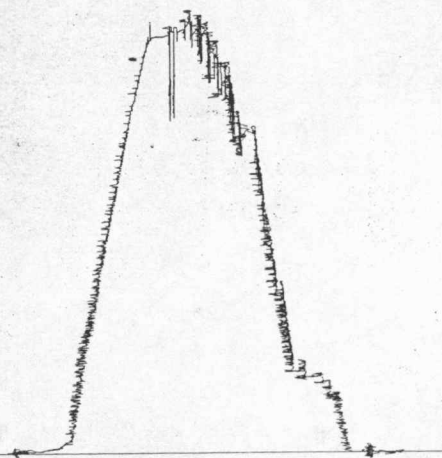
KT 18518

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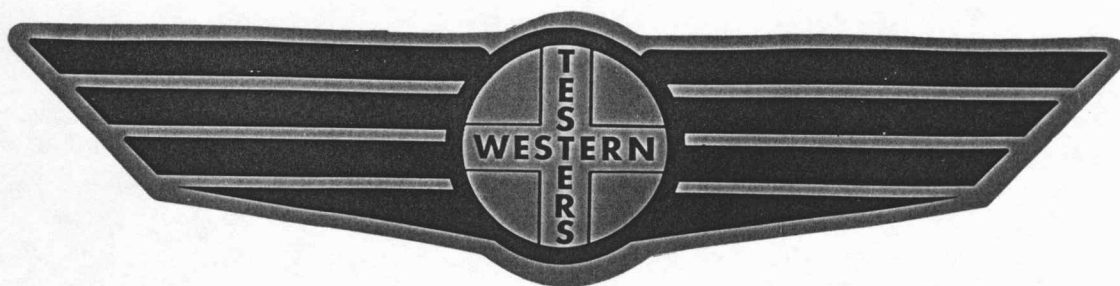


KT 18518

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 80 - 688 - 7021

DST REPORT

GENERAL INFORMATION

DATE	: 9-10-93	TICKET	: 18518
CUSTOMER	: RITCHIE EXPLORATION	LEASE	: MCCREIGHT 2-B
WELL	: #1	TEST: 3	GEOLOGIST: KITT NOAH
ELEVATION	: 2272 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 2	TOWNSHIP	: 21S
RANGE	: 24W	STATE	: KS
GAUGE SN#	: 18760	RANGE	: 3950
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	4429.00 ft	TO:	4439.00 ft	TVD:	4439.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	4432.0 ft		4437.0 ft		
TEMPERATURE:	0.0				
DRILL COLLAR LENGTH:	30.0 ft	I.D.:	2.200 in		
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in		
DRILL PIPE LENGTH :	4384.0 ft	I.D.:	3.800 in		
TEST TOOL LENGTH :	15.0 ft	TOOL SIZE :	5.500 in		
ANCHOR LENGTH :	10.0 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:	4429.0 ft	SIZE:	6.750 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		

MUD INFORMATION

DRILLING CON. :	DUKE #4	VISCOSITY :	49.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	11.200 cc
WEIGHT :	9.100 ppg		
CHLORIDES :	8000 ppm	SERIAL NUMBER:	
JARS-MAKE :	NO	REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

MISRUN PACKER FAILURE

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
65.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME: No Events Created AVERAGE OIL RATE: 0.0000 STB/D AVERAGE WATER RATE: 0.0000 STB/D
GAS VOLUME:	0.0000	SCF	
MUD VOLUME:	0.6320	STB	
WATER VOLUME:	0.0000	STB	
TOTAL FLUID :	0.6320	STB	

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 0.00

Description	Duration	p1	p End
INITIAL FLOW	0.00	0.00	0.00
INITIAL SHUT-IN	0.00		0.00
FINAL FLOW	0.00	0.00	0.00
FINAL SHUT-IN	0.00		0.00

FINAL HYDROSTATIC PRESSURE: 0.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2180.00

Description	Duration	p1	p End
INITIAL FLOW	0.00	0.00	0.00
INITIAL SHUT-IN	0.00		3.00

FINAL HYDROSTATIC PRESSURE: 2157.00



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No 18520

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201Elevation 2272 GR Formation Miss Eff. Pay Ft.District Calby Date Sept 10 1993 Customer Order No. COMPANY NAME Ritchie Exploration, IncADDRESS 125 N Market Suite 1500 Wichita KS.LEASE AND WELL NO. McCreight 2B #1 COUNTY Adgemen STATE KS. Sec. 2 Twp. 21 Rge. 24Mail Invoice To Same No. Copies Requested RegCo. Name Same Address Mail Charts To Same No. Copies Requested RegAddress Formation Test No. 4 Interval Tested From 4360 ft. to 4439 ft. Total Depth 4439 ft.Packer Depth 4355 ft. Size 6 3/4 in. Packer Depth ft. Size in.Packer Depth 4360 ft. Size 6 3/4 in. Packer Depth ft. Size in.Depth of Selective Zone Set Top Recorder Depth (Inside) 4363 ft. Recorder Number 13460 Cap. 3950Bottom Recorder Depth (Outside) 4366 ft. Recorder Number 13400 Cap. 3950Below Straddle Recorder Depth ft. Recorder Number Cap. Drilling Contractor Duke Rig #4 Drill Collar Length 30 I. D. 2.2 in.Mud Type Chemical Viscosity 48 Weight Pipe Length I. D. in.Weight 9.3 Water Loss 136 cc. Drill Pipe Length 4310 I. D. 3.8 in.Chlorides 10 000 P.P.M. Test Tool Length 20 ft. Tool Size 5/200 in.Jars: Make no Serial Number Anchor Length 79 ft. Size 5/200 in.Did Well Flow? no Reversed Out no Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.Main Hole Size 7/8 in. Tool Joint Size 4/200 in.Blow: IFP Weak blow 1/4" in waterFFP Weak blow 1/4" in waterRecovered 60 ft. of gas in pipeRecovered 10 ft. of oilRecovered 60 ft. of OCM 30 % oil 70 % mudRecovered 60 ft. of OCM 10 % oil 90 % mudRecovered ft. of Chlorides P.P.M. Sample Jars used Remarks: Time On Location A.M. Time Pick Up Tool 700 A.M.Time Set Packer(s) 800 A.M. Time Started Off Bottom 1100 A.M.Initial Hydrostatic Pressure P.S.I. Maximum Temperature 104Initial Flow Period 45 Minutes (B) 48 P.S.I. to (C) 58 P.S.I.Initial Closed In Period 45 Minutes (D) 1043 P.S.I.Final Flow Period 45 Minutes (E) 68 P.S.I. to (F) 87 P.S.I.Final Closed In Period 45 Minutes (G) 916 P.S.I.Final Hydrostatic Pressure 2115 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 Whittmore
Signature of Customer or his authorized representativeWestern Representative Mike SkuluitThanks!

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 9-10-50 Test Ticket No. 18520
 Recorder No. 13760 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>2164</u> 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 <u>2114</u> P.S.I.			

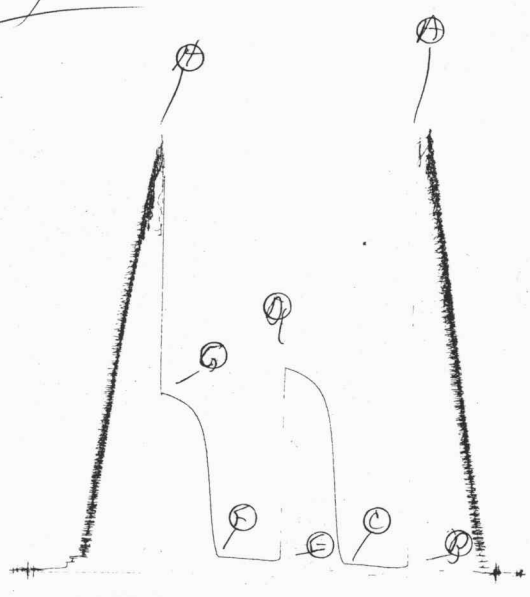
PRESSURE BREAKDOWN

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>28</u>	0	<u>45</u>	0	<u>69</u>	0	<u>76</u>
P 2 5	<u>2</u>	3	<u>54</u>	5	<u>5</u>	3	<u>110</u>
P 3 10	<u>2</u>	6	<u>139</u>	10	<u>60</u>	6	<u>257</u>
P 4 15	<u>28</u>	9	<u>347</u>	15	<u>65</u>	9	<u>429</u>
P 5 20	<u>30</u>	12	<u>615</u>	20	<u>66</u>	12	<u>648</u>
P 6 25	<u>32</u>	15	<u>777</u>	25	<u>68</u>	15	<u>746</u>
P 7 30	<u>37</u>	18	<u>862</u>	30	<u>70</u>	18	<u>777</u>
P 8 35	<u>39</u>	21	<u>908</u>	35	<u>72</u>	21	<u>812</u>
P 9 40	<u>42</u>	24	<u>934</u>	40	<u>74</u>	24	<u>834</u>
P10 45	<u>45</u>	27	<u>958</u>	45	<u>74</u>	27	<u>849</u>
P11 50		30	<u>972</u>	50		30	<u>864</u>
P12 55		33	<u>988</u>	55		33	<u>875</u>
P13 60		36	<u>1002</u>	60		36	<u>884</u>
P14 65		39	<u>1012</u>	65		39	<u>894</u>
P15 70		42	<u>1021</u>	70		42	<u>901</u>
P16 75		45	<u>1030</u>	75		45	<u>905</u>
P17 80		48	<u>1034</u>	80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

13740

7K+18520

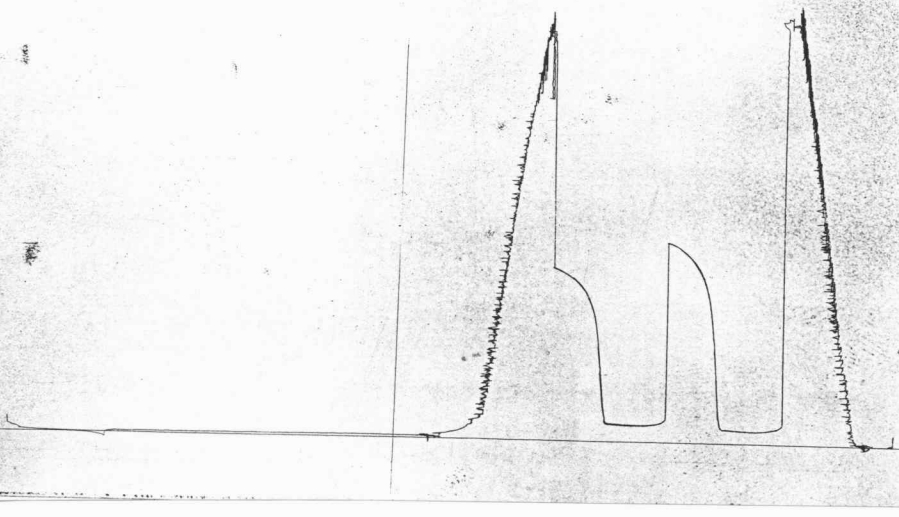
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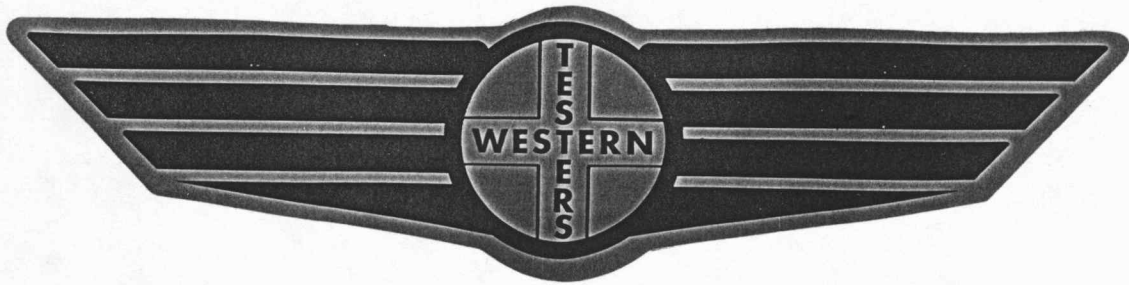
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7K+18520

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 80 - 688 - 7021

DST REPORT

GENERAL INFORMATION

DATE	: 9-10-93	TICKET	: 18520
CUSTOMER	: RITCHIE EXPLORATION	LEASE	: MCCREIGHT 2-B
WELL	: #1	TEST: 4	GEOLOGIST: KITT NOAH
ELEVATION	: 2272 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 2	TOWNSHIP	: 21S
RANGE	: 24W	STATE	: KS
GAUGE SN#	: 13760	RANGE	: 3950
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	4360.00 ft	TO:	4439.00 ft	TVD:	4439.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	4363.0 ft		4366.0 ft		
TEMPERATURE:	0.0				
DRILL COLLAR LENGTH:	30.0 ft	I.D.:		2.200 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	4310.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	79.0 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:	4355.0 ft	SIZE:		6.750 in	
PACKER DEPTH:	4360.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	DUKE #4	VISCOSITY :	48.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	13.600 cc
WEIGHT :	9.300 ppg	SERIAL NUMBER:	
CHLORIDES :	10000 ppm	REVERSED OUT?:	NO
JARS-MAKE :	NO		
DID WELL FLOW?:	NO		

COMMENTS

Comment

WEAK BLOW 1/4" IN WATER INITIAL FLOW PERIOD. WEAK
BLOW 1/4" IN WATER ON FINAL FLOW PERIOD.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
10.0	100.0	0.0	0.0	0.0	OIL GRAVITY 37 AT 60 DEG
60.0	30.0	0.0	0.0	70.0	OIL CUT MUD
60.0	10.0	0.0	0.0	90.0	OIL CUT MUD
0.0	0.0	0.0	0.0	0.0	60 GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.4489 STB		
GAS VOLUME:	0.0000 SCF	TOTAL FLOW TIME:	90.0000 min.
MUD VOLUME:	1.0948 STB	AVERAGE OIL RATE:	24.6988 STB/D
WATER VOLUME:	0.0000 STB	AVERAGE WATER RATE:	0.0000 STB/D
TOTAL FLUID :	1.5437 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2125.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	48.00	58.00
INITIAL SHUT-IN	45.00		1043.00
FINAL FLOW	45.00	68.00	87.00
FINAL SHUT-IN	45.00		916.00

FINAL HYDROSTATIC PRESSURE: 2115.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2164.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	28.00	45.00
INITIAL SHUT-IN	48.00		1034.00
FINAL FLOW	45.00	60.00	76.00
FINAL SHUT-IN	45.00		905.00

FINAL HYDROSTATIC PRESSURE: 2116.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 9-10-93	TICKET	: 18520
CUSTOMER	: RITCHIE EXPLORATION	LEASE	: MCCREIGHT 2-B
WELL	: #1	GEOLOGIST	: KITT NOAH
ELEVATION	: 2272 G.L.	FORMATION	: MISSISSIPPI
SECTION	: 2	TOWNSHIP	: 21S
RANGE	: 24W	STATE	: KS
GAUGE SN#	: 13760	CLOCK	: 12
	COUNTY: HODGEMAN		
	RANGE : 3950		

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	28.00	28.00
5.00	28.00	0.00
10.00	28.00	0.00
15.00	28.00	0.00
20.00	30.00	2.00
25.00	33.00	3.00
30.00	37.00	4.00
35.00	39.00	2.00
40.00	42.00	3.00
45.00	45.00	3.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	56.00	56.00	0.00
6.00	139.00	83.00	0.00
9.00	347.00	208.00	0.00
12.00	612.00	265.00	0.00
15.00	777.00	165.00	0.00
18.00	862.00	85.00	0.00
21.00	908.00	46.00	0.00
24.00	934.00	26.00	0.00
27.00	958.00	24.00	0.00
30.00	973.00	15.00	0.00
33.00	988.00	15.00	0.00
36.00	1002.00	14.00	0.00
39.00	1013.00	11.00	0.00
42.00	1021.00	8.00	0.00
45.00	1030.00	9.00	0.00
48.00	1034.00	4.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	60.00	60.00
5.00	60.00	0.00
10.00	60.00	0.00
15.00	63.00	3.00
20.00	66.00	3.00
25.00	68.00	2.00
30.00	70.00	2.00
35.00	72.00	2.00
40.00	74.00	2.00
45.00	76.00	2.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	110.00	110.00	0.00
6.00	257.00	147.00	0.00
9.00	479.00	222.00	0.00
12.00	648.00	169.00	0.00
15.00	736.00	88.00	0.00
18.00	777.00	41.00	0.00
21.00	813.00	36.00	0.00
24.00	834.00	21.00	0.00
27.00	849.00	15.00	0.00
30.00	864.00	15.00	0.00
33.00	875.00	11.00	0.00
36.00	884.00	9.00	0.00
39.00	894.00	10.00	0.00
42.00	901.00	7.00	0.00
45.00	905.00	4.00	0.00