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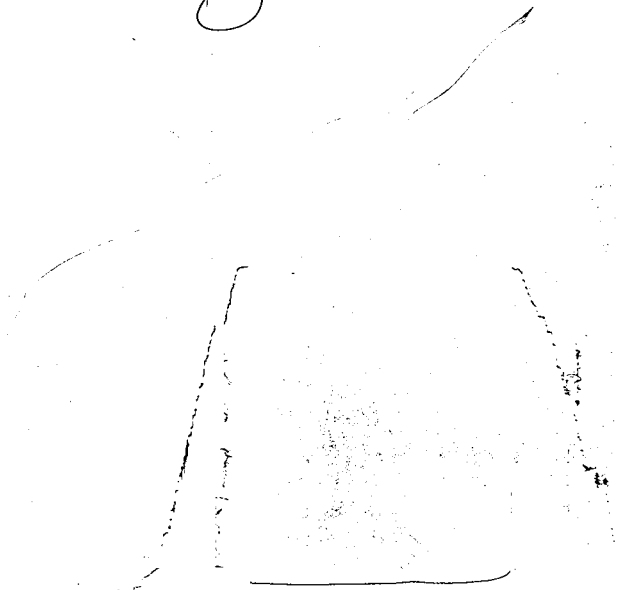
(B)

7K7 19770

13548

19770

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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 19770

Elevation 1834 GA Formation Simpson Sand Eff. Pay Ft.

District Augusta Date 11-30-93 Customer Order No.
COMPANY NAME Hupco Operating Inc
ADDRESS 25th & Vine Hays, KS. 67601
LEASE AND WELL NO. Gatton B-3 COUNTY Stafford STATE KS Sec. 20 Twp. 22 Rge. 11W
Mail Invoice To Co. Name #B-3 Gatton Same No. Copies Requested
Mail Charts To Address Same No. Copies Requested

Formation Test No. 1 Interval Tested From 3559 ft. to 3592 ft. Total Depth 3592 ft.
Packer Depth 3554 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3559 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 3565 ft. Recorder Number 13521 Cap. 4300
Bottom Recorder Depth (Outside) 3592 ft. Recorder Number 13548 Cap. 4075
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Duke Rig #1 Drill Collar Length I. D. in.
Mud Type Chem Viscosity 45 Weight Pipe Length I. D. in.
Weight 9.1 Water Loss 8.0 cc. Drill Pipe Length 3538 I. D. 3.8 in.
Chlorides P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.
Jars: Make Serial Number Anchor Length 33 ft. Size 5 1/2 in.
Did Well Flow? Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: off Btm of Bucket in 3 min. Decreasing to 1" off Btm.
2nd Flow - Steady 2 inches in Bucket
Recovered 15 ft. of Drly mud - NO SHOWS
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 6:00 A.M. Time Pick Up Tool 7:00 A.M. Time Off Location A.M.
Time Set Packer(s) 8:35 P.M. Time Started Off Bottom 11:50 A.M. Maximum Temperature 105°
Initial Hydrostatic Pressure (A) 1794 P.S.I.
Initial Flow Period Minutes 30 (B) 77 P.S.I. to (C) 44 P.S.I.
Initial Closed In Period Minutes 45 (D) 55 P.S.I.
Final Flow Period Minutes 60 (E) 44 P.S.I. to (F) 44 P.S.I.
Final Closed In Period Minutes 60 (G) 44 P.S.I.
Final Hydrostatic Pressure (H) 1805 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] Stuart Storer

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 11-30-93

Test Ticket No. 19770

Recorder No. 13521

Capacity _____

Location _____

Ft _____

Clock No. _____ Elevation _____

Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>1798</u>	P.S.I.		M
B First Initial Flow Pressure <u>89</u>	P.S.I.	<u>30</u> Mins.	_____ Min.
C First Final Flow Pressure <u>54</u>	P.S.I.	<u>45</u> Mins.	_____ Min.
D Initial Closed-in Pressure <u>63</u>	P.S.I.	<u>60</u> Mins.	_____ Min.
E Second Initial Flow Pressure <u>53</u>	P.S.I.	<u>60</u> Mins.	_____ Min.
F Second Final Flow Pressure <u>53</u>	P.S.I.		
G Final Closed-in Pressure <u>53</u>	P.S.I.		
H Final Hydrostatic Mud <u>1798</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.
B P 1 0	<u>89</u>	C 0		E 0	<u>53</u>	F 0	<u>53</u>
P 2 5	<u>89</u>	3		5		3	
P 3 10	<u>71</u>	6		10		6	
P 4 15	<u>64</u>	9		15		9	
P 5 20	<u>58</u>	12		20		12	
P 6 25	<u>55</u>	15	<u>54</u>	25		15	
C P 7 30	<u>54</u>	18	<u>55</u>	30		18	
P 8 35		21	<u>58</u>	35		21	
P 9 40		24	<u>57</u>	40		24	
P 10 45		27	<u>58</u>	45		27	
P 11 50		30	<u>60</u>	50		30	
P 12 55		33	<u>60</u>	55		33	
P 13 60		36	<u>61</u>	F 60	<u>53</u>	36	
P 14 65		39	<u>62</u>	65		39	
P 15 70		42	<u>63</u>	70		42	
P 16 75		45		75		45	
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		G 60	<u>53</u>

DST REPORT

GENERAL INFORMATION

DATE	: 11/30/93	TICKET	: 19770
CUSTOMER	: HUPFER OPERATING, INC.	LEASE	: GATTON
WELL	: B-3	TEST:	1
ELEVATION:	1834 GL	GEOLOGIST:	
SECTION	: 20	FORMATION:	SIMPSON SAND
RANGE	: 11W	TOWNSHIP	: 22S
GAUGE SN#:	13521	STATE	: KS
		CLOCK	: 12
	COUNTY: STAFFORD		
	RANGE : 4300		

WELL INFORMATION

PERFORATION INTERVAL FROM:	3559.00 ft	TO:	3592.00 ft	TVD:	3592.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	3565.0 ft		3592.0 ft		
TEMPERATURE:	105.0				
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 :	3538.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	21.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	33.0 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:	3554.0 ft	SIZE:		6.750 in	
PACKER DEPTH:	3559.0 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 RIG 1	VISCOSITY :	45.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	8.000 cc
WEIGHT :	9.100 ppg		
CHLORIDES :	0 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD OFF BOTTOM OF BUCKET IN 3
MINUTES. DECREASING TO 1 INCH OFF BOTTOM. FINAL
FLOW PERIOD STEADY 2 INCHES IN BUCKET.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
15.0	0.0	0.0	0.0	100.0	DRLG MUD - NO SHOW

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.2104	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.2104	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1794.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	77.00	44.00
INITIAL SHUT-IN	45.00		55.00
FINAL FLOW	60.00	44.00	44.00
FINAL SHUT-IN	60.00		44.00

FINAL HYDROSTATIC PRESSURE: 1805.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1798.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	89.00	54.00
INITIAL SHUT-IN	42.00		63.00
FINAL FLOW	60.00	53.00	53.00
FINAL SHUT-IN	60.00		53.00

FINAL HYDROSTATIC PRESSURE: 1798.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 11/30/93	TICKET : 19770
CUSTOMER : HUPFER OPERATING, INC.	LEASE : GATTON
WELL : B-3 TEST: 1	GEOLOGIST:
ELEVATION: 1834 GL	FORMATION: SIMPSON SAND
SECTION : 20	TOWNSHIP : 22S
RANGE : 11W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 13521 RANGE : 4300	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	89.00	89.00
5.00	89.00	0.00
10.00	71.00	-18.00
15.00	64.00	-7.00
20.00	58.00	-6.00
25.00	55.00	-3.00
30.00	54.00	-1.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	54.00	54.00	0.00
6.00	54.00	0.00	0.00
9.00	54.00	0.00	0.00
12.00	54.00	0.00	0.00
15.00	54.00	0.00	0.00
18.00	55.00	1.00	0.00
21.00	56.00	1.00	0.00
24.00	57.00	1.00	0.00
27.00	58.00	1.00	0.00
30.00	59.00	1.00	0.00
33.00	60.00	1.00	0.00
36.00	61.00	1.00	0.00
39.00	62.00	1.00	0.00
42.00	63.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	53.00	53.00
5.00	53.00	0.00
10.00	53.00	0.00
15.00	53.00	0.00
20.00	53.00	0.00
25.00	53.00	0.00
30.00	53.00	0.00
35.00	53.00	0.00
40.00	53.00	0.00
45.00	53.00	0.00
50.00	53.00	0.00
55.00	53.00	0.00
60.00	53.00	0.00

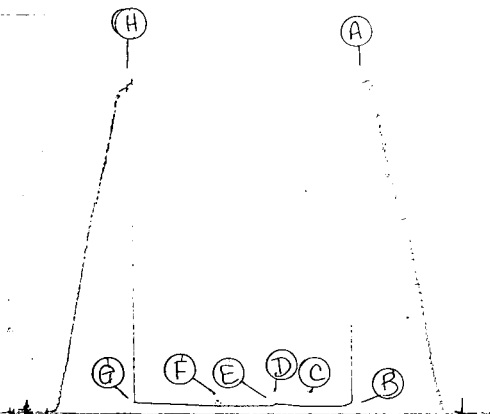
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	53.00	53.00	0.00
6.00	53.00	0.00	0.00
9.00	53.00	0.00	0.00
12.00	53.00	0.00	0.00
15.00	53.00	0.00	0.00
18.00	53.00	0.00	0.00
21.00	53.00	0.00	0.00
24.00	53.00	0.00	0.00
27.00	53.00	0.00	0.00
30.00	53.00	0.00	0.00
33.00	53.00	0.00	0.00
36.00	53.00	0.00	0.00
39.00	53.00	0.00	0.00
42.00	53.00	0.00	0.00
45.00	53.00	0.00	0.00
48.00	53.00	0.00	0.00
51.00	53.00	0.00	0.00
54.00	53.00	0.00	0.00
57.00	53.00	0.00	0.00
60.00	53.00	0.00	0.00

TK# 20137

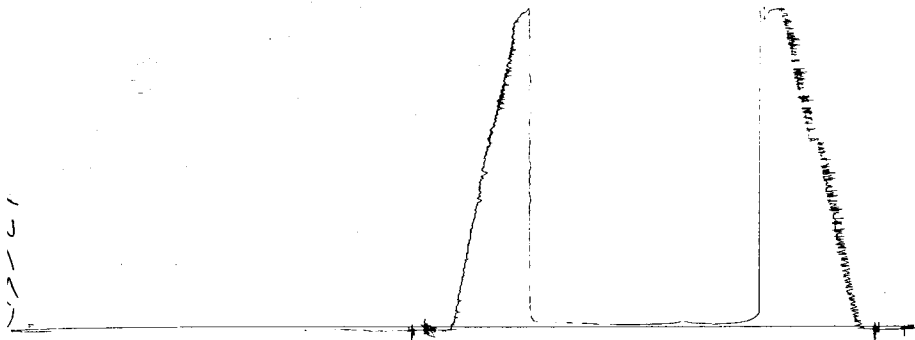
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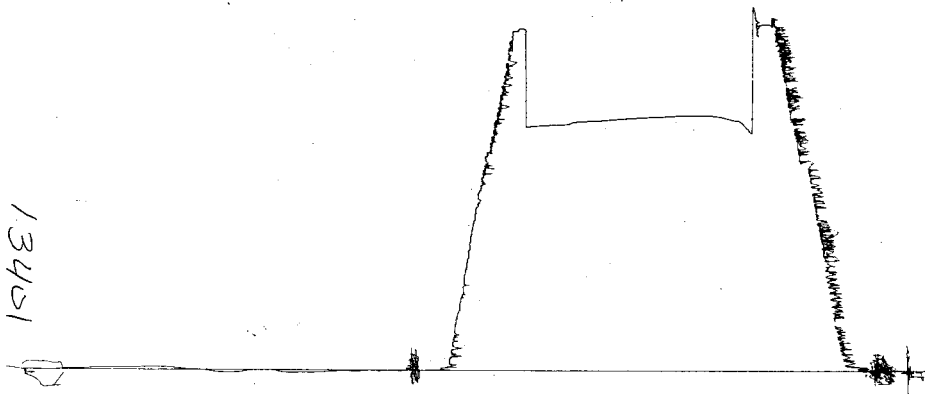
TK # 20137.

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TK # 20137.

Below Straddle





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N^o 20137

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

WICHITA, KANSAS 67201

Elevation 1834 GL Formation Simp. Eff. Pay — Ft.District GREAT Bend Date 11-30-93 Customer Order No. —COMPANY NAME Hupfer Operating, Inc.ADDRESS 25th + Vine ST. Hays, KS 67601LEASE AND WELL NO. GATTON B-3 COUNTY STAFFORD STATE Ks Sec. 20 Twp. 22^s Rge. 11^wMail Invoice To SAME Co. Name Address No. Copies Requested RegMail Charts To SAME Address No. Copies Requested RegFormation Test No. 2 Interval Tested From 3545 ft. to 3611 ft. Total Depth 3631 ft.Packer Depth 3540 ft. Size 6 5/8 in. Packer Depth 3611 ft. Size 6 5/8 in.Packer Depth 3545 ft. Size 6 7/8 in. Packer Depth — ft. Size — in.Depth of Selective Zone Set —Top Recorder Depth (Inside) 3548 ft. Recorder Number 10270 Cap. 4150Bottom Recorder Depth (Outside) 3551 ft. Recorder Number 13550 Cap. 4175Below Straddle Recorder Depth 3628 ft. Recorder Number 13401 Cap. 4000Drilling Contractor Duke Drilling Drill Collar Length — I. D. — in.Mud Type Chemical Viscosity 51 Weight Pipe Length — I. D. — in.Weight 9.3 Water Loss 11 1/2 cc. Drill Pipe Length 3520 I. D. 3.8 in.Chlorides N/A P.P.M. Test Tool Length 25 ft. Tool Size 5 1/2 in.Jars: Make — Serial Number — Anchor Length 66 ft. Size 5 1/2 in.Did Well Flow? — Reversed Out — Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x 11 in.Blow: IF - WEAK Blow Throughout 1/2" TO 2 1/2" BlowFF - WEAK Blow Throughout 3" BlowRecovered 60 ft. of Gas in PipeRecovered 15 ft. of MudRecovered — ft. of —Recovered — ft. of —Recovered — ft. of —Chlorides — P.P.M. Sample Jars used 2 Remarks: —Time On Location 9:00 A.M. Time Pick Up Tool 9:30 A.M. Time Off Location — A.M.Time Set Packer(s) 11:30 P.M. Time Started Off Bottom 2:15 P.M. Maximum Temperature 108°Initial Hydrostatic Pressure (A) 1755 P.S.I.Initial Flow Period Minutes 30 (B) 31 P.S.I. to (C) 31 P.S.I.Initial Closed In Period Minutes 30 (D) 52 P.S.I.Final Flow Period Minutes 45 (E) 31 P.S.I. to (F) 31 P.S.I.Final Closed In Period Minutes 60 (G) 52 P.S.I.Final Hydrostatic Pressure (H) 1755 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 representativeWestern Representative Ray Schwager Thank you

FIELD INVOICE

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

WESTERN TESTING CO., INC.

Pressure Data

Date 11-30-93

Test Ticket No. 20137

Recorder No. 10270

Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1772</u> P.S.I.	_____ M	_____
B First Initial Flow Pressure	<u>46</u> P.S.I.	<u>30</u> Mins	<u>30</u> Mins
C First Final Flow Pressure	<u>46</u> P.S.I.	<u>30</u> Mins	<u>27</u> Mins
D Initial Closed-in Pressure	<u>55</u> P.S.I.	<u>45</u> Mins	_____ Mins
E Second Initial Flow Pressure	<u>44</u> P.S.I.	<u>100</u> Mins	_____ Mins
F Second Final Flow Pressure	<u>44</u> P.S.I.		
G Final Closed-in Pressure	<u>65</u> P.S.I.		
H Final Hydrostatic Mud	<u>1772</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.
B P 1 0		C 0	<u>46</u>	E 0		F 0	<u>44</u>
P 2 5		3	<u>46</u>	5	<u>44</u>	3	<u>46</u>
P 3 10	<u>46</u>	6		10		6	<u>48</u>
P 4 15		9		15	<u>44</u>	9	<u>50</u>
P 5 20	<u>46</u>	12	<u>50</u>	20		12	<u>51</u>
P 6 25		15	<u>51</u>	25	<u>44</u>	15	<u>52</u>
C P 7 30	<u>46</u>	18	<u>52</u>	30	<u>44</u>	18	<u>53</u>
P 8 35		21	<u>53</u>	35	<u>44</u>	21	<u>54</u>
P 9 40		24	<u>54</u>	40		24	<u>55</u>
P10 45		D 27	<u>55</u>	F 45	<u>44</u>	27	<u>56</u>
P11 50		30		50		30	<u>57</u>
P12 55		33		55		33	<u>58</u>
P13 60		36		60		36	<u>59</u>
P14 65		39		65		39	<u>60</u>
P15 70		42		70		42	<u>61</u>
P16 75		45		75		45	<u>62</u>
P17 80		48		80		48	<u>63</u>
P18 85		51		85		51	<u>64</u>
P19 90		54		90		54	<u>65</u>
P20 95		57		95		57	<u>65</u>
100		60		100		G. 60	<u>65</u>

DST REPORT

GENERAL INFORMATION

DATE	: 11/30/93	TICKET	: 20137
CUSTOMER	: HUPFER OPERATING, INC.	LEASE	: GATTON
WELL	: B-3	TEST:	2
ELEVATION:	1834 GL	GEOLOGIST:	HUPFER
SECTION	: 20	FORMATION:	SIMPSON SAND
RANGE	: 11W	TOWNSHIP	: 22S
GAUGE SN#:	10270	STATE	: KS
		CLOCK	: 12
	COUNTY: STAFFORD		
	RANGE : 4150		

WELL INFORMATION

PERFORATION INTERVAL FROM:	3545.00 ft	TO:	3611.00 ft	TVD:	3631.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	3548.0 ft		3551.0 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 :	3520.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	25.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	66.0 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:	3540.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3545.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3611.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	DUKE RIG 1	VISCOSITY :	51.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	11.600 cc
WEIGHT :	9.300 ppg		
CHLORIDES :	0 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW THROUGHOUT - 1/2 TO
2 1/2 INCH BLOW. FINAL FLOW PERIOD WEAK BLOW
THROUGHOUT - 3 INCH BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
15.0	0.0	0.0	0.0	100.0	MUD
0.0	0.0	0.0	0.0	0.0	60 FT GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.0000	SCF	TOTAL FLOW TIME:	75.0000 min.
MUD VOLUME:	0.2104	STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	0.0000	STB	AVERAGE WATER RATE:	0.0000 STB/D
TOTAL FLUID :	0.2104	STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1755.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	31.00	31.00
INITIAL SHUT-IN	30.00		52.00
FINAL FLOW	45.00	31.00	31.00
FINAL SHUT-IN	60.00		52.00

FINAL HYDROSTATIC PRESSURE: 1755.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1772.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	46.00	46.00
INITIAL SHUT-IN	27.00		55.00
FINAL FLOW	45.00	44.00	44.00
FINAL SHUT-IN	60.00		65.00

FINAL HYDROSTATIC PRESSURE: 1772.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 11/30/93	TICKET : 20137
CUSTOMER : HUPFER OPERATING, INC.	LEASE : GATTON
WELL : B-3 TEST: 2	GEOLOGIST: HUPFER
ELEVATION: 1834 GL	FORMATION: SIMPSON SAND
SECTION : 20	TOWNSHIP : 22S
RANGE : 11W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 10270 RANGE : 4150	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	46.00	46.00
5.00	46.00	0.00
10.00	46.00	0.00
15.00	46.00	0.00
20.00	46.00	0.00
25.00	46.00	0.00
30.00	46.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	46.00	46.00	12.67
6.00	46.00	0.00	6.83
9.00	46.00	0.00	4.89
12.00	50.00	4.00	3.92
15.00	51.00	1.00	3.33
18.00	52.00	1.00	2.94
21.00	53.00	1.00	2.67
24.00	54.00	1.00	2.46
27.00	55.00	1.00	2.30

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	44.00	44.00
5.00	44.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

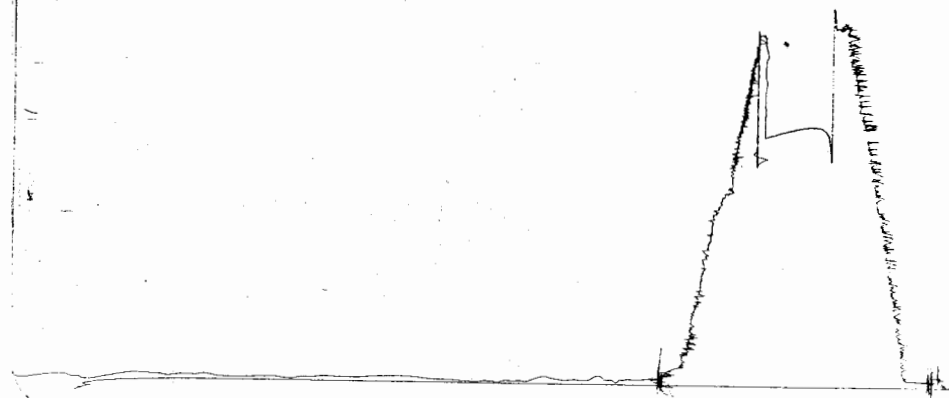
FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
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
35.00	44.00	0.00
40.00	44.00	0.00
45.00	44.00	0.00

FINAL SHUT IN

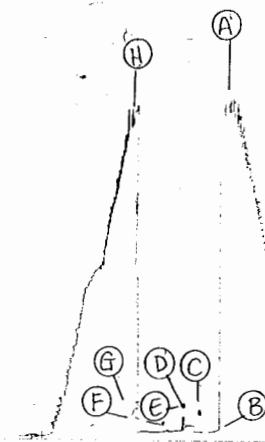
<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	46.00	46.00	21.00
6.00	48.00	2.00	11.00
9.00	50.00	2.00	7.67
12.00	51.00	1.00	6.00
15.00	52.00	1.00	5.00
18.00	53.00	1.00	4.33
21.00	54.00	1.00	3.86
24.00	55.00	1.00	3.50
27.00	56.00	1.00	3.22
30.00	57.00	1.00	3.00
33.00	58.00	1.00	2.82
36.00	59.00	1.00	2.67
39.00	60.00	1.00	2.54
42.00	61.00	1.00	2.43
45.00	62.00	1.00	2.33
48.00	63.00	1.00	2.25
51.00	64.00	1.00	2.18
54.00	65.00	1.00	2.11
57.00	65.00	0.00	2.05
60.00	65.00	0.00	2.00

TK# 20138
Below Straddle



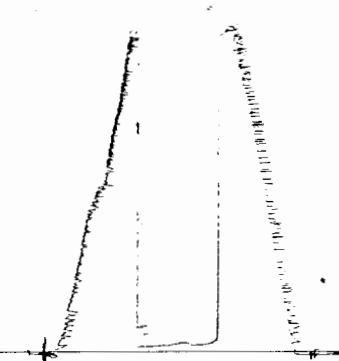
12270

TK# 20138
I.



TK# 20138
O.

13550





WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO **20138** *Last*

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

Elevation 1834 GL Formation Simp. Eff. Pay — Ft.

District GREAT Bend Date 12-1-93 Customer Order No. —

COMPANY NAME Hupfer Operating, Inc
ADDRESS 25th & Vine ST. HAYS, KS 67601

LEASE AND WELL NO. GATTON B-3 COUNTY STAFFORD STATE Ks Sec. 20 Twp. 22 Rge. 11 W

Mail Invoice To SAME Co. Name Address No. Copies Requested Reg

Mail Charts To SAME Address No. Copies Requested Reg

Formation Test No. 3 Interval Tested From 3525 ft. to 3611 ft. Total Depth 3631 ft.

Packer Depth 3520 ft. Size 6 3/8 in. Packer Depth 3611 ft. Size 6 3/8 in.

Packer Depth 3525 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3528 ft. Recorder Number 10270 Cap. 4150

Bottom Recorder Depth (Outside) 3531 ft. Recorder Number 13550 Cap. 4175

Below Straddle Recorder Depth 3628 ft. Recorder Number 13401 Cap. 4000

Drilling Contractor Duke Drilling Drill Collar Length — I. D. — in.

Mud Type Chemical Viscosity 51 Weight Pipe Length — I. D. — in.

Weight 9.2 Water Loss 11.6 cc. Drill Pipe Length 3500 I. D. 3.8 in.

Chlorides N/A P.P.M. Test Tool Length 25 ft. Tool Size 5 1/2 in.

Jars: Make — Serial Number — Anchor Length 86 ft. Size 5 1/2 in.

Did Well Flow? — Reversed Out — Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: IF - WEAK Blow Throughout 2" Blow

FF - WEAK Blow Throughout 2" Blow

Recovered 20 ft. of Mud

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

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

Time On Location 5:13 AM Time Pick Up Tool 4:05 AM Time Off Location 8:45 AM

Time Set Packer(s) 5:13 AM Time Started Off Bottom 6:35 AM Maximum Temperature 108

Initial Hydrostatic Pressure (A) 1755 P.S.I.

Initial Flow Period Minutes 15 (B) 41 P.S.I. to (C) 41 P.S.I.

Initial Closed In Period Minutes 15 (D) 72 P.S.I.

Final Flow Period Minutes 15 (E) 41 P.S.I. to (F) 41 P.S.I.

Final Closed In Period Minutes 15 (G) 41 P.S.I.

Final Hydrostatic Pressure (H) 1755 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Ray Schwager
Signature of Customer or his authorized representative

Western Representative Ray Schwager Thank you

FIELD INVOICE

Open Hole Test	☒
Misrun	☐
Straddle Test	☒
Jars	☐
Selective Zone	☐
Safety Joint	☐
Standby	☐
Evaluation	☐
Extra Packer	☒
Circ. Sub.	☐
Mileage	☐
Fluid Sampler	☐
Extra Charts	☐
Insurance	☐
Telecopier	☐
TOTAL	☒

WESTERN TESTING CO., INC.

Pressure Data

Date 12-1-93

Test Ticket No. 20138

Recorder No. 10270

Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1783</u> P.S.I.	_____ M	_____
B First Initial Flow Pressure	<u>50</u> P.S.I.	<u>15</u> Mins.	<u>15</u> Min.
C First Final Flow Pressure	<u>50</u> P.S.I.	<u>15</u> Mins.	<u>189</u> Min.
D Initial Closed-in Pressure	<u>81</u> P.S.I.	<u>15</u> Mins.	<u>15</u> Min.
E Second Initial Flow Pressure	<u>61</u> P.S.I.	<u>15</u> Mins.	<u>18</u> Min.
F Second Final Flow Pressure	<u>54</u> P.S.I.		
G Final Closed-in Pressure	<u>53</u> P.S.I.		
H Final Hydrostatic Mud	<u>1780</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.
B P 1 0 <u>62</u> <u>1</u>		C 0 <u>49</u> <u>50</u>		E 0 <u>67</u> <u>41</u>		~~F~~ 0 <u>52</u> <u>54</u>	
P 2 5 <u>51</u> <u>50</u>		3 <u>49</u> <u>50</u>		5 <u>58</u> <u>54</u>		3 <u>48</u> <u>53</u>	
P 3 10 <u>50</u> <u>1</u>		6 <u>81</u> <u>50</u>		10 <u>51</u> <u>54</u>		6 <u>5</u> <u>1</u>	
C P 4 15 <u>49</u> <u>50</u>		9 <u>82</u> <u>81</u>		E 15 <u>52</u> <u>54</u>		9 <u>5</u> <u>53</u>	
P 5 20 _____		12 <u>81</u> <u>81</u>		20 _____		12 <u>48</u> <u>53</u>	
P 6 25 _____		D 15 <u>81</u> <u>81</u>		25 _____		15 <u>50</u> <u>53</u>	
P 7 30 _____		18 _____		30 _____		G 18 <u>51</u> <u>53</u>	
P 8 35 _____		21 _____		35 _____		21 _____	
P 9 40 _____		24 _____		40 _____		24 _____	
P 10 45 _____		27 _____		45 _____		27 _____	
P 11 50 _____		30 _____		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 _____		75 _____		45 _____	
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	: 12/1/93	TICKET	: 20138
CUSTOMER	: HUPFER OPERATING, INC.	LEASE	: GATTON
WELL	: B-3	TEST: 3	GEOLOGIST: RANDY K?
ELEVATION	: 1834 GL	FORMATION	: SIMPSON SAND
SECTION	: 20	TOWNSHIP	: 22S
RANGE	: 11W	COUNTY: STAFFORD	STATE : KS
GAUGE SN#	: 10270	RANGE : 4150	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3525.00 ft	TO:	3611.00 ft	TVD:	3631.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	3528.0 ft		3531.0 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 :	3500.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	25.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	86.0 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:	3520.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3525.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3611.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	DUKE RIG 1	VISCOSITY :	51.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	11.600 cc
WEIGHT :	9.200 ppg	SERIAL NUMBER:	
CHLORIDES :	0 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

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

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
20.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	30.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.2805	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.2805	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1755.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	41.00	41.00
INITIAL SHUT-IN	15.00		72.00
FINAL FLOW	15.00	41.00	41.00
FINAL SHUT-IN	15.00		41.00

FINAL HYDROSTATIC PRESSURE: 1755.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1783.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	63.00	49.00
INITIAL SHUT-IN	9.00		83.00
FINAL FLOW	15.00	67.00	52.00
FINAL SHUT-IN	18.00		51.00

FINAL HYDROSTATIC PRESSURE: 1780.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 12/1/93	TICKET	: 20138
CUSTOMER	: HUPFER OPERATING, INC.	LEASE	: GATTON
WELL	: B-3	TEST:	3
ELEVATION:	1834 GL	GEOLOGIST:	RANDY K?
SECTION	: 20	FORMATION:	SIMPSON SAND
RANGE	: 11W	TOWNSHIP	: 22S
GAUGE SN#:	10270	STATE	: KS
		CLOCK	: 12
		COUNTY:	STAFFORD
		RANGE	: 4150

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	63.00	63.00
5.00	51.00	-12.00
10.00	50.00	-1.00
15.00	49.00	-1.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	49.00	49.00	12.67
6.00	81.00	32.00	6.83
9.00	83.00	2.00	4.89

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	67.00	67.00
5.00	58.00	-9.00
10.00	51.00	-7.00
15.00	52.00	1.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	48.00	48.00	21.00
6.00	48.00	0.00	11.00
9.00	48.00	0.00	7.67
12.00	48.00	0.00	6.00
15.00	50.00	2.00	5.00
18.00	51.00	1.00	4.33