

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name BORTH #1 Test No. 1 Date 10/30/94
Company ADVANTAGE RESOURCES INC Zone LANSING 'A'
Address 1775 SHERMAN ST. #1375 DENVER CO 80203 Elevation 2209
Rep./Geo. ROGER WELTY Cont. DUKE #5 Est. Ft. of Pay _____
Location: Sec. 13 Twp. 28S Rge. 18W Co. KIOWA State KS

Interval Tested 4221-4248 Drill Pipe Size 4.5" XH
Anchor Length 27 Wt. Pipe I.D. - 2.7 Ft. Run _____
Packer Depth 4216 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 4221 Mud Wt. 9.2 lb/Gal.
Total Depth 4248 Viscosity 46 Filtrate 11.6

Well Open @ 1:43AM Initial Blow WEAK TO FAIR BLOW (1-4")

Initial Blow FAIR BLOW (2-8")

Recovery - Total Feet 75 Flush Tool? NO

c. 225 Feet of GAS IN PIPE
c. 2 Feet of CLEAN OIL
c. 28 Feet of GASSY OIL CUT MUD 15%GAS/15%OIL/70%MUD
c. 45 Feet of WATERY MUD WITH OIL SPOTS 40%WATER/60%MUD
c. _____ Feet of _____

T 112 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
/ 0.41 @ 67 °F Chlorides 28000 ppm Recovery Chlorides 4500 ppm System

Initial Hydrostatic Mud 2004.6 PSI AK1 Recorder No. 13788 Range 4650

First Initial Flow Pressure 34.5 PSI @ (depth) 4245 w / Clock No. 30401

First Final Flow Pressure 42.4 PSI AK1 Recorder No. 10248 Range 4400

Initial Shut-in Pressure 1427.5 PSI @ (depth) 4240 w / Clock No. 23858

Second Initial Flow Pressure 45.8 PSI AK1 Recorder No. _____ Range _____

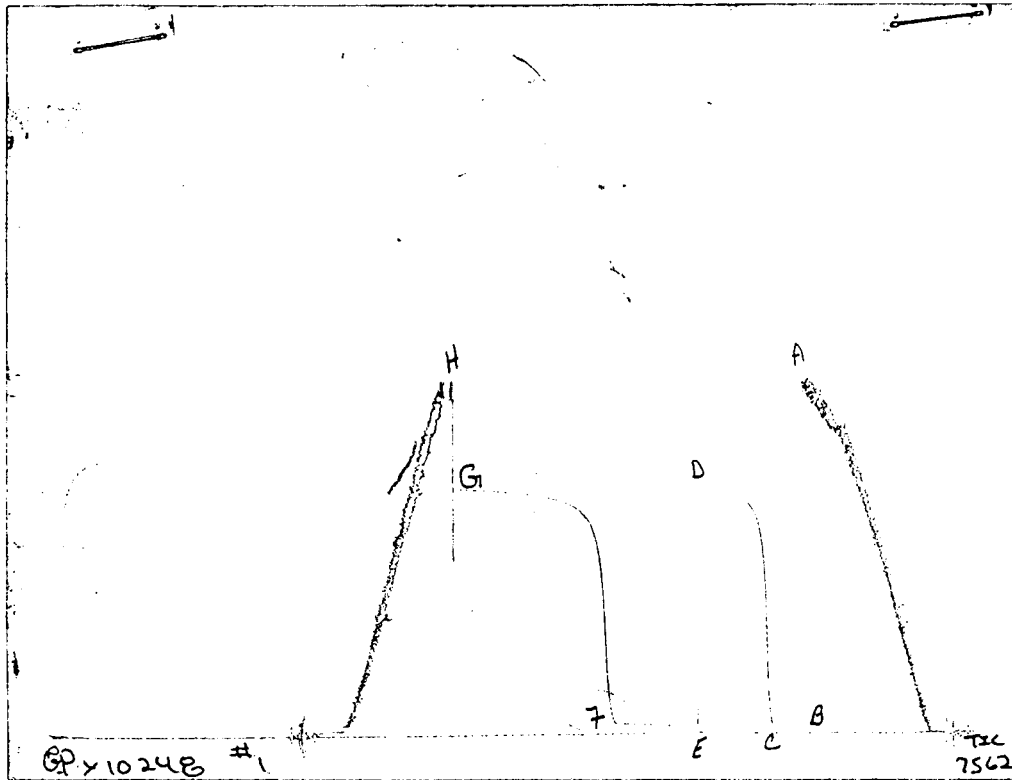
Second Final Flow Pressure 64.1 PSI @ (depth) _____ w / Clock No. _____

Final Shut-in Pressure 1421.1 PSI Initial Opening 15 Final Flow 60

Final Hydrostatic Mud 1935.4 PSI Initial Shut-in 60 Final Shut-in 120

Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2010	2004.6
(B) FIRST INITIAL FLOW PRESSURE	20	34.5
(C) FIRST FINAL FLOW PRESSURE	27	42.4
(D) INITIAL CLOSED-IN PRESSURE	1417	1427.5
(E) SECOND INITIAL FLOW PRESSURE	28	45.8
(F) SECOND FINAL FLOW PRESSURE	57	64.1
(G) FINAL CLOSED-IN PRESSURE	1412	1421.1
(H) FINAL HYDROSTATIC MUD	1986	1935.4

TRILOBITE TESTING L.L.C.

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303-456-8536
FF 872 6048
L60 BORTZ

Test Ticket

No. 7562

Well Name & No. BORTH #1 Test No. 1 Date 10-30-94
 Company ADVANTAGE RESOURCES INC. Zone Tested LANS A
 Address 1775 SHERMAN STREET, SUITE 1375 / DENVER CO. 80203 Elevation 2209 K.B.
 Co. Rep./Geo. ROGER WELTY cont. Duke Dirlig #5 Est. Ft. of Pay _____
 Location: Sec. 13 Twp. 28^S Rge. 18^W Co. KIOWA State KS.
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes No _____ Evaluation _____

Interval Tested 4221 - 4248' Drill Pipe Size 4 1/2" X 4.
 Anchor Length 27' Top Choke - 1" Bottom Choke - 3/4"
 Top Packer Depth 4216' Hole Size - 7 7/8" Rubber Size - 6 3/4"
 Bottom Packer Depth 4221' Wt. Pipe I.D. - 2.7 Ft. Run NONE
 Total Depth 4248' Drill Collar - 2.25 Ft. Run NONE
 Mud Wt. 9.2 lb/gal. Viscosity 46 Filtrate 11.6 cc.
 Tool Open @ 1:43 A.M. Initial Blow Weak test fair below. (1-4")

Final Blow Fair blow. (2-8")

Recovery - Total Feet	Feet of Gas in Pipe	Flush Tool?
<u>75</u>	<u>225</u>	<u>NO</u>
Rec. <u>2</u> Feet Of <u>Clean Oil</u>	%gas	%oil
Rec. <u>28</u> Feet Of <u>G.O.C.M.</u>	<u>15</u> %gas	<u>15</u> %oil
Rec. <u>45</u> Feet Of <u>W.M. @ oil spots</u>	%gas	<u>40</u> %oil
Rec. _____ Feet Of _____	%gas	%oil
Rec. _____ Feet Of _____	%gas	%oil

BHT 112 °F Gravity N.A. °API @ _____ °F Corrected Gravity N.A. °API

RW 0.41 @ 67 °F Chlorides 28,000 ppm Recovery Chlorides 4,500 ppm System

(A) Initial Hydrostatic Mud 2010 PSI AK1 Recorder No. 13788 Range 4650
 (B) First Initial Flow Pressure 20 PSI @ (depth) 4245 w/Clock No. 30401
 (C) First Final Flow Pressure 27 PSI AK1 Recorder No. 10248 Range 4400
 (D) Initial Shut-In Pressure 1417 PSI @ (depth) 4240 w/Clock No. 23858
 (E) Second Initial Flow Pressure 28 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 57 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 1412 PSI Initial Opening 15 Test 600
 (H) Final Hydrostatic Mud 1986 PSI Initial Shut-In 60 Jars _____

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Final Flow 60 Safety Joint _____
 Final Shut-In 120 Straddle _____
 Circ. Sub _____
 Sampler _____

Approved By Roger Welty
 Our Representative Gary [Signature]

Extra Packer _____
 Other _____
 TOTAL PRICE \$ 600

TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name BORTH #1 Test No. 2 Date 11/1/94
Company ADVANTAGE RESOURCES INC Zone MISSISSIPPI
Address 1775 SHERMAN ST. #1375 DENVER CO 80203 Elevation 2209
Co. Rep./Geo. ROGER WELTY Cont. DUKE #5 Est. Ft. of Pay 23
Location: Sec. 13 Twp. 28S Rge. 18W Co. KIOWA State KS

Interval Tested 4795-4836 Drill Pipe Size 4.5" XH
Anchor Length 41 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4790 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 4795 Mud Wt. 9.3 lb/Gal.
Total Depth 4836 Viscosity 50 Filtrate 12

Tool Open @ 3:15AM Initial Blow STRONG BLOW - BOTTOM OF BUCKET IN 45 SECONDS

Final Blow STRONG BLOW - BOTTOM OF BUCKET IN 2 SECONDS
GAS TO SURFACE IN 45 MINUTES

Recovery - Total Feet 45 Flush Tool? NO

Rec. 45 Feet of DRILLING MUD 12%WATER/88%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 127 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.19 @ _____ °F Chlorides 5500 ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud 2326.8 PSI AK1 Recorder No. 13788 Range 4650

(B) First Initial Flow Pressure 29.8 PSI @ (depth) 4833 w / Clock No. 30401

(C) First Final Flow Pressure 31.1 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 991.4 PSI @ (depth) 4828 w / Clock No. 23858

(E) Second Initial Flow Pressure 35.5 PSI AK1 Recorder No. _____ Range _____

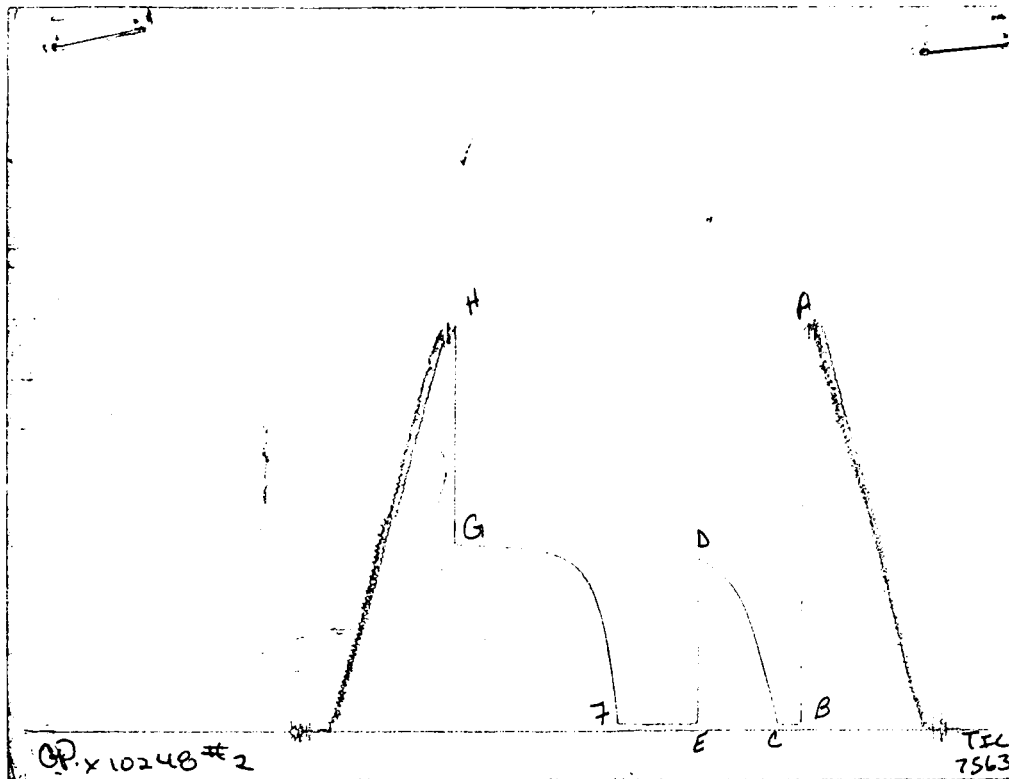
(F) Second Final Flow Pressure 35.5 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1072.4 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 2326.8 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2320	2326.8
(B) FIRST INITIAL FLOW PRESSURE	23	29.8
(C) FIRST FINAL FLOW PRESSURE	25	31.1
(D) INITIAL CLOSED-IN PRESSURE	979	991.4
(E) SECOND INITIAL FLOW PRESSURE	28	35.5
(F) SECOND FINAL FLOW PRESSURE	28	35.5
(G) FINAL CLOSED-IN PRESSURE	1076	1072.4
(H) FINAL HYDROSTATIC MUD	2294	2326.8

GAS VOLUME REPORT

ADVANTAGE RESOURCES INC

BORTH #1

DST # 2

MIN	PSIG	ORIFICE	MCF/D	MIN	WATER	ORIFICE	MCF/D
NO GAS TO SURFACE				45		0.5	TSTM
				50	1	0.25	1.68
				55	4	0.25	3.37
				60	4.5	0.25	3.58

Remarks:

TRILOBITE TESTING L.L.C.

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Test Ticket

No. 7563

Well Name & No. BORTH #1 Test No. 2 Date 11-1-94
 Company ADVANTAGE RESOURCES INC. Zone Tested MISS
 Address 1775 SHERMAN ST. STE. 1375 / DENVER CO. 80203 Elevation 2209 K.B.
 Co. Rep./Geo. ROGER WELTY cont. DUKE DRUG #5 Est. Ft. of Pay 23
 Location: Sec. 13 Twp. 28S Rge. 18W Co. KIOWA State KS.
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey Yes _____ No _____ Evaluation _____

Interval Tested 4795 - 4836' Drill Pipe Size 4 1/2" x 11
 Anchor Length 41' Top Choke - 1" Bottom Choke - 3/4"
 Top Packer Depth 4790' Hole Size - 7 7/8" Rubber Size - 6 3/4"
 Bottom Packer Depth 4795' Wt. Pipe I.D. - 2.7 Ft. Run NONE
 Total Depth 4836' Drill Collar - 2.25 Ft. Run NONE
 Mud Wt. 9.3 lb/gal. Viscosity 50 Filtrate 12.0 cc.
 Tool Open @ 3:15 A.M. Initial Blow strong blow. (letting of ducklet
in 45 sec.)

Final Blow strong blow (letting of ducklet in 2 seconds.)
G.T.S. in 45 mins. (see gas volume report)

Recovery - Total Feet	Feet of Gas in Pipe	Flush Tool?
<u>45</u>	<u>4745</u>	<u>No</u>
Rec. <u>45</u> Feet Of <u>Drily Mud.</u>	%gas	%oil <u>12</u> %water <u>88</u> %mud
Rec. _____ Feet Of _____	%gas	%oil _____ %water _____ %mud
Rec. _____ Feet Of _____	%gas	%oil _____ %water _____ %mud
Rec. _____ Feet Of _____	%gas	%oil _____ %water _____ %mud
Rec. _____ Feet Of _____	%gas	%oil _____ %water _____ %mud

BHT 127 °F Gravity N.A. °API @ _____ °F Corrected Gravity N.A. °API
 RW 0.19 @ 66 °F Chlorides 5,500 ppm Recovery Chlorides 8,000 ppm System
 (A) Initial Hydrostatic Mud 2320 PSI AK1 Recorder No. 13788 Range 4650
 (B) First Initial Flow Pressure 23 PSI @ (depth) 4833' w/Clock No. 30401
 (C) First Final Flow Pressure 25 PSI AK1 Recorder No. 10248 Range 4400
 (D) Initial Shut-In Pressure 979 PSI @ (depth) 4828' w/Clock No. 23858
 (E) Second Initial Flow Pressure 28 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 28 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 1076 PSI Initial Opening 15 Test 600
 (H) Final Hydrostatic Mud 2294 PSI Initial Shut-In 60 Jars _____

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Approved By Roger Welty Final Flow 60 Safety Joint _____
 Our Representative Ray Foutney Final Shut-In 120 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ 600

TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name BORTH #1 Test No. 3 Date 11/1/94
Company ADVANTAGE RESOURCES INC Zone MISSISSIPPI
Address 1775 SHERMAN ST. #1375 DENVER CO 80203 Elevation 2209
Co. Rep./Geo. ROGER WELTY Cont. DUKE #5 Est. Ft. of Pay 25
Location: Sec. 13 Twp. 28S Rge. 18W Co. KIOWA State KS

Interval Tested 4836-4861 Drill Pipe Size 4.5" XH
Anchor Length 25 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4831 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 4836 Mud Wt. 9.2 lb/Gal.
Total Depth 4861 Viscosity 53 Filtrate 11.2

Tool Open @ 7:00PM Initial Blow WEAK TO FAIR BLOW (2-10")

Final Blow FAIR TO STRONG BLOW - BOTTOM OF BUCKET IN 12-15 MINUTES

Recovery - Total Feet 62 Flush Tool? NO

Rec. 880 Feet of GAS IN PIPE
Rec. 62 Feet of MUD WITH OIL SPECKS
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 127 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides 5500 ppm Recovery Chlorides 5200 ppm System

(A) Initial Hydrostatic Mud 2383.1 PSI AK1 Recorder No. 13788 Range 4650

(B) First Initial Flow Pressure 24.1 PSI @ (depth) 4858 w / Clock No. 30401

(C) First Final Flow Pressure 32.1 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 1021.1 PSI @ (depth) 4853 w / Clock No. 23858

(E) Second Initial Flow Pressure 35.5 PSI AK1 Recorder No. _____ Range _____

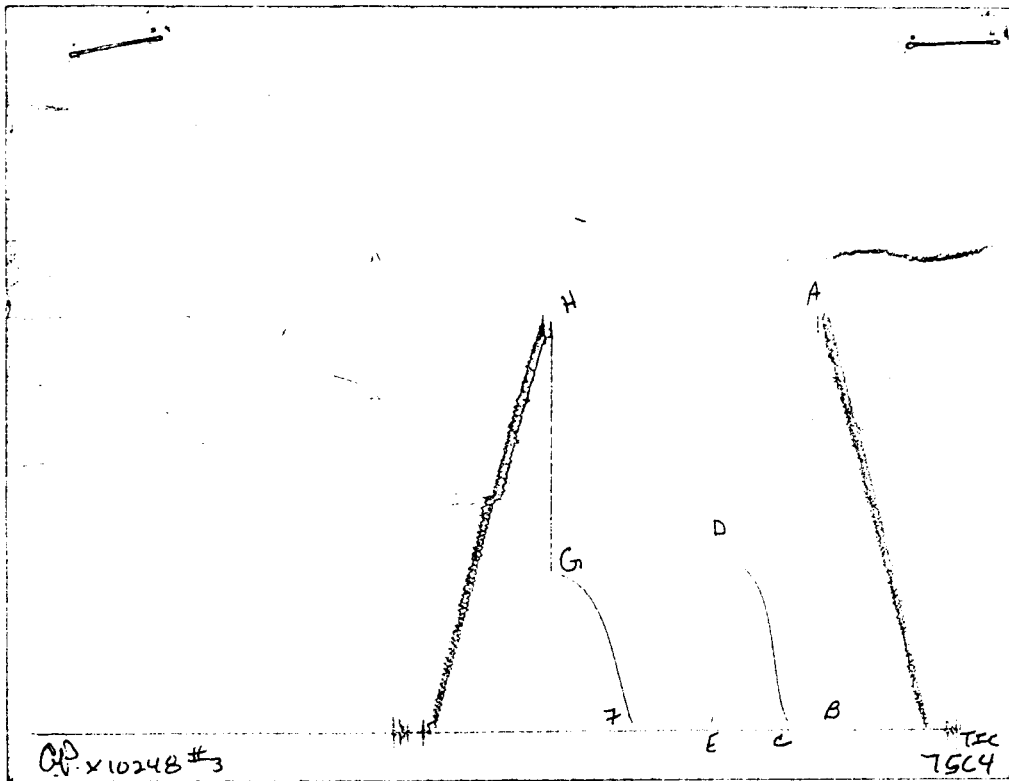
(F) Second Final Flow Pressure 44.7 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 930.1 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 2354.4 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2373	2383.1
(B) FIRST INITIAL FLOW PRESSURE	16	24.1
(C) FIRST FINAL FLOW PRESSURE	23	32.1
(D) INITIAL CLOSED-IN PRESSURE	1014	1021.1
(E) SECOND INITIAL FLOW PRESSURE	23	35.5
(F) SECOND FINAL FLOW PRESSURE	28	44.7
(G) FINAL CLOSED-IN PRESSURE	920	930.1
(H) FINAL HYDROSTATIC MUD	2294	2354.4

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 7564

Well Name & No. BORTH #1 Test No. 3 Date 11-1-94
 Company ADVANTAGE RESOURCES INC. Zone Tested Mass
 Address 1775 SHERMAN ST. STE. 1375/DENVER CO. 80203 Elevation 2209 K.B.
 Co. Rep./Geo. ROGER WELTY cont. DUKE DRUG #5 Est. Ft. of Pay 25'
 Location: Sec. 13 Twp. 28^S Rge. 18^W Co. KIOWA State KS.
 No. of Copies _____ Distribution Sheet _____ Yes _____ No Turnkey Yes _____ No _____ Evaluation _____

Interval Tested 4836 - 4861' Drill Pipe Size 4 1/2" X.H.
 Anchor Length 25' Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 4831' Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 4836' Wt. Pipe I.D. — 2.7 Ft. Run NONE
 Total Depth 4861' Drill Collar — 2.25 Ft. Run NONE
 Mud Wt. 9.2 lb/gal. Viscosity 53 Filtrate 11.2 cc.
 Tool Open @ 7:00 P.M. Initial Blow Weak test fair flow. (2-10")

Final Blow Fair to strong below. (turn. of bucket in 12-15 mins.)

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
<u>62'</u>	<u>880</u>	<u>No</u>
Rec. _____ Feet Of _____	<u>Mud @ oil specs.</u>	%gas _____ %oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____		%gas _____ %oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____		%gas _____ %oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____		%gas _____ %oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____		%gas _____ %oil _____ %water _____ %mud _____

BHT 127 °F Gravity N.A. °API @ _____ °F Corrected Gravity N.A. °API
 RW N.A. @ _____ °F Chlorides 5,500 ppm Recovery Chlorides 5,200 ppm System
 (A) Initial Hydrostatic Mud 2373 ~~2373~~ PSI AK1 Recorder No. 13788 Range 4650
 (B) First Initial Flow Pressure 16 PSI @ (depth) 4858' w/Clock No. 30401
 (C) First Final Flow Pressure 23 PSI AK1 Recorder No. 10248 Range 4400
 (D) Initial Shut-In Pressure 1014 PSI @ (depth) 4853' w/Clock No. 23858
 (E) Second Initial Flow Pressure 23 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 28 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 920 PSI Initial Opening 15 Test 600
 (H) Final Hydrostatic Mud 2294 PSI Initial Shut-In 60 Jars _____

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Final Flow 60 Safety Joint _____
 Final Shut-In 60 Straddle _____
 Circ. Sub _____
 Sampler _____

Approved By *[Signature]*
 Our Representative *[Signature]*

Extra Packer _____
 Other _____
 TOTAL PRICE \$ 600