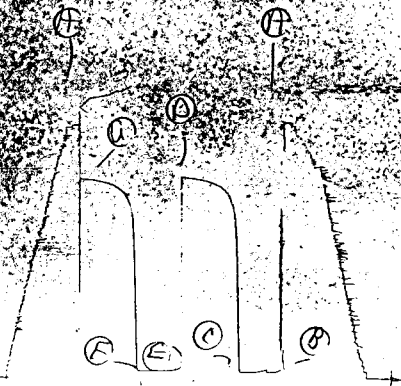


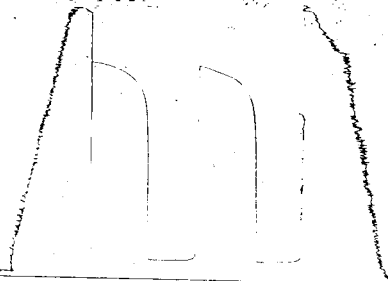
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JKT 20380

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WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N^o 20380P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1881 K.B. Formation TOPEKA Eff. Pay Ft.

District GREAT BEND Date 12-12-93 Customer Order No.

COMPANY NAME HUTCHINSON OIL CO.

ADDRESS 105 S BROADWAY SUITE #470 WICHITA KS 67202

LEASE AND WELL NO. TEICHMANN 1-20 COUNTY STAFFORD STATE KS Sec. 26 Twp. 22S Rge. 12W

Mail Invoice To Co. Name SAMP No. Copies Requested 166

Mail Charts To Address TEICHMANN #1-20 No. Copies Requested 1

Formation Test No. 1 Interval Tested From 3140 ft. to 3150 ft. Total Depth 3150 ft.

Packer Depth 3135 ft. Size 6 5/8 in. Packer Depth 3150 ft. Size 7 in.

Packer Depth 3140 ft. Size 6 5/8 in. Packer Depth 3150 ft. Size 7 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3143 ft. Recorder Number 11012 Cap. 4425 PSI

Bottom Recorder Depth (Outside) 3147 ft. Recorder Number 3659 Cap. 4600 "

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor DUKE DRILLING R161 Drill Collar Length 0 I. D. in.

Mud Type CHEMICAL Viscosity 55 Weight Pipe Length 0 I. D. in.

Weight 9.6 Water Loss 9.6 cc. Drill Pipe Length 3020 I. D. 3.8 in.

Chlorides 3,200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make NOT RAN Serial Number Anchor Length 10 ft. Size 5 1/2 in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 2 3/8 in. Tool Joint Size 4 1/2 in.

Blow: 1ST FLOW: WEAK BLOW - SLOW BUILD TO 15"

2ND FLOW: VERY WEAK BLOW 1/4"

Recovered 30 ft. of MUDDY WATER (3020mud 202 WATER) 48,000 PPM CHLORIDES

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered 30 ft. of TOTAL FLUID

Chlorides 48,000 P.P.M. Sample Jars used Remarks:

Time On Location 5:30 A.M. Time Pick Up Tool 6:00 A.M. Time Off Location 12:00 A.M.

Time Set Packer(s) 7:20 A.M. Time Started Off Bottom 9:50 A.M. Maximum Temperature 103°

Initial Hydrostatic Pressure (A) 1400 P.S.I.

Initial Flow Period Minutes 30 (B) 102 P.S.I. to (C) 104 P.S.I.

Initial Closed In Period Minutes 45 (D) 1109 P.S.I.

Final Flow Period Minutes 30 (E) 110 P.S.I. to (F) 110 P.S.I.

Final Closed In Period Minutes 45 (G) 1114 P.S.I.

Final Hydrostatic Pressure (H) 1390 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 of Customer or his authorized representative

Western Representative John Riehl

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 12-12-93

Test Ticket No. 20380

Recorder No. 11018 Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>1475</u>	P.S.I.		M
B First Initial Flow Pressure <u>1475</u>	P.S.I.	<u>30</u> Mins.	Mins.
C First Final Flow Pressure _____	P.S.I.	<u>45</u> Mins.	Mins.
D Initial Closed-in Pressure _____	P.S.I.	<u>30</u> Mins.	Mins.
E Second Initial Flow Pressure _____	P.S.I.	<u>45</u> Mins.	Mins.
F Second Final Flow Pressure _____	P.S.I.		
G Final Closed-in Pressure _____	P.S.I.		
H Final Hydrostatic Mud <u>1457</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 _____ 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.
B P 1 0	43	C 0	40	E 0	50	F 0	50
P 2 5	43	3	651	5	50	3	642
P 3 10	43	6	957	10		6	951
P 4 15	48	9	1040	15		9	1029
P 5 20	42	12	1073	20		12	1073
P 6 25	41	15	1100	25		15	1091
C P 7 30	40	18	1115	F 30	50	18	1106
P 8 35		21	1124	35		21	1121
P 9 40		24	1134	40		24	1126
P 10 45		27	1142	45		27	1133
P 11 50		30	1148	50		30	1137
P 12 55		33	1152	55		33	1144
P 13 60		36	1156	60		36	1148
P 14 65		39	1160	65		39	1150
P 15 70		42	1161	70		42	1152
P 16 75		45	1164	75		45	1154
P 17 80		48		80		48	
P 18 85		51		85		51	
P 19 90		54		90		54	
P 20 95		57		95		57	
100		60		100		60	

DST REPORT

GENERAL INFORMATION

DATE	: 12-12-93	TICKET	: 20380
CUSTOMER	: HUTCHINSON OIL CO.	LEASE	: TEICHMANN
WELL	: #1-20	TEST: 1	GEOLOGIST: J. BURKE
ELEVATION	: 1881 K.B.	FORMATION	: TOPEKA
SECTION	: 20	TOWNSHIP	: 22S
RANGE	: 12W	COUNTY: STAFFORD	STATE : KS
GAUGE SN#	: 11018	RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3140.00 ft	TO:	3150.00 ft	TVD:	3150.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	3143.0 ft		3147.0 ft		
TEMPERATURE:	103.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3120.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 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:	3135.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3140.0 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 DRILLING #1	VISCOSITY :	55.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	9.600 cc
WEIGHT :	9.600 ppg		
CHLORIDES :	3700 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

WEAK BLOW SLOWLY BUILDING 1.5" ON INITIAL FLOW
PERIOD. VERY WEAK BLOW .25" ON FINAL FLOW PERIOD.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	0.0	70.0	30.0	MUDDY WATER
0.0	0.0	0.0	0.0	0.0	48,000 PPM CHLORIDES

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:	0.1262	STB	AVERAGE WATER RATE:	10.0990	STB/D
WATER VOLUME:	0.2946	STB			
TOTAL FLUID :	0.4208	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1400.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	102.00	104.00
INITIAL SHUT-IN	45.00		1109.00
FINAL FLOW	30.00	110.00	110.00
FINAL SHUT-IN	45.00		1114.00

FINAL HYDROSTATIC PRESSURE: 1390.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1475.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	43.00	40.00
INITIAL SHUT-IN	45.00		1164.00
FINAL FLOW	30.00	50.00	50.00
FINAL SHUT-IN	45.00		1154.00

FINAL HYDROSTATIC PRESSURE: 1457.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12-12-93	TICKET : 20380
CUSTOMER : HUTCHINSON OIL CO.	LEASE : TEICHMANN
WELL : #1-20 TEST: 1	GEOLOGIST: J. BURKE
ELEVATION: 1881 K.B.	FORMATION: TOPEKA
SECTION : 20	TOWNSHIP : 22S
RANGE : 12W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	43.00	43.00
5.00	43.00	0.00
10.00	43.00	0.00
15.00	48.00	5.00
20.00	42.00	-6.00
25.00	41.00	-1.00
30.00	40.00	-1.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	651.00	651.00	0.00
6.00	957.00	306.00	0.00
9.00	1040.00	83.00	0.00
12.00	1073.00	33.00	0.00
15.00	1100.00	27.00	0.00
18.00	1115.00	15.00	0.00
21.00	1124.00	9.00	0.00
24.00	1134.00	10.00	0.00
27.00	1142.00	8.00	0.00
30.00	1148.00	6.00	0.00
33.00	1152.00	4.00	0.00
36.00	1156.00	4.00	0.00
39.00	1160.00	4.00	0.00
42.00	1161.00	1.00	0.00
45.00	1164.00	3.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

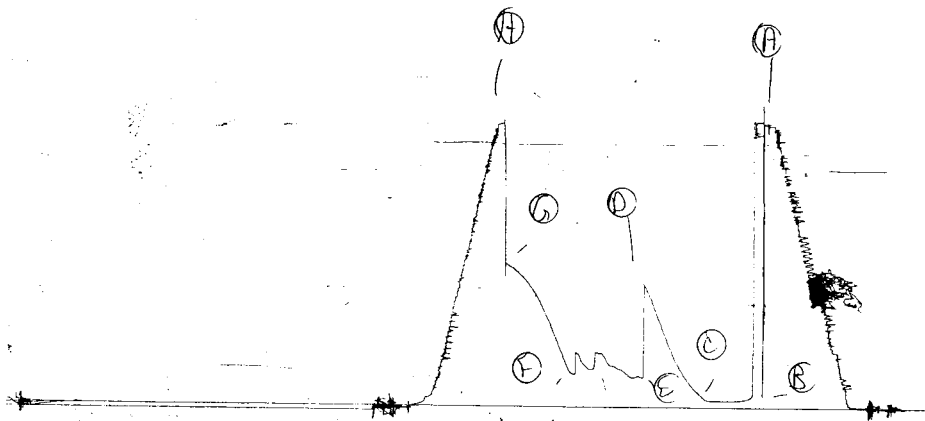
<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	50.00	50.00
5.00	50.00	0.00
10.00	50.00	0.00
15.00	50.00	0.00
20.00	50.00	0.00
25.00	50.00	0.00
30.00	50.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	642.00	642.00	0.00
6.00	951.00	309.00	0.00
9.00	1029.00	78.00	0.00
12.00	1073.00	44.00	0.00
15.00	1091.00	18.00	0.00
18.00	1106.00	15.00	0.00
21.00	1121.00	15.00	0.00
24.00	1126.00	5.00	0.00
27.00	1133.00	7.00	0.00
30.00	1137.00	4.00	0.00
33.00	1144.00	7.00	0.00
36.00	1148.00	4.00	0.00
39.00	1150.00	2.00	0.00
42.00	1152.00	2.00	0.00
45.00	1154.00	2.00	0.00

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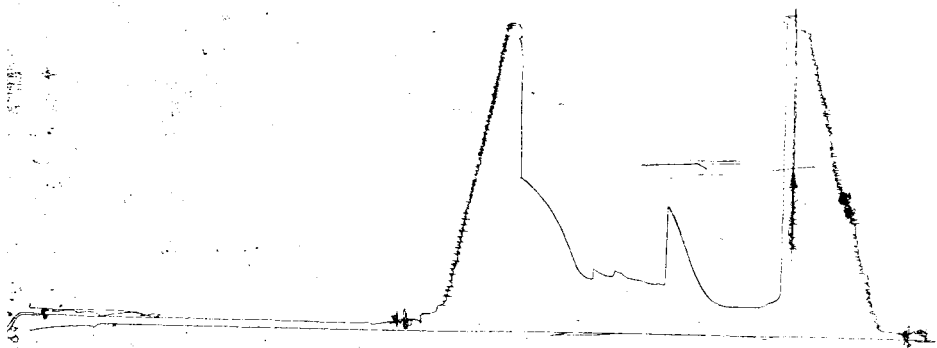
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WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N^o 20381

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

WICHITA, KANSAS 67201

Elevation 1881 K.B. Formation LANSING F.F. Eff. Pay _____ Ft.District GREAT BEND Date 12-13-93 Customer Order No. _____COMPANY NAME HUTCHINSON OIL COADDRESS 105 S-BROADWAY SUITE #470 WICHITA KS 67202LEASE AND WELL NO. TRICHININ #1-26 COUNTY STAFFORD STATE KS Sec. 20 Twp. 22S Rge. 12WMail Invoice To _____ Co. Name SOMO Address _____ No. Copies Requested RF6Mail Charts To _____ Address _____ No. Copies Requested "Formation Test No. 2 Interval Tested From 3402 ft. to 3428 ft. Total Depth 3428 ft.Packer Depth 3402 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.Packer Depth 3402 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3410 ft. Recorder Number 11012 Cap. 4425 PSIBottom Recorder Depth (Outside) 3425 ft. Recorder Number 3659 Cap. 4000 PSIBelow Straddle Recorder Depth 5 ft. Recorder Number _____ Cap. _____Drilling Contractor DUKE DRILLING RIG Drill Collar Length 0 I. D. _____ in.Mud Type CHEMICAL Viscosity 50 Weight Pipe Length 0 I. D. _____ in.Weight 9.0 Water Loss 8.8 cc. Drill Pipe Length 3387 2287 I. D. 3.8 in.Chlorides 6500 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.Jars: Make NOT RAN Serial Number _____ Anchor Length 21 ft. Size 5 1/2 in.Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.Main Hole Size 7 1/2 in. Tool Joint Size 4 1/2 x 1 1/4 in.Blow: 1ST FLOW: STRONG BLOW (B.O.B IN 9 MINUTES)2ND FLOW: STRONG BLOW (B.O.B IN 10 MINUTES)Recovered 700 ft. of GAS IN PIPERecovered 24 ft. of OIL + GAS CUT MUD (1020 GAS 1020 OIL 8020 MUD)Recovered 60 ft. of HUY OIL + GAS CUT MUD (3020 GAS 2020 OIL 5020 MUD)

Recovered _____ ft. of _____

Recovered 80 ft. of TOTAL FLUID RECOVERYChlorides _____ P.P.M. Sample Jars used _____ Remarks: SLID TOOL 8 FT TO BTM CAUSING ABNORMAL FLOWPRESSURE IN OUTSIDE RECORDERTime On Location 4:30 A.M. Time Pick Up Tool 5:00 P.M. Time Off Location 12:00 A.M.Time Set Packer(s) 6:00 A.M. Time Started Off Bottom 9:00 P.M. Maximum Temperature 106Initial Hydrostatic Pressure _____ (A) 1625 P.S.I.Initial Flow Period _____ Minutes 30 (B) 35 P.S.I. to (C) 40 P.S.I.Initial Closed In Period _____ Minutes 45 (D) 688 P.S.I.Final Flow Period _____ Minutes 60 (E) 151 P.S.I. to (F) 167 P.S.I.Final Closed In Period _____ Minutes 45 (G) 811 P.S.I.Final Hydrostatic Pressure _____ (H) 1603 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 of Customer or his authorized representativeWestern Representative John Seel

FIELD INVOICE

Open Hole Test	\$ <u>✓</u>
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 12-13-93

Test Ticket No. 20381

Recorder No. 11018 Capacity _____ Location _____ P. _____

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>11633</u>	P.S.I.		M
B First Initial Flow Pressure _____	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure _____	P.S.I.	<u>45</u> Mins.	<u>51</u> Mins.
D Initial Closed-in Pressure _____	P.S.I.	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure _____	P.S.I.	<u>45</u> Mins.	<u>48</u> Mins.
F Second Final Flow Pressure _____	P.S.I.		
G Final Closed-in Pressure _____	P.S.I.		
H Final Hydrostatic Mud <u>11620</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 _____ 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.
B P 1 0	45	C 0	45	E 0	173	F 0	203
P 2 5		3	49	5	184	3	236
P 3 10		6	54	10	179	6	290
P 4 15		9	76	15	210	9	344
P 5 20		12	99	20	228	12	410
P 6 25		15	121	25	247	15	452
C P 7 30	45	18	150	30	299	18	508
P 8 35		21	178	35	316	21	551
P 9 40		24	216	40	223	24	596
P10 45		27	258	45	256	27	640
P11 50		30	300	50	309	30	675
P12 55		33	347	55	203	33	711
P13 60		36	410	F 60		36	736
P14 65		39	473	65		39	759
P15 70		42	529	70		42	778
P16 75		D 45	580	75		G 45	796
P17 80		48	637	80		48	819
P18 85		51	698	85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

DST REPORT

GENERAL INFORMATION

DATE	: 12-13-93	TICKET	: 20381
CUSTOMER	: HUTCHINSON OIL CO.	LEASE	: TEICHMANN
WELL	: #1-20	TEST:	2
ELEVATION	: 1881 K.B.	GEOLOGIST	: J. BURKE
SECTION	: 20	FORMATION	: LANSING E & F
RANGE	: 12W	TOWNSHIP	: 22S
GAUGE SN#	: 11018	STATE	: KS
		CLOCK	: 12
	COUNTY: STAFFORD		
	RANGE : 4425		

WELL INFORMATION

PERFORATION INTERVAL FROM:	3407.00 ft	TO:	3428.00 ft	TVD:	3428.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	3410.0 ft		3425.0 ft		
TEMPERATURE:	106.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3387.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	21.0 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:	3402.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3407.0 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 DRILLING #1	VISCOSITY :	50.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	8.800 cc
WEIGHT :	9.000 ppg		
CHLORIDES :	6500 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

STRONG BLOW OFF BOTTOM OF BUCKET IN 9 MINUTES ON
INITIAL FLOW PERIOD. STRONG BLOW OFF BOTTOM OF
BUCKET IN 10 MINUTES ON FINAL FLOW PERIOD.

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

SLID TOOL 8' TO BOTTOM.
PLUGGING ACTION ON FINAL FLOW PERIOD.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
20.0	10.0	10.0	0.0	80.0	OIL & GAS CUT MUD
60.0	20.0	30.0	0.0	50.0	HEAVY OIL & GAS CUT MUD
0.0	0.0	0.0	0.0	0.0	700' GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.1964 STB	TOTAL FLOW TIME:	85.0000 min.
GAS VOLUME:	1.5752 SCF	AVERAGE OIL RATE:	14.2574 STB/D
MUD VOLUME:	0.6452 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.8416 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1625.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	35.00	40.00
INITIAL SHUT-IN	45.00		688.00
FINAL FLOW	60.00	151.00	167.00
FINAL SHUT-IN	45.00		811.00
FINAL HYDROSTATIC PRESSURE:	1603.00		

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1633.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	45.00	45.00
INITIAL SHUT-IN	51.00		698.00
FINAL FLOW	55.00	173.00	203.00
FINAL SHUT-IN	48.00		819.00

FINAL HYDROSTATIC PRESSURE: 1620.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12-13-93	TICKET : 20381
CUSTOMER : HUTCHINSON OIL CO.	LEASE : TEICHMANN
WELL : #1-20 TEST: 2	GEOLOGIST: J. BURKE
ELEVATION: 1881 K.B.	FORMATION: LANSING E & F
SECTION : 20	TOWNSHIP : 22S
RANGE : 12W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	45.00	45.00
5.00	45.00	0.00
10.00	45.00	0.00
15.00	45.00	0.00
20.00	45.00	0.00
25.00	45.00	0.00
30.00	45.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	49.00	49.00	11.00
6.00	54.00	5.00	6.00
9.00	76.00	22.00	4.33
12.00	99.00	23.00	3.50
15.00	121.00	22.00	3.00
18.00	150.00	29.00	2.67
21.00	178.00	28.00	2.43
24.00	216.00	38.00	2.25
27.00	258.00	42.00	2.11
30.00	300.00	42.00	2.00
33.00	347.00	47.00	1.91
36.00	410.00	63.00	1.83
39.00	473.00	63.00	1.77
42.00	529.00	56.00	1.71
45.00	580.00	51.00	1.67
48.00	637.00	57.00	1.63
51.00	698.00	61.00	1.59

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	173.00	173.00
5.00	184.00	11.00
10.00	179.00	-5.00
15.00	210.00	31.00
20.00	228.00	18.00
25.00	247.00	19.00
30.00	299.00	52.00
35.00	316.00	17.00
40.00	223.00	-93.00
45.00	256.00	33.00
50.00	309.00	53.00
55.00	203.00	-106.00

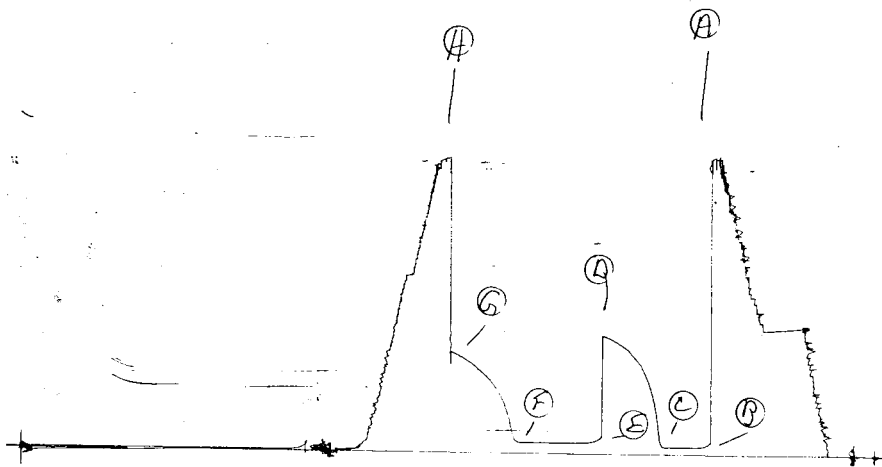
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	236.00	236.00	19.33
6.00	290.00	54.00	10.17
9.00	344.00	54.00	7.11
12.00	410.00	66.00	5.58
15.00	452.00	42.00	4.67
18.00	508.00	56.00	4.06
21.00	551.00	43.00	3.62
24.00	596.00	45.00	3.29
27.00	640.00	44.00	3.04
30.00	675.00	35.00	2.83
33.00	711.00	36.00	2.67
36.00	736.00	25.00	2.53
39.00	759.00	23.00	2.41
42.00	778.00	19.00	2.31
45.00	796.00	18.00	2.22
48.00	819.00	23.00	2.15

2011 10 10 10:10 / INSIDE

KT-2038

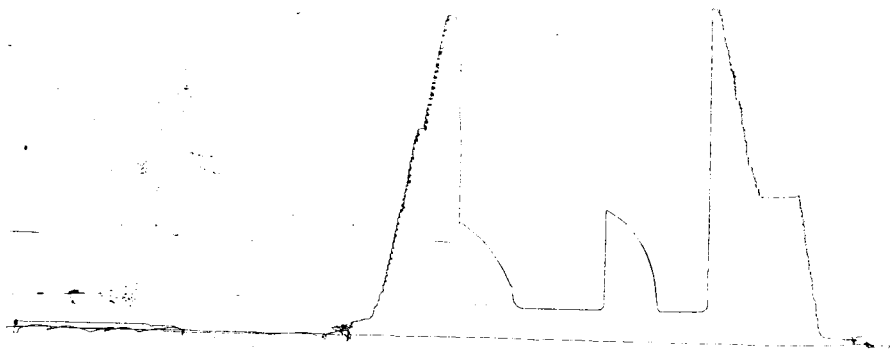
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KT 20382

D





WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 20382

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

Elevation 1881 K. H. Formation LAUSING A, T, U Eff. Pay Ft.

District GREAT BANK Date 12-14-93 Customer Order No.

COMPANY NAME MUTCHINGS OIL CO.

ADDRESS 115 S. BIRCHWOOD SUITE #470 WICHITA KS 67212

LEASE AND WELL NO. TEICHMAN #1-20 COUNTY STEFFORD STATE KS Sec. 26 Twp. 22S Rge. 12W

Mail Invoice To SHARP Co. Name Address No. Copies Requested 100

Mail Charts To Address No. Copies Requested

Formation Test No. 3 Interval Tested From 3476 ft. to 3532 ft. Total Depth 3532 ft.

Packer Depth 3471 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Packer Depth 3476 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3479 ft. Recorder Number 11010 Cap. 4425 PSI

Bottom Recorder Depth (Outside) 3529 ft. Recorder Number 3659 Cap. 4000 "

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor DUKE DRILLING RIG 1 Drill Collar Length 6 I. D. in.

Mud Type CHEMICAL Viscosity 46 Weight Pipe Length 0 I. D. in.

Weight 9.2 Water Loss 8 cc. Drill Pipe Length 3456 I. D. 3.8 in.

Chlorides 9,200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make NOT RUN Serial Number Anchor Length 56 ft. Size 5 1/2 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 XH in.

Blow: 1ST FLOW: GOOD BLOW (INITIAL 1" BUILDING TO 7" AT END OF PERIOD)

2ND FLOW: GOOD BLOW (SLOW BUILD TO 10")

Recovered 80 ft. of GAS IN PIPE

Recovered 100 ft. of GAS CUT OIL SPACKED MUD (102.6 GAS 92.6 MUD)

Recovered ft. of

Recovered ft. of

Recovered 100 ft. of TOTAL FLUID RECOVERED

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

Time On Location 9:00 A.M. Time Pick Up Tool 10:30 P.M. Time Off Location 6:00 P.M.

Time Set Packer(s) 12:20 A.M. Time Started Off Bottom 3:20 P.M. Maximum Temperature 106°

Initial Hydrostatic Pressure (A) 1691 P.S.I.

Initial Flow Period 30 Minutes (B) 33 P.S.I. to (C) 38 P.S.I.

Initial Closed In Period 45 Minutes (D) 683 P.S.I.

Final Flow Period 60 Minutes (E) 56 P.S.I. to (F) 58 P.S.I.

Final Closed In Period 45 Minutes (G) 566 P.S.I.

Final Hydrostatic Pressure (H) 1670 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 of Customer or his authorized representative

Western Representative John P. Smith

FIELD INVOICE

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

WESTERN TESTING CO., INC.

Pressure Data

DATE 12-14-93

Test Ticket No. 20382

Recorder No. 11018 Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1700</u> P.S.I.		M
B First Initial Flow Pressure	_____ P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	_____ P.S.I.	<u>45</u> Mins.	<u>51</u> Mins.
D Initial Closed-in Pressure	_____ P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	_____ P.S.I.	<u>45</u> Mins.	<u>51</u> Mins.
F Second Final Flow Pressure	_____ P.S.I.		
G Final Closed-in Pressure	_____ P.S.I.		
H Final Hydrostatic Mud	<u>1681</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 _____ 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.
B P 1 0	<u>44</u>	C 0	<u>44</u>	E 0	<u>63</u>	F 0	<u>63</u>
P 2 5	<u>1</u>	3	<u>44</u>	5	<u>1</u>	3	<u>70</u>
P 3 10	<u>1</u>	6	<u>44</u>	10	<u>1</u>	6	<u>120</u>
P 4 15	<u>44</u>	9	<u>148</u>	15	<u>1</u>	9	<u>207</u>
P 5 20	<u>1</u>	12	<u>296</u>	20	<u>1</u>	12	<u>276</u>
P 6 25	<u>1</u>	15	<u>378</u>	25	<u>1</u>	15	<u>329</u>
C P 7 30	<u>44</u>	18	<u>437</u>	30	<u>63</u>	18	<u>364</u>
P 8 35	<u>1</u>	21	<u>488</u>	35	<u>1</u>	21	<u>401</u>
P 9 40	<u>1</u>	24	<u>530</u>	40	<u>1</u>	24	<u>429</u>
P10 45	<u>1</u>	27	<u>561</u>	45	<u>63</u>	27	<u>449</u>
P11 50	<u>1</u>	30	<u>585</u>	50	<u>1</u>	30	<u>475</u>
P12 55	<u>1</u>	33	<u>608</u>	55	<u>1</u>	33	<u>488</u>
P13 60	<u>1</u>	36	<u>625</u>	F 60	<u>63</u>	36	<u>514</u>
P14 65	<u>1</u>	39	<u>641</u>	65	<u>1</u>	39	<u>528</u>
P15 70	<u>1</u>	42	<u>653</u>	70	<u>1</u>	42	<u>544</u>
P16 75	<u>1</u>	D 45	<u>664</u>	75	<u>1</u>	G 45	<u>555</u>
P17 80	<u>1</u>	48	<u>675</u>	80	<u>1</u>	48	<u>567</u>
P18 85	<u>1</u>	51	<u>680</u>	85	<u>1</u>	51	<u>581</u>
P19 90	<u>1</u>	54	<u>1</u>	90	<u>1</u>	54	<u>1</u>
P20 95	<u>1</u>	57	<u>1</u>	95	<u>1</u>	57	<u>1</u>
		60	<u>1</u>	100	<u>1</u>	60	<u>1</u>

DST REPORT

GENERAL INFORMATION

DATE	: 12-16-93	TICKET	: 20382
CUSTOMER	: HUTCHINSON OIL CO.	LEASE	: TEICHMANN
WELL	: #1-20	TEST:	3
ELEVATION:	1881 K.B.	GEOLOGIST:	J. BURKE
SECTION	: 20	FORMATION:	LANDING H, I, & J
RANGE	: 12W	TOWNSHIP	: 22S
GAUGE SN#:	11018	STATE	: KS
COUNTY:	STAFFORD	CLOCK	: 12
RANGE	: 4425		

WELL INFORMATION

PERFORATION INTERVAL FROM:	3476.00 ft	TO:	3532.00 ft	TVD:	3532.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3479.0 ft		3529.0 ft		
TEMPERATURE:	106.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3456.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	56.0 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:	3479.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3529.0 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 DRILLING #1	VISCOSITY :	46.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	8.000 cc
WEIGHT :	9.200 ppg		
CHLORIDES :	9200 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

GOOD 1" TO 7" BLOW AT END OF INITIAL FLOW PERIOD.
GOOD BLOW SLOWLY BUILDING TO 10" ON FINAL FLOW
PERIOD.

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
100.0	0.0	10.0	0.0	90.0	GAS CUT OIL SPECKED MUD
0.0	0.0	0.0	0.0	0.0	80' GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.7876	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	1.2624	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	1.2624	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1691.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	33.00	38.00
INITIAL SHUT-IN	45.00		683.00
FINAL FLOW	60.00	56.00	58.00
FINAL SHUT-IN	45.00		811.00

FINAL HYDROSTATIC PRESSURE: 1670.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1700.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	44.00	44.00
INITIAL SHUT-IN	51.00		680.00
FINAL FLOW	60.00	63.00	63.00
FINAL SHUT-IN	51.00		581.00

FINAL HYDROSTATIC PRESSURE: 1681.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12-16-93	TICKET : 20382
CUSTOMER : HUTCHINSON OIL CO.	LEASE : TEICHMANN
WELL : #1-20 TEST: 3	GEOLOGIST: J. BURKE
ELEVATION: 1881 K.B.	FORMATION: LANDING H, I, & J
SECTION : 20	TOWNSHIP : 22S
RANGE : 12W	STATE : KS
GAUGE SN#: 11018	CLOCK : 12
COUNTY: STAFFORD	
RANGE : 4425	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	44.00	44.00
5.00	44.00	0.00
10.00	44.00	0.00
15.00	44.00	0.00
20.00	44.00	0.00
25.00	44.00	0.00
30.00	44.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	44.00	44.00	0.00
6.00	44.00	0.00	0.00
9.00	148.00	104.00	0.00
12.00	296.00	148.00	0.00
15.00	378.00	82.00	0.00
18.00	437.00	59.00	0.00
21.00	488.00	51.00	0.00
24.00	530.00	42.00	0.00
27.00	561.00	31.00	0.00
30.00	585.00	24.00	0.00
33.00	608.00	23.00	0.00
36.00	625.00	17.00	0.00
39.00	641.00	16.00	0.00
42.00	653.00	12.00	0.00
45.00	664.00	11.00	0.00
48.00	675.00	11.00	0.00
51.00	680.00	5.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	63.00	63.00
5.00	63.00	0.00
10.00	63.00	0.00
15.00	63.00	0.00
20.00	63.00	0.00
25.00	63.00	0.00
30.00	63.00	0.00
35.00	63.00	0.00
40.00	63.00	0.00
45.00	63.00	0.00
50.00	63.00	0.00
55.00	63.00	0.00
60.00	63.00	0.00

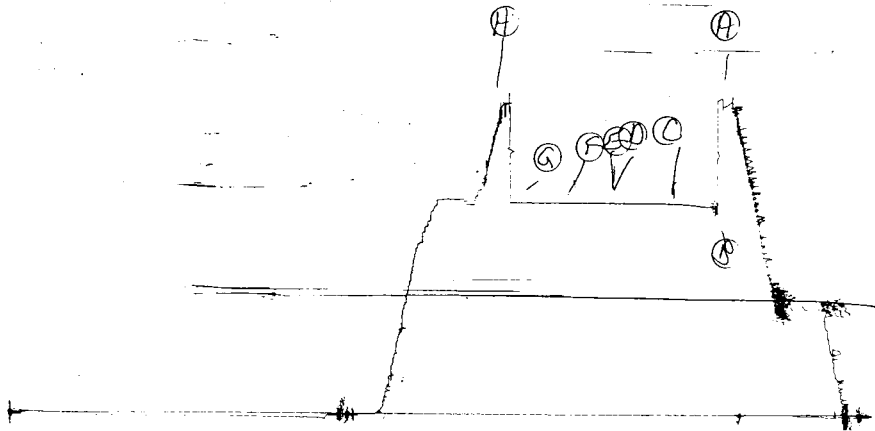
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	70.00	70.00	0.00
6.00	120.00	50.00	0.00
9.00	207.00	87.00	0.00
12.00	276.00	69.00	0.00
15.00	329.00	53.00	0.00
18.00	364.00	35.00	0.00
21.00	401.00	37.00	0.00
24.00	429.00	28.00	0.00
27.00	449.00	20.00	0.00
30.00	475.00	26.00	0.00
33.00	488.00	13.00	0.00
36.00	514.00	26.00	0.00
39.00	528.00	14.00	0.00
42.00	544.00	16.00	0.00
45.00	555.00	11.00	0.00
48.00	567.00	12.00	0.00
51.00	581.00	14.00	0.00

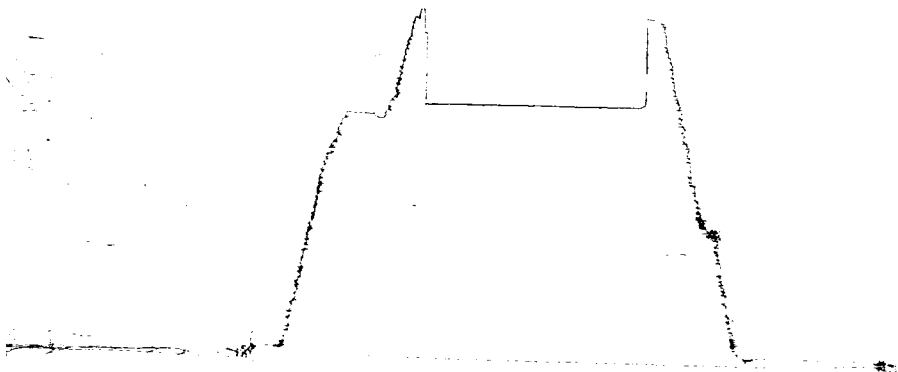
10010 10010 10010

KT LOSS

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JKT 20.582





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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 20383

Elevation 1881 K.B Formation VIALA, CONG Eff. Pay _____ Ft.

District GREAT BEND Date 12-15-93 Customer Order No. _____

COMPANY NAME HUTCHINSON OIL CO
ADDRESS 105 S BROADWAY SUITE #470 WICHITA KS 67202
LEASE AND WELL NO. TEKHMANN #120 COUNTY STAFFORD STATE KS Sec. 20 Twp. 22S Rge. 12W
Mail Invoice To _____ Co. Name _____ Address _____ No. Copies Requested RAC
Mail Charts To _____ Address _____ No. Copies Requested _____

Formation Test No. 4 Interval Tested From 3608 ft. to 3660 ft. Total Depth 3660 ft.
Packer Depth 3603 ft. Size 6 3/8 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 3608 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.
Depth of Selective Zone Set _____
Top Recorder Depth (Inside) 3611 ft. Recorder Number 11018 Cap. 4425 PSI
Bottom Recorder Depth (Outside) 3657 ft. Recorder Number 3659 Cap. 4000 PSI
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____
Drilling Contractor DUKE DRILLING F161 Drill Collar Length 0 I. D. _____ in.
Mud Type CHEMICAL Viscosity 46 Weight Pipe Length 0 I. D. _____ in.
Weight 9.2 Water Loss 8 cc. Drill Pipe Length 35 PP I. D. 3.8 in.
Chlorides 9200 P.P.M. Test Tool Length 20 ft. Tool Size 52 in.
Jars: Make NET RAN Serial Number _____ Anchor Length 52 ft. Size 52 in.
Did Well Flow? NO Reversed Out YES Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 2 7/8 in. Tool Joint Size 4 1/2 IN in.

Blow: 1ST FLOW: STRONG BLOW B.O.B IN 30 SECONDS (BLOW WAS DECREASING BY END OF FLOW)
2ND FLOW: NO BLOW FLUSHED TOOL RECEIVED SURF AND THEN READ
Recovered 2500 ft. of GASSY WATER (107.618 9020 WATER) RESISTIVITY 25 @ 50°
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered 2500 ft. of TOTAL FLUID RECOVERY
Chlorides 24,000 P.P.M. Sample Jars used _____ Remarks: _____

Time On Location 8:00 AM Time Pick Up Tool 8:30 AM Time Off Location 3:00 AM
Time Set Packer(s) 9:40 AM Time Started Off Bottom 12:10 PM Maximum Temperature 119°
Initial Hydrostatic Pressure _____ (A) 1768 P.S.I.
Initial Flow Period _____ Minutes 30 (B) 1130 P.S.I. to (C) 1185 P.S.I.
Initial Closed In Period _____ Minutes 45 (D) 1202 P.S.I.
Final Flow Period _____ Minutes 30 (E) 1202 P.S.I. to (F) 1202 P.S.I.
Final Closed In Period _____ Minutes 45 (G) 1203 P.S.I.
Final Hydrostatic Pressure _____ (H) 1740 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 of Customer or his authorized representative

Western Representative _____

FIELD INVOICE

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

WESTERN TESTING CO., INC.

Pressure Data

DATE 12-15-93 Test Ticket No. 20383

Recorder No. 11018 Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>1813</u> P.S.I.	Open Tool	<u>M</u>	
B First Initial Flow Pressure _____ P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure _____ P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure _____ P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure _____ P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>48</u> Mins.
F Second Final Flow Pressure _____ P.S.I.			
G Final Closed-in Pressure _____ P.S.I.			
H Final Hydrostatic Mud <u>1786</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 _____ 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 0	1148	0	1214	0	1216	0	1216
P 2 5	1194	3	1215	5		3	
P 3 10	1197	6	1215	10		6	
P 4 15	1203	9	1216	15	1216	9	
P 5 20	1207	12	1216	20		12	
P 6 25	1211	15	1216	25		15	1216
P 7 30	1214	18		30	1216	18	
P 8 35		21		35		21	
P 9 40		24		40		24	
P 10 45		27		45		27	
P 11 50		30	1216	50		30	
P 12 55		33		55		33	
P 13 60		36		60		36	
P 14 65		39		65		39	
P 15 70		42		70		42	
P 16 75		45	1216	75		45	
P 17 80		48		80		48	1216
P 18 85		51		85		51	
P 19 90		54		90		54	
P 20 95		57		95		57	
		60		100		60	

DST REPORT

GENERAL INFORMATION

DATE	: 12-16-93	TICKET	: 20383
CUSTOMER	: HUTCHINSON OIL CO.	LEASE	: TEICHMANN
WELL	: #1-20	TEST:	4
ELEVATION	: 1881 K.B.	GEOLOGIST	: J. BURKE
SECTION	: 20	FORMATION	: VIOLA CONGLOMERATE
RANGE	: 12W	TOWNSHIP	: 22S
GAUGE SN#	: 11018	STATE	: KS
	COUNTY: STAFFORD	CLOCK	: 12
	RANGE : 4425		

WELL INFORMATION

PERFORATION INTERVAL FROM:	3608.00 ft	TO:	3660.00 ft	TVD:	3660.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3611.0 ft		3657.0 ft		
TEMPERATURE:	114.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3588.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	52.0 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:	3603.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3608.0 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 DRILLING #1	VISCOSITY :	46.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	8.000 cc
WEIGHT :	9.200 ppg		
CHLORIDES :	9200 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

STRONG BLOW OFF BOTTOM OF BUCKET IN 30 SECONDS -
BLOW DECREASED BY END OF INITIAL FLOW PERIOD.
NO BLOW FLUSHED TOOL AND RECEIVED SURGE AND THEN

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

DIED ON FINAL FLOW PERIOD.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
2500.0	0.0	10.0	0.0	90.0	GASSY WATER
0.0	0.0	0.0	0.0	0.0	RESISTIVITY.25 @ 50 DEG F
0.0	0.0	0.0	0.0	0.0	CHLORIDES 24000 PPM

RATE INFORMATION

OIL VOLUME: 0.0000 STB
 GAS VOLUME: 19.6895 SCF
 MUD VOLUME: 31.5593 STB
 WATER VOLUME: 0.0000 STB
 TOTAL FLUID : 31.5593 STB

TOTAL FLOW TIME: 60.0000 min.
 AVERAGE OIL RATE: 0.0000 STB/D
 AVERAGE WATER RATE: 0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1691.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	1130.00	1185.00
INITIAL SHUT-IN	45.00		1202.00
FINAL FLOW	30.00	1202.00	1202.00
FINAL SHUT-IN	45.00		1202.00

FINAL HYDROSTATIC PRESSURE: 1670.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1813.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	1148.00	1214.00
INITIAL SHUT-IN	45.00		1216.00
FINAL FLOW	30.00	1216.00	1216.00
FINAL SHUT-IN	48.00		1216.00

FINAL HYDROSTATIC PRESSURE: 1786.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12-16-93	TICKET : 20383
CUSTOMER : HUTCHINSON OIL CO.	LEASE : TEICHMANN
WELL : #1-20 TEST: 4	GEOLOGIST: J. BURKE
ELEVATION: 1881 K.B.	FORMATION: VIOLA CONGLOMERATE
SECTION : 20	TOWNSHIP : 22S
RANGE : 12W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	1148.00	1148.00
5.00	1194.00	46.00
10.00	1197.00	3.00
15.00	1203.00	6.00
20.00	1207.00	4.00
25.00	1211.00	4.00
30.00	1214.00	3.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1214.00	1214.00	0.00
6.00	1215.00	1.00	0.00
9.00	1215.00	0.00	0.00
12.00	1216.00	1.00	0.00
15.00	1216.00	0.00	0.00
18.00	1216.00	0.00	0.00
21.00	1216.00	0.00	0.00
24.00	1216.00	0.00	0.00
27.00	1216.00	0.00	0.00
30.00	1216.00	0.00	0.00
33.00	1216.00	0.00	0.00
36.00	1216.00	0.00	0.00
39.00	1216.00	0.00	0.00
42.00	1216.00	0.00	0.00
45.00	1216.00	0.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

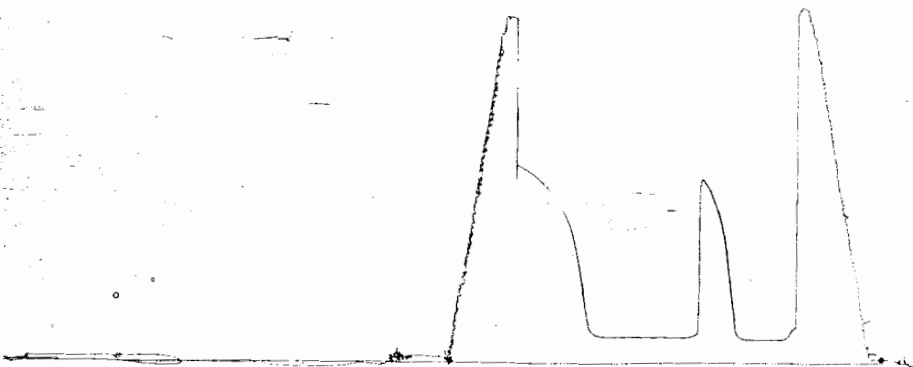
Time (min)	Pressure	Delta P
0.00	1216.00	1216.00
5.00	1216.00	0.00
10.00	1216.00	0.00
15.00	1216.00	0.00
20.00	1216.00	0.00
25.00	1216.00	0.00
30.00	1216.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1216.00	1216.00	0.00
6.00	1216.00	0.00	0.00
9.00	1216.00	0.00	0.00
12.00	1216.00	0.00	0.00
15.00	1216.00	0.00	0.00
18.00	1216.00	0.00	0.00
21.00	1216.00	0.00	0.00
24.00	1216.00	0.00	0.00
27.00	1216.00	0.00	0.00
30.00	1216.00	0.00	0.00
33.00	1216.00	0.00	0.00
36.00	1216.00	0.00	0.00
39.00	1216.00	0.00	0.00
42.00	1216.00	0.00	0.00
45.00	1216.00	0.00	0.00
48.00	1216.00	0.00	0.00

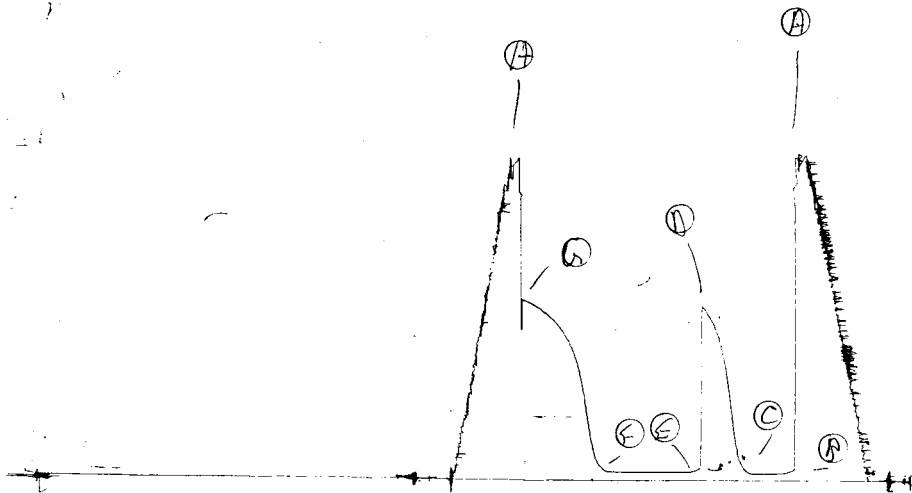
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P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET **Nº 20384**

FINAL VST

Elevation 1281 K.B Formation SIMPSON SPARKBUCKLE Eff. Pay Ft.

District GREAT BEND Date 12-16-93 Customer Order No.

COMPANY NAME HUTCHINSON OIL CO

ADDRESS 105 S. BROADWAY SUITE #470 WICHITA KS 67202

LEASE AND WELL NO. TEICHMANN #120 COUNTY STAFFORD STATE KS Sec. 20 Twp 22S Rge. 12W

Mail Invoice To SAMK No. Copies Requested 586
Co. Name Address

Mail Charts To No. Copies Requested
Address

Formation Test No. 5 Interval Tested From 3686 ft. to 3756 ft. Total Depth 3756 ft.

Packer Depth 3681 ft. Size 6 3/8 in. Packer Depth ft. Size in.

Packer Depth 3686 ft. Size 6 3/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3689 ft. Recorder Number 11012 Cap. 4425 PSI

Bottom Recorder Depth (Outside) 3753 ft. Recorder Number 3659 Cap. 4000 PSI

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor DUKE DRILLING RIG 1 Drill Collar Length 0 I. D. in.

Mud Type CHEMICAL Viscosity 74 Weight Pipe Length 0 I. D. in.

Weight 9.2 Water Loss 2.2 cc. Drill Pipe Length 3666 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 20 ft. Tool Size 52 in.

Jars: Make NOT RUN Serial Number Anchor Length 20 ft. Size 52 in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: 1ST FLOW: FAIR BLOW - (SLOW BUILDING 2" FLOW)

2ND FLOW: FAIR BLOW 5" " " 3" " "

Recovered 90 ft. of GRS IN PIPE

Recovered 30 ft. of OIL SPECKLED MUD

Recovered ft. of CLEAN CR IN TOOL

Recovered ft. of

Recovered 30 ft. of TOTAL FLUID RECOVERY

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

Time On Location 12:00 A.M. Time Pick Up Tool 1:00 A.M. Time Off Location 8:00 A.M.

Time Set Packer(s) 2:30 A.M. Time Started Off Bottom 5:00 A.M. Maximum Temperature 108°

Initial Hydrostatic Pressure (A) 1801 P.S.I.

Initial Flow Period Minutes 30 (B) 33 P.S.I. to (C) 35 P.S.I.

Initial Closed In Period Minutes 45 (D) 925 P.S.I.

Final Flow Period Minutes 60 (E) 45 P.S.I. to (F) 53 P.S.I.

Final Closed In Period Minutes 75 (G) 1030 P.S.I.

Final Hydrostatic Pressure (H) 1770 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 of Customer or his authorized representative

Western Representative

FIELD INVOICE

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

WESTERN TESTING CO., INC.

Pressure Data

DATE 12-16-93 Test Ticket No. 20384

Recorder No. 11018 Capacity _____ Location _____ Pt. _____

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1874</u> P.S.I.		M
B First Initial Flow Pressure	_____ P.S.I.	<u>30</u> Mins	_____ Mins
C First Final Flow Pressure	_____ P.S.I.	<u>45</u> Mins	_____ Mins
D Initial Closed-in Pressure	_____ P.S.I.	<u>60</u> Mins	_____ Mins
E Second Initial Flow Pressure	_____ P.S.I.		_____ Mins
F Second Final Flow Pressure	_____ P.S.I.		_____ Mins
G Final Closed-in Pressure	_____ P.S.I.		
H Final Hydrostatic Mud	<u>1815</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 _____ 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 0	39	0		0	47	0	47
P 2 5		3	41	5		3	54
P 3 10		6	51	10		6	75
P 4 15		9	78	15		9	112
P 5 20		12	133	20		12	178
P 6 25		15	253	25		15	299
P 7 30	39	18	419	30		18	408
P 8 35		21	575	35		21	531
P 9 40		24	613	40		24	622
P 10 45		27	782	45		27	699
P 11 50		30	853	50		30	754
P 12 55		33	904	55		33	795
P 13 60		36	939	60		36	825
P 14 65		39	971	65	47	39	865
P 15 70		42	991	70		42	894
P 16 75		45		75		45	914
P 17 80		48		80		48	935
P 18 85		51		85		51	952
P 19 90		54		90		54	968
P 20 95		57		95		57	982
100		60		100		60	994

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticker No. 22384

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	
P 2 110		66		110		66	
P 3 115		69		115		69	
P 4 120		72		120		72	
P 5 125		75		125		75	
P 6 130		78		130		78	
P 7 135		81		135		81	
P 8 140		84		140		84	
P 9 145		87		145		87	
P10 150		90		150		90	
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	

DST REPORT

GENERAL INFORMATION

DATE	: 12-16-93	TICKET	: 20384
CUSTOMER	: HUTCHINSON OIL CO.	LEASE	: TEICHMANN
WELL	: #1-20	TEST: 5	GEOLOGIST: J. BURKE
ELEVATION	: 1881 K.B.	FORMATION	: SIMPSON SD ARBUCKLE
SECTION	: 20	TOWNSHIP	: 22S
RANGE	: 12W	COUNTY: STAFFORD	STATE : KS
GAUGE SN#	: 11018	RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3686.00 ft	TO:	3756.00 ft	TVD:	3756.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3689.0 ft		3753.0 ft		
TEMPERATURE:	108.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3666.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	70.0 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:	3681.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3686.0 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 DRILLING #1	VISCOSITY :	74.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	7.200 cc
WEIGHT :	9.200 ppg	SERIAL NUMBER:	
CHLORIDES :	10000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

FAIR BLOW SLOWLY BUILDING TO 3" BLOW ON INITIAL
FLOW PERIOD. FAIR BLOW SLOWLY BUILDING TO 3" BLOW
ON FINAL FLOW PERIOD.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	1.0	0.0	0.0	99.0	OIL SPECKED MUD-CLEAN OIL
0.0	0.0	0.0	0.0	0.0	IN TOOL.
0.0	0.0	0.0	0.0	0.0	90 FT. OF GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.0042	STB		
GAS VOLUME:	0.0000	SCF	TOTAL FLOW TIME:	95.0000 min.
MUD VOLUME:	0.4166	STB	AVERAGE OIL RATE:	6.3783 STB/D
WATER VOLUME:	0.0000	STB	AVERAGE WATER RATE:	0.0000 STB/D
TOTAL FLUID :	0.4208	STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1801.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	33.00	35.00
INITIAL SHUT-IN	45.00		975.00
FINAL FLOW	60.00	45.00	53.00
FINAL SHUT-IN	75.00		1030.00

FINAL HYDROSTATIC PRESSURE: 1778.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1874.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	39.00	39.00
INITIAL SHUT-IN	42.00		991.00
FINAL FLOW	65.00	47.00	47.00
FINAL SHUT-IN	69.00		1024.00

FINAL HYDROSTATIC PRESSURE: 1815.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12-16-93	TICKET : 20384
CUSTOMER : HUTCHINSON OIL CO.	LEASE : TEICHMANN
WELL : #1-20 TEST: 5	GEOLOGIST: J. BURKE
ELEVATION: 1881 K.B.	FORMATION: SIMPSON SD ARBUCKLE
SECTION : 20	TOWNSHIP : 22S
RANGE : 12W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	39.00	39.00
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

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	41.00	41.00	0.00
6.00	51.00	10.00	0.00
9.00	78.00	27.00	0.00
12.00	133.00	55.00	0.00
15.00	253.00	120.00	0.00
18.00	419.00	166.00	0.00
21.00	575.00	156.00	0.00
24.00	673.00	98.00	0.00
27.00	782.00	109.00	0.00
30.00	853.00	71.00	0.00
33.00	904.00	51.00	0.00
36.00	939.00	35.00	0.00
39.00	971.00	32.00	0.00
42.00	991.00	20.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	47.00	47.00
5.00	47.00	0.00
10.00	47.00	0.00
15.00	47.00	0.00
20.00	47.00	0.00
25.00	47.00	0.00
30.00	47.00	0.00
35.00	47.00	0.00
40.00	47.00	0.00
45.00	47.00	0.00
50.00	47.00	0.00
55.00	47.00	0.00
60.00	47.00	0.00
65.00	47.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	56.00	56.00	0.00
6.00	75.00	19.00	0.00
9.00	112.00	37.00	0.00
12.00	178.00	66.00	0.00
15.00	299.00	121.00	0.00
18.00	408.00	109.00	0.00
21.00	531.00	123.00	0.00
24.00	622.00	91.00	0.00
27.00	699.00	77.00	0.00
30.00	754.00	55.00	0.00
33.00	795.00	41.00	0.00
36.00	835.00	40.00	0.00
39.00	865.00	30.00	0.00
42.00	892.00	27.00	0.00
45.00	916.00	24.00	0.00
48.00	935.00	19.00	0.00
51.00	953.00	18.00	0.00
54.00	968.00	15.00	0.00
57.00	982.00	14.00	0.00
60.00	996.00	14.00	0.00
63.00	1009.00	13.00	0.00
66.00	1017.00	8.00	0.00
69.00	1024.00	7.00	0.00