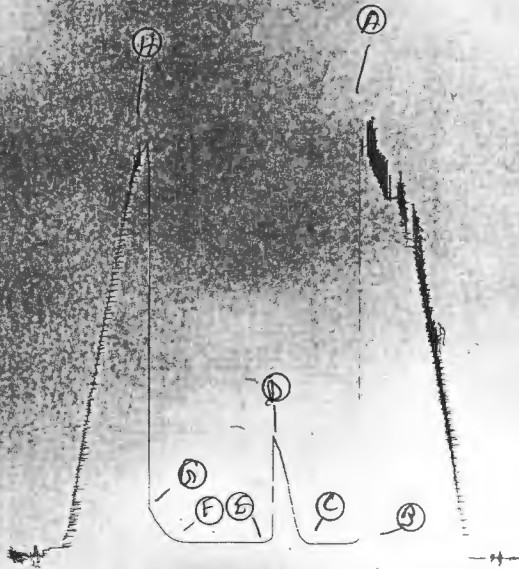
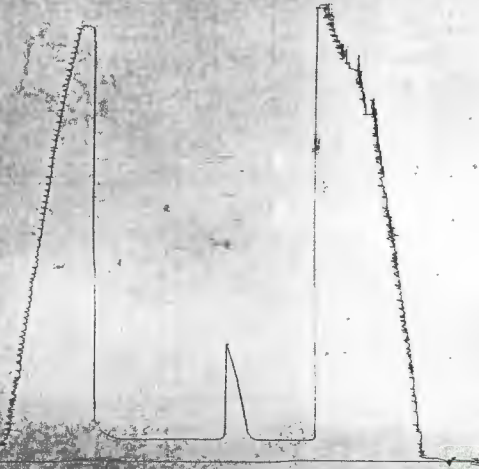


KT 20379



PST RECORD 3659 OUTW

KT 20379





WESTERN TESTING CO., INC. 19-23-22W
FORMATION TESTING
TICKET No. 20379

LAST DST FOR THIS WELL

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

Elevation 2311 G.R. Formation MISSISSIPPI Eff. Pay Ft.

District GREAT BEND Date 12-11-93 Customer Order No.

COMPANY NAME JIM EMERSON

ADDRESS 3108 NATALIE PLANO TEXAS 75074

LEASE AND WELL NO. CRAIGHEAD #2 (2) COUNTY HADGEMAN STATE KS Sec. 19 Twp 23S Rge. 22W

Mail Invoice To SAME No. Copies Requested REC

Co. Name Address No. Copies Requested

Mail Charts To not turn key Address No. Copies Requested

Formation Test No. Interval Tested From 4509 ft. to 4594 ft. Total Depth 4594 ft.

Packer Depth 4504 ft. Size 6 3/4 in. Packer Depth = ft. Size = in.

Packer Depth 4509 ft. Size 6 3/4 in. Packer Depth = ft. Size = in.

Depth, of Selective Zone Set

Top Recorder Depth (Inside) 4512 ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) 4591 ft. Recorder Number 3659 Cap. 4000

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

Drilling Contractor DUSE DRILLING RIG 4 Drill Collar Length 0 I. D. - in.

Mud Type CHEMICAL Viscosity 47 Weight Pipe Length 0 I. D. - in.

Weight 9.6 Water Loss 11 cc. Drill Pipe Length 4402-42/87 I. D. 3.8 in.

Chlorides 4,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.

Jars: Make NAT RAY Serial Number - Anchor Length 85 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 in.

Blow: 1ST FLOW: WEAK BLOW (SLOW BUILD TO 1 1/2)

2ND FLOW: WEAK BLOW (1/2" THROUGHOUT)

Recovered 30 ft. of GAS IN PIPE

Recovered 30 ft. of OIL CUT MUD (20% OIL 80% MUD)

Recovered ft. of

Recovered ft. of

Recovered 30' ft. of FLUID TOTAL RECOVERED

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

Time On Location 4:30 A.M. P.M. Time Pick Up Tool 5:30 A.M. P.M. Time Off Location 12:00 A.M. P.M.

Time Set Packer(s) 7:30 A.M. P.M. Time Started Off Bottom 10:00 A.M. P.M. Maximum Temperature 110°

Initial Hydrostatic Pressure (A) 2285 P.S.I.

Initial Flow Period Minutes 30 (B) 92 P.S.I. to (C) 97 P.S.I.

Initial Closed In Period Minutes 30 (D) 610 P.S.I.

Final Flow Period Minutes 60 (E) 102 P.S.I. to (F) 102 P.S.I.

Final Closed In Period Minutes 30 (G) 204 P.S.I.

Final Hydrostatic Pressure (H) 2250 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	\$

WESTERN TESTING CO., INC.

Pressure Data

DATE 12-11-93

Test Ticket No. 20379

Recorder No. 11018 Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2349</u> P.S.I.		<u>M</u>
B First Initial Flow Pressure	<u>82</u> P.S.I.	<u>30</u> Mins.	
C First Final Flow Pressure	<u>82</u> P.S.I.	<u>30</u> Mins.	<u>36</u> Mins.
D Initial Closed-in Pressure	<u>699</u> P.S.I.	<u>60</u> Mins.	
E Second Initial Flow Pressure	<u>89</u> P.S.I.	<u>30</u> Mins.	<u>33</u> Mins.
F Second Final Flow Pressure	<u>89</u> P.S.I.		
G Final Closed-in Pressure	<u>283</u> P.S.I.		
H Final Hydrostatic Mud	<u>2313</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.
<u>B</u> P 1 0	<u>82</u>	C 0	<u>82</u>	E 0	<u>89</u>	F 0	<u>89</u>
P 2 5		3	<u>82</u>	5		3	<u>89</u>
P 3 10		6	<u>83</u>	10		<u>6</u>	<u>89</u>
P 4 15		9	<u>89</u>	15		9	<u>93</u>
P 5 20		12	<u>113</u>	20		12	<u>101</u>
P 6 25		15	<u>147</u>	25		15	<u>113</u>
<u>C</u> P 7 30	<u>82</u>	18	<u>227</u>	30		18	<u>131</u>
P 8 35		21	<u>331</u>	35		21	<u>154</u>
P 9 40		24	<u>445</u>	40		24	<u>184</u>
P 10 45		27	<u>543</u>	45		27	<u>212</u>
P 11 50		<u>D</u> 30	<u>618</u>	50		<u>G</u> 30	<u>256</u>
P 12 55		33	<u>662</u>	55		33	<u>283</u>
P 13 60		<u>D</u> 36	<u>699</u>	<u>F</u> 60	<u>89</u>	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 : 12/11/93	TICKET : 20379
CUSTOMER : JIM EMERSON	LEASE : CRAIGHEAD
WELL : #2 TEST: 1	GEOLOGIST: MCLEOD
ELEVATION: 2311 GR	FORMATION: MISSISSIPPI
SECTION : 19	TOWNSHIP : 23S
RANGE : 22W COUNTY: HODGEMAN	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4509.00 ft	TO: 4594.00 ft	TVD: 4594.0 ft
DEPTH OF SELECTIVE ZONE:		TEST TYPE: OIL
DEPTH OF RECORDERS: 4512.0 ft	4591.0 ft	
TEMPERATURE: 118.0		
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 : 4487.0 ft	I.D.: 3.800 in	
TEST TOOL LENGTH : 22.0 ft	TOOL SIZE : 5.500 in	
ANCHOR LENGTH : 85.0 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: 4504.0 ft	SIZE: 6.750 in	
PACKER DEPTH: 4509.0 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 DRLG RIG 4	
MUD TYPE : CHEMICAL	VISCOSITY : 47.00 cp
WEIGHT : 9.600 ppg	WATER LOSS: 11.000 cc
CHLORIDES : 4000 ppm	
JARS-MAKE :	SERIAL NUMBER:
DID WELL FLOW?: NO	REVERSED OUT?: NO

COMMENTS

Comment

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

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	30 FT GAS ABOVE FLUID
30.0	20.0	0.0	0.0	80.0	OIL CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0842 STB	TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	6.7327 STB/D
MUD VOLUME:	0.3366 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.4208 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2285.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	92.00	97.00
INITIAL SHUT-IN	30.00		610.00
FINAL FLOW	60.00	102.00	102.00
FINAL SHUT-IN	30.00		204.00

FINAL HYDROSTATIC PRESSURE: 2250.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2349.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	82.00	82.00
INITIAL SHUT-IN	36.00		699.00
FINAL FLOW	60.00	89.00	89.00
FINAL SHUT-IN	33.00		283.00

FINAL HYDROSTATIC PRESSURE: 2313.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 12/11/93	TICKET	: 20379
CUSTOMER	: JIM EMERSON	LEASE	: CRAIGHEAD
WELL	: #2	TEST:	1
ELEVATION	: 2311 GR	GEOLOGIST	: MCLEOD
SECTION	: 19	FORMATION	: MISSISSIPPI
RANGE	: 22W	TOWNSHIP	: 23S
GAUGE SN#	: 11018	COUNTY	: HODGEMAN
		STATE	: KS
		RANGE	: 4425
		CLOCK	: 12

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	82.00	82.00
5.00	82.00	0.00
10.00	82.00	0.00
15.00	82.00	0.00
20.00	82.00	0.00
25.00	82.00	0.00
30.00	82.00	0.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	82.00	82.00	0.00
6.00	83.00	1.00	0.00
9.00	89.00	6.00	0.00
12.00	113.00	24.00	0.00
15.00	147.00	34.00	0.00
18.00	227.00	80.00	0.00
21.00	331.00	104.00	0.00
24.00	445.00	114.00	0.00
27.00	543.00	98.00	0.00
30.00	618.00	75.00	0.00
33.00	662.00	44.00	0.00
36.00	699.00	37.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	89.00	89.00
5.00	89.00	0.00
10.00	89.00	0.00
15.00	89.00	0.00
20.00	89.00	0.00
25.00	89.00	0.00
30.00	89.00	0.00
35.00	89.00	0.00
40.00	89.00	0.00
45.00	89.00	0.00
50.00	89.00	0.00
55.00	89.00	0.00
60.00	89.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	89.00	89.00	0.00
6.00	89.00	0.00	0.00
9.00	93.00	4.00	0.00
12.00	101.00	8.00	0.00
15.00	113.00	12.00	0.00
18.00	131.00	18.00	0.00
21.00	154.00	23.00	0.00
24.00	184.00	30.00	0.00
27.00	212.00	28.00	0.00
30.00	256.00	44.00	0.00
33.00	283.00	27.00	0.00