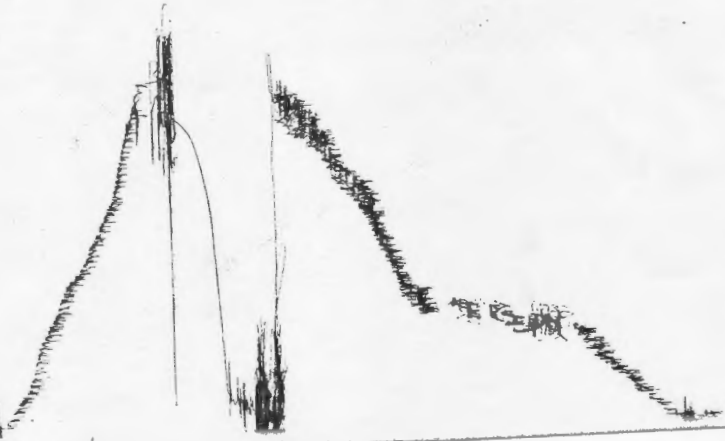


13265 DST #1

JKT 19619

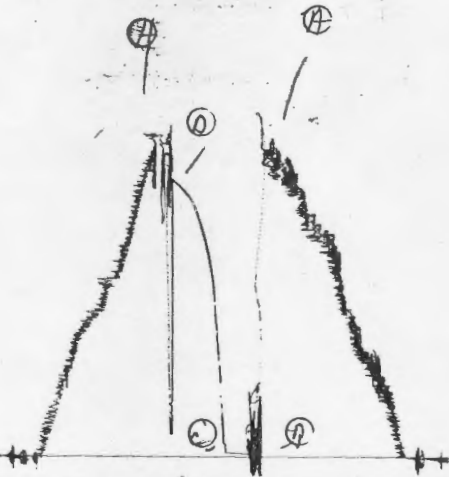
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13268 DST #1

★ JKT 19619

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# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

COMPANY BLACKHAWK EXPLORATION LEASE & WELL NO. #1 Williams SEC. 2 TWP. 32S RGE. 7W TEST NO. 1 DATE 7/9/93

DST REPORT

GENERAL INFORMATION

DATE : 7-09-93  
CUSTOMER : BLACKHAWK EXPLORATION  
WELL : #1 TEST: 1  
ELEVATION: 1437 K.B.  
SECTION : 2  
RANGE : 7W COUNTY: HARPER  
GAUGE SN#: 13268 RANGE : 4225  
TICKET : 19619  
LEASE : WILLIAMS  
GEOLOGIST: TERRY MCLEOD  
FORMATION: STALNECKER  
TOWNSHIP : 32S  
STATE : KS  
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3549.00 ft TO: 3553.00 ft TVD: 3553.0 ft  
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL  
DEPTH OF RECORDERS: 3535.0 ft 3550.0 ft  
TEMPERATURE: 116.0  
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 : 3523.0 ft I.D.: 3.800 in  
TEST TOOL LENGTH : 26.0 ft TOOL SIZE : 5.500 in  
ANCHOR LENGTH : 4.0 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: 3544.0 ft SIZE: 6.630 in  
PACKER DEPTH: 3549.0 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. : VAL ENERGY  
MUD TYPE : CHEMICAL VISCOSITY : 44.00 cp  
WEIGHT : 9.200 ppg WATER LOSS: 12.000 cc  
CHLORIDES : 5500 ppm  
JARS-MAKE : NO SERIAL NUMBER:  
DID WELL FLOW?: NO REVERSED OUT?: NO

COMMENTS

Comment

VERY WEAK .25 TO .50 INCH BLOW ON INITIAL FLOW PERIOD.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
4.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME: 0.0000 STB	TOTAL FLOW TIME: 20.0000 min.
GAS VOLUME: 0.0000 SCF	AVERAGE OIL RATE: 0.0000 STB/D
MUD VOLUME: 0.0561 STB	AVERAGE WATER RATE: 0.0000 STB/D
WATER VOLUME: 0.0000 STB	
TOTAL FLUID : 0.0561 STB	

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1751.00

Description	Duration	p1	p End
INITIAL FLOW	20.00	21.00	21.00
INITIAL SHUT-IN	45.00		1540.00
FINAL FLOW	0.00	0.00	0.00
FINAL SHUT-IN	0.00		0.00

FINAL HYDROSTATIC PRESSURE: 1751.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1703.00

Description	Duration	p1	p End
INITIAL FLOW	20.00	20.00	24.00
INITIAL SHUT-IN	45.00		1532.00
FINAL FLOW	0.00	0.00	0.00

FINAL HYDROSTATIC PRESSURE: 1675.00

**PRESSURE TRANSIENT REPORT**

**GENERAL INFORMATION**

DATE : 7-09-93	TICKET : 19619
CUSTOMER : BLACKHAWK EXPLORATION	LEASE : WILLIAMS
WELL : #1 TEST: 1	GEOLOGIST: TERRY MCLEOD
ELEVATION: 1437 K.B.	FORMATION: STALNECKER
SECTION : 2	TOWNSHIP : 32S
RANGE : 7W COUNTY: HARPER	STATE : KS
GAUGE SN#: 13268 RANGE : 4225	CLOCK : 12

**INITIAL FLOW**

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	20.00	20.00
5.00	20.00	0.00
10.00	24.00	4.00
15.00	24.00	0.00
20.00	24.00	0.00

**INITIAL SHUT IN**

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	228.00	228.00	0.00
6.00	478.00	250.00	0.00
9.00	733.00	255.00	0.00
12.00	978.00	245.00	0.00
15.00	1084.00	106.00	0.00
18.00	1179.00	95.00	0.00
21.00	1256.00	77.00	0.00
24.00	1323.00	67.00	0.00
27.00	1370.00	47.00	0.00
30.00	1413.00	43.00	0.00
33.00	1447.00	34.00	0.00
36.00	1474.00	27.00	0.00
39.00	1495.00	21.00	0.00
42.00	1513.00	18.00	0.00
45.00	1532.00	19.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	0.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
			No Data Entered



WESTERN TESTING CO., INC.
FORMATION TESTING

No 19619

TICKET

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

Elevation 1437 RB Formation Stalneckel Eff. Pay Ft.

District PRATT Date 7-9-93 Customer Order No.

COMPANY NAME Blackhawk Exploration Ind

ADDRESS 1015 East Wichita, Kansas 67214

LEASE AND WELL NO. Williams #1 COUNTY HARPER STATE Kansas Sec. 2 Twp. 32 Rge. 7W

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

Mail Charts To SAME Address No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 3549 ft. to 3553 ft. Total Depth 3553 ft.

Packer Depth 3544 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.

Packer Depth 3549 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) (AP) 3535 ft. Recorder Number 13268 Cap. 4225

Bottom Recorder Depth (Outside) 3550 ft. Recorder Number 15265 Cap. 3975

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

Drilling Contractor VAI Energy Drill Collar Length - 0 - I. D. - in.

Mud Type Chem Viscosity 44 Weight Pipe Length - 0 - I. D. - in.

Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length 3523 I. D. 3.8 in.

Chlorides 5500 P.P.M. Test Tool Length 26 ft. Tool Size 5 1/2 in.

Jars: Make No Serial Number - Anchor Length 4 ft. Size 5 1/4 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: Very weak (1/4 in to 1/2 inch) blows on initial flow

Recovered 4 ft. of Mud. Recovered - ft. of Recovered - ft. of Recovered - ft. of Recovered - ft. of

JUL 12 1993

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

Time On Location 7:45 A.M. Time Pick Up Tool 9:45 A.M. Time Off Location 4:00 P.M.

Time Set Packer(s) 10:45 A.M. Time Started Off Bottom 11:50 A.M. Maximum Temperature 116 of

Initial Hydrostatic Pressure (A) 1751 P.S.I. Initial Flow Period 20 Minutes (B) 21 P.S.I. to (C) 21 P.S.I. Action Plugging

Initial Closed In Period 45 Minutes (D) 1540 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) 1751 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] Thank you

FIELD INVOICE

Table with 2 columns: Item Name and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTING CO., INC.

Pressure Data

Date 7-9

Test Ticker No. 19619

Recorder No. 13268

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	<u>20</u>	P.S.I.	Mins. <u>20</u>	Mins.
C First Final Flow Pressure	<u>24</u>	P.S.I.	Mins. <u>25</u>	Mins.
D Initial Closed-in Pressure	<u>1500</u>	P.S.I.	Mins. <u>—</u>	Mins.
E Second Initial Flow Pressure	<u>—</u>	P.S.I.	Mins. <u>—</u>	Mins.
F Second Final Flow Pressure	<u>—</u>	P.S.I.		
G Final Closed-in Pressure	<u>—</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1675</u>	P.S.I.		

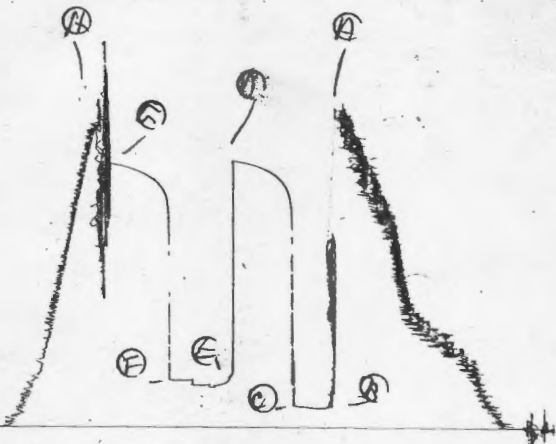
PRESSURE BREAKDOWN

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>20</u>	0	<u>24</u>	0		0	
P 2 5	<u>20</u>	3	<u>208</u>	5		3	
P 3 10	<u>24</u>	6	<u>478</u>	10		6	
P 4 15	<u>24</u>	9	<u>232</u>	15		9	
P 5 20	<u>24</u>	12	<u>978</u>	20		12	
P 6 25		15	<u>1084</u>	25		15	
P 7 30		18	<u>1179</u>	30		18	
P 8 35		21	<u>1256</u>	35		21	
P 9 40		24	<u>1322</u>	40		24	
P10 45		27	<u>1370</u>	45		27	
P11 50		30	<u>1412</u>	50		30	
P12 55		33	<u>1447</u>	55		33	
P13 60		36	<u>1474</u>	60		36	
P14 65		39	<u>1495</u>	65		39	
P15 70		42	<u>1512</u>	70		42	
P16 75		45	<u>1522</u>	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	

13268 DST#2

KT 19620

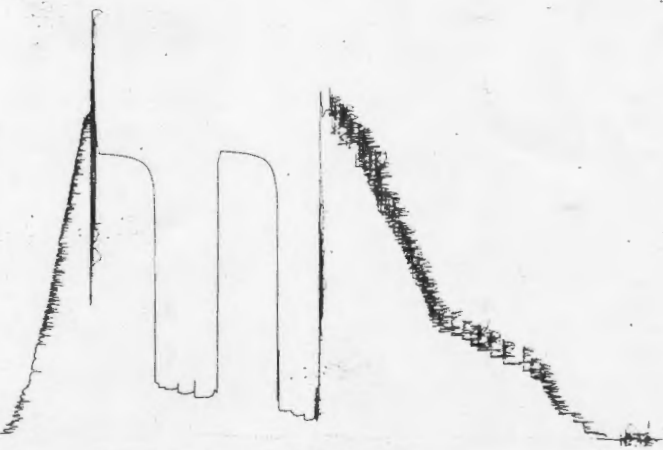
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13265 DST#2

KT 19620

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# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

COMPANY BLACKHAWK EXPLORATION

LEASE & WELL NO. #1 WILLIAMS

SEC. 2 TWP. 32S RGE. 7W TEST NO. 2 DATE 7/9/93

DST REPORT

GENERAL INFORMATION

DATE : 7-09-93  
CUSTOMER : BLACKHAWK EXPLORATION  
WELL : #1 TEST: 2  
ELEVATION: 1437 K.B.  
SECTION : 2  
RANGE : 7W COUNTY: HARPER  
GAUGE SN#: 19620 RANGE : 4225  
TICKET : 19620  
LEASE : WILLIAMS  
GEOLOGIST: TERRY MCLEOD  
FORMATION: STALNECKER  
TOWNSHIP : 32S  
STATE : KS  
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3551.00 ft TO: 3560.00 ft TVD: 3560.0 ft  
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS  
DEPTH OF RECORDERS: 3552.0 ft 3555.0 ft  
TEMPERATURE: 134.0  
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 : 3529.0 ft I.D.: 3.800 in  
TEST TOOL LENGTH : 22.0 ft TOOL SIZE : 5.500 in  
ANCHOR LENGTH : 9.0 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: 3546.0 ft SIZE: 6.630 in  
PACKER DEPTH: 3551.0 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. : VAL ENERGY  
MUD TYPE : CHEMICAL VISCOSITY : 44.00 cp  
WEIGHT : 9.200 ppg WATER LOSS: 12.000 cc  
CHLORIDES : 5500 ppm  
JARS-MAKE : NO SERIAL NUMBER:  
DID WELL FLOW?: NO REVERSED OUT?: NO

COMMENTS

Comment

STRONG BLOW ON INITIAL FLOW PERIOD. STRONG BLOW  
ON FINAL FLOW PERIOD. GAS TO SURFACE IN 10 MINUTE  
SEE ATTACHED SHEET FOR GAS MEASUREMENTS.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
60.0	0.0	10.0	40.0	50.0	MUDDY GAS CUT WATER
360.0	0.0	0.0	100.0	0.0	WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 105000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.4725	SCF	TOTAL FLOW TIME:	75.0000 min.
MUD VOLUME:	0.4208	STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	5.3861	STB	AVERAGE WATER RATE:	111.4927 STB/D
TOTAL FLUID :	5.8069	STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1698.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	106.00	106.00
INITIAL SHUT-IN	45.00		1466.00
FINAL FLOW	45.00	213.00	267.00
FINAL SHUT-IN	45.00		1466.00

FINAL HYDROSTATIC PRESSURE: 1698.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1710.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	109.00	121.00
INITIAL SHUT-IN	51.00		1470.00
FINAL FLOW	45.00	293.00	264.00
FINAL SHUT-IN	48.00		1455.00

FINAL HYDROSTATIC PRESSURE: 1695.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 7-09-93	TICKET : 19620
CUSTOMER : BLACKHAWK EXPLORATION	LEASE : WILLIAMS
WELL : #1 TEST: 2	GEOLOGIST: TERRY MCLEOD
ELEVATION: 1437 K.B.	FORMATION: STALNECKER
SECTION : 2	TOWNSHIP : 32S
RANGE : 7W COUNTY: HARPER	STATE : KS
GAUGE SN#: 19620 RANGE : 4225	CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
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SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN.	MERLA	0.000	GAS TO SURF.	0 SCF/D
20 MIN.	MERLA	0.500	1 PSIG	33900 SCF/D
30 MIN.	MERLA	0.500	1 PSIG	33900 SCF/D
40 MIN.	MERLA	0.500	1 PSIG	33900 SCF/D
45 MIN.	MERLA	0.500	1 PSIG	33900 SCF/D

**PRESSURE TRANSIENT REPORT**

**GENERAL INFORMATION**

DATE : 7-09-93	TICKET : 19620
CUSTOMER : BLACKHAWK EXPLORATION	LEASE : WILLIAMS
WELL : #1 TEST: 2	GEOLOGIST: TERRY MCLEOD
ELEVATION: 1437 K.B.	FORMATION: STALNECKER
SECTION : 2	TOWNSHIP : 32S
RANGE : 7W COUNTY: HARPER	STATE : KS
GAUGE SN#: 19620 RANGE : 4225	CLOCK : 12

**INITIAL FLOW**

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	109.00	109.00
5.00	109.00	0.00
10.00	109.00	0.00
15.00	111.00	2.00
20.00	117.00	6.00
25.00	119.00	2.00
30.00	121.00	2.00

**INITIAL SHUT IN**

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	498.00	498.00	0.00
6.00	1192.00	694.00	0.00
9.00	1306.00	114.00	0.00
12.00	1343.00	37.00	0.00
15.00	1369.00	26.00	0.00
18.00	1390.00	21.00	0.00
21.00	1404.00	14.00	0.00
24.00	1417.00	13.00	0.00
27.00	1426.00	9.00	0.00
30.00	1434.00	8.00	0.00
33.00	1442.00	8.00	0.00
36.00	1448.00	6.00	0.00
39.00	1457.00	9.00	0.00
42.00	1461.00	4.00	0.00
45.00	1464.00	3.00	0.00
48.00	1468.00	4.00	0.00
51.00	1470.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	293.00	293.00
5.00	249.00	-44.00
10.00	236.00	-13.00
15.00	236.00	0.00
20.00	226.00	-10.00
25.00	234.00	8.00
30.00	235.00	1.00
35.00	262.00	27.00
40.00	261.00	-1.00
45.00	264.00	3.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	826.00	826.00	0.00
6.00	1261.00	435.00	0.00
9.00	1309.00	48.00	0.00
12.00	1341.00	32.00	0.00
15.00	1362.00	21.00	0.00
18.00	1377.00	15.00	0.00
21.00	1390.00	13.00	0.00
24.00	1401.00	11.00	0.00
27.00	1410.00	9.00	0.00
30.00	1420.00	10.00	0.00
33.00	1427.00	7.00	0.00
36.00	1434.00	7.00	0.00
39.00	1440.00	6.00	0.00
42.00	1445.00	5.00	0.00
45.00	1451.00	6.00	0.00
48.00	1455.00	4.00	0.00



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No. <sup>final</sup> 19620

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

Elevation 1437 RB Formation Stalwecker Eff. Pay \_\_\_\_\_ Ft.

District Prot Date 7-9-93 Customer Order No. \_\_\_\_\_

COMPANY NAME Blackhawk Exploration  
ADDRESS 1015 East 2nd Wichita, Kansas 67214

LEASE AND WELL NO. Williams #1 COUNTY HARPER STATE Kansas Sec. 2 Twp. 32 Rge. 7W

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 3551 ft. to 3560 ft. Total Depth 3560 ft.

Packer Depth 3546 ft. Size 6 5/8 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.

Packer Depth 3551 ft. Size 6 7/8 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 3552 ft. Recorder Number 13268 Cap. 4225

Bottom Recorder Depth (Outside) 3585 ft. Recorder Number 13265 Cap. 3975

Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_

Drilling Contractor VAT Energy Drill Collar Length 0 I. D. \_\_\_\_\_ in.

Mud Type Chem Viscosity 44 Weight Pipe Length 0 I. D. \_\_\_\_\_ in.

Weight 9.2 Water Loss 12 cc. Drill Pipe Length 3529 I. D. 3.8 in.

Chlorides 5500 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.

Jars: Make NO Serial Number \_\_\_\_\_ Anchor Length 9 ft. Size 5 1/2 OD 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 XN in.

Blow: Strong blow on initial flow

Strong blow on final flow gas to surface 10 min see flow

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered 60 ft. of Muddy water 40% water 50% mud 10% gas

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered 360 ft. of Water 105,000 P.P.M.

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

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

JUL 12 1993

Time On Location 4:00 ~~P.M.~~ <sup>A.M.</sup> Time Pick Up Tool 5:15 ~~P.M.~~ <sup>A.M.</sup> Time Off Location 11:00 ~~P.M.~~ <sup>A.M.</sup>

Time Set Packer(s) 6:20 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 9:05 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 134 °F

Initial Hydrostatic Pressure \_\_\_\_\_ (A) 1698 P.S.I.

Initial Flow Period \_\_\_\_\_ Minutes 30 (B) 106 P.S.I. to (C) 106 P.S.I.

Initial Closed In Period \_\_\_\_\_ Minutes 45 (D) 1466 P.S.I.

Final Flow Period \_\_\_\_\_ Minutes 45 (E) 213 P.S.I. to (F) 267 P.S.I.

Final Closed In Period \_\_\_\_\_ Minutes 45 (G) 1466 P.S.I.

Final Hydrostatic Pressure \_\_\_\_\_ (H) 1698 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] 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 7-9-92 Test Ticket No. 19650  
 Recorder No. 13268 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft. \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1710</u> P.S.I.	Open Tool		M
B First Initial Flow Pressure	<u>109</u> P.S.I.	First Flow Pressure	Mins. <u>40</u>	Mins.
C First Final Flow Pressure	<u>141</u> P.S.I.	Initial Closed-in Pressure	Mins. <u>51</u>	Mins.
D Initial Closed-in Pressure	<u>1470</u> P.S.I.	Second Flow Pressure	Mins. <u>45</u>	Mins.
E Second Initial Flow Pressure	<u>192</u> P.S.I.	Final Closed-in Pressure	Mins. <u>48</u>	Mins.
F Second Final Flow Pressure	<u>2104</u> P.S.I.			
G Final Closed-in Pressure	<u>1455</u> P.S.I.			
H Final Hydrostatic Mud	<u>1695</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>109</u>	0	<u>141</u>	0	<u>192</u> OK	0	<u>2104</u>
P 2 5	<u>109</u>	3	<u>1498</u>	5	<u>249</u>	3	<u>216</u>
P 3 10	<u>111</u>	6	<u>1192</u>	10	<u>256</u>	6	<u>1461</u>
P 4 15	<u>117</u>	9	<u>1306</u>	15	<u>256</u>	9	<u>1309</u>
P 5 20	<u>117</u>	12	<u>1345</u>	20	<u>254</u>	12	<u>1341</u>
P 6 25	<u>119</u>	15	<u>1369</u>	25	<u>235</u>	15	<u>1362</u>
P 7 30	<u>121</u>	18	<u>1390</u>	30	<u>262</u>	18	<u>1377</u>
P 8 35		21	<u>1404</u>	35	<u>261</u>	21	<u>1390</u>
P 9 40		24	<u>1417</u>	40	<u>262</u>	24	<u>1401</u>
P10 45		27	<u>1426</u>	45	<u>264</u>	27	<u>1410</u>
P11 50		30	<u>1434</u>	50		30	<u>1440</u>
P12 55		33	<u>1442</u>	55		33	<u>1447</u>
P13 60		36	<u>1448</u>	60		36	<u>1454</u>
P14 65		39	<u>1457</u>	65		39	<u>1460</u>
P15 70		42	<u>1461</u>	70		42	<u>1465</u>
P16 75		45	<u>1464</u>	75		45	<u>1451</u>
P17 80		48	<u>1468</u>	80		48	<u>1455</u>
P18 85		51	<u>1470</u>	85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	