

15-081-21349

33-28s-34w

TRILOBITE TESTING L.L.C.

OPERATOR : Helmerich & Payne Inc.

DATE 9-13-00

WELL NAME: Eubank #D-5

KB 3116.00 ft

TICKET NO: 13395

DST #1

LOCATION : 33-28-34

GR 3105.00 ft

FORMATION: Lansing

INTERVAL : 4109.00 To 4140.00 ft

TD 4140.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	11058	11058	2346			PF Fr. 0305 to 0320 hr
SI 60 Range(Psi)	4475.0	4475.0	4995.0	0.0	0.0	IS Fr. 0320 to 0420 hr
SF 60 Clock(hrs)	12	12	alpin			SF Fr. 0420 to 0520 hr
FS 180 Depth(ft)	4137.0	4137.0	4110.0	0.0	0.0	FS Fr. 0520 to 0820 hr

	Field	1	2	3	4	
A. Init Hydro	2020.0	2032.0	2007.0	0.0	0.0	T STARTED 1220 hr
B. First Flow	66.0	73.0	25.0	0.0	0.0	T ON BOTM 0301 hr
Bl. Final Flow	66.0	72.0	48.0	0.0	0.0	T OPEN 0305 hr
C. In Shut-in	322.0	314.0	326.0	0.0	0.0	T PULLED 0820 hr
D. Init Flow	88.0	102.0	52.0	0.0	0.0	T OUT 1030 hr
E. Final Flow	122.0	126.0	116.0	0.0	0.0	
F. Fl Shut-in	322.0	311.0	327.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2008.0	1952.0	1979.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	i	i	o			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 105000.00 lbs
						Initial Str Wt 80000.00 lbs
						Unseated Str Wt 85000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 710.00 ft
						D.P. Length 3394.00 ft

RECOVERY

Tot Fluid 240.00 ft of 240.00 ft in DC and 0.00 ft in DP
 120.00 ft of Slightly water cut mud w/ oil scum
 0.00 ft of 10% water 90% mud
 120.00 ft of Water cut mud
 0.00 ft of 40% wter 60% mud
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of

SALINITY 18500.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:

Bottom of bucket in 3 1/2 minutes.
 Slightly surging blow.

Initial Shut-In:

No return.

Final Flow:

Bottom of bucket in 2 minutes.
 (possible plugging)

Final Shut-In:

1/4" return in 2 1/2 minutes. Died
 in 35 minutes.

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	46.00 S/L
W.L.	12.40 in3
F.C.	0.00 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	112.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Shane McBride
Co. Rep.	Brad Rein
Contr.	Cheyenne
Rig #	3
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Eubank #D-5

LOCATION : 33-28-34

TICKET No. 13395 D.S.T. No. 1 DATE 9-13-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 31

TOTAL TOOL 61

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 61

D.C. ABOVE TOOLS.Stands12 Single Total 710

D.P. ABOVE TOOLS.Stands55 Single Total 3394

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4165

TOTAL DEPTH 4140

TOTAL DRILL PIPE ABOVE K.B. 25

REMARKS:

Gas:

Oil: scum

Water: 1,500 ml

Mud: 2,500 ml.

Total: 4,000 ml

Pressure: 280 psi.

Chlorides in sampler 18,500 RW .37 @ 76*f

P.O. SUB	
C.O. SUB 1'	4078
S.I. TOOL 5'	4084
sampler 3'	4087
HMV 5'	4092
JARS 5'	4097
SAFETY JOINT 2'	4099
PACKER top	4104
PACKER bottom	4109
DEPTH 4109	
1'	4110
ANCHOR alpine recorder	4110
25' perf	4135
ak-1 recorder	4137
BULLNOSE 5'bullplug perf	4140
T.D.	4140

13395 DST #1 Eubank D-5 Helmerich & Payne Inc.

TEST HISTORY

Flag Points
t(Min.) P(PSig)

A:	0.00	2007.39
B:	0.00	25.32
C:	14.00	48.49
D:	59.00	326.47
E:	0.00	52.86
F:	59.00	116.94
G:	183.00	327.33
H:	0.00	1979.14

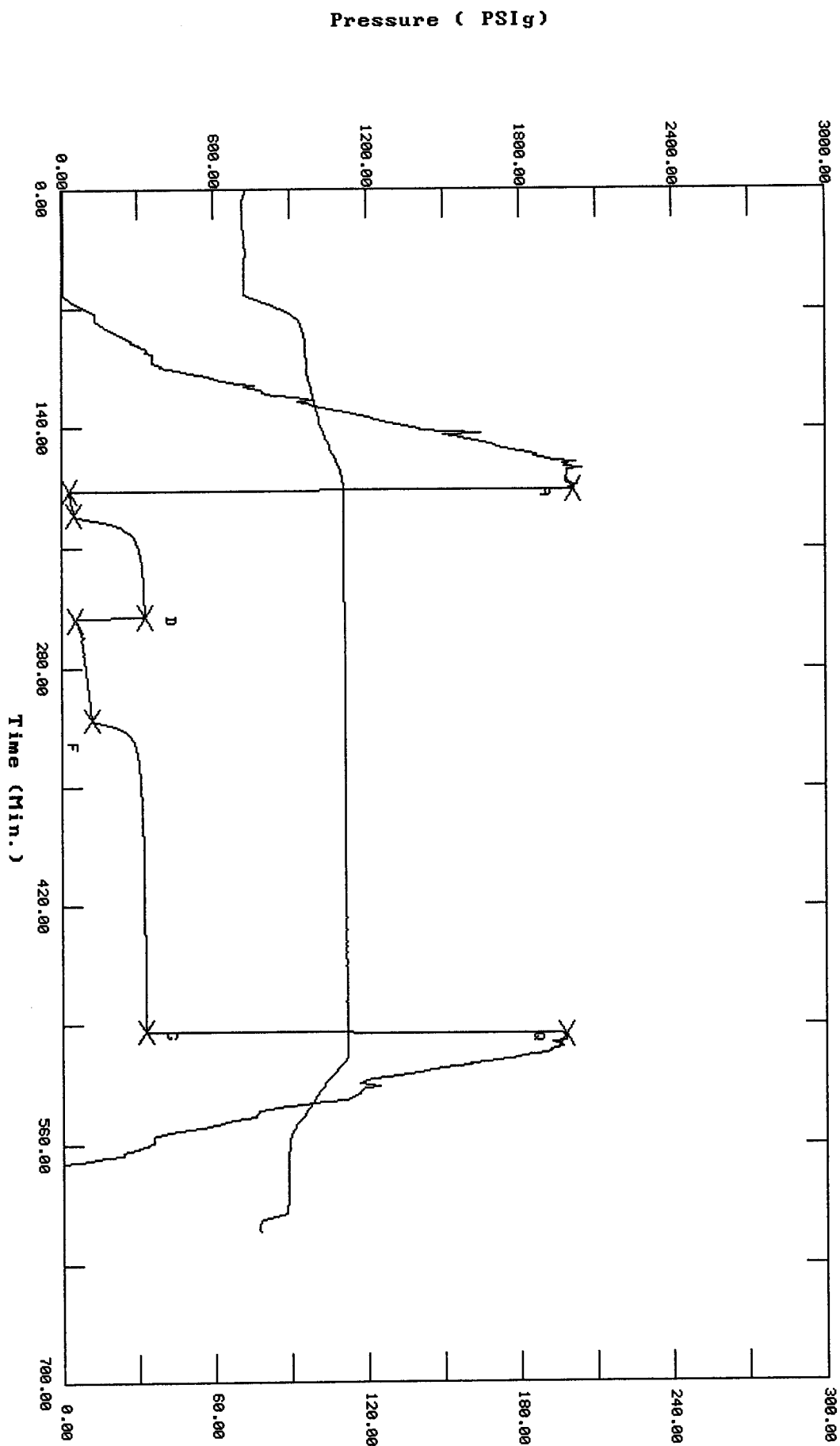
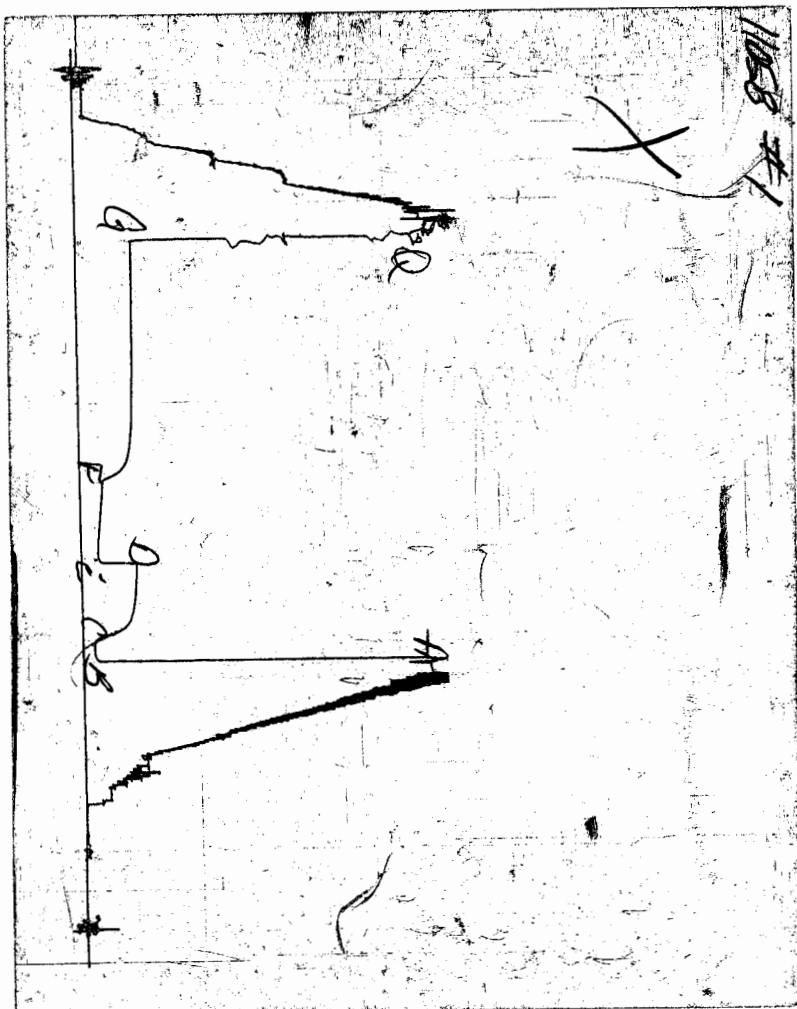


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 13395 Date 9-13-00
Company Name Helmreich & Payne
Lease Embark # D-5 Test No. #1
County Haskell, KS Sec. 33 Twp. 28S Rng. 34W

SAMPLER RECOVERY

Gas _____ ML
Oil slur _____ ML
Mud 2,500 _____ ML
Water 1,500 _____ ML
Other _____ ML
Pressure 280 _____ PSI
Total 4000 _____ ML

SAMPLER ANALYSIS

Resistivity .37 ohms @ 76 F
Chlorides 18,500 ppm.
Gravity _____ corrected @ 60 F

PIT MUD ANALYSIS

Chlorides 1000 ppm.
Resistivity 5.42 ohms @ 70° F
Viscosity 46
Mud Weight 9.2
Filtrate 12.4
Other LEM #C1

PIPE RECOVERY

TOP
Resistivity .37 ohms @ 76 F
Chlorides 18,500 ppm.

MIDDLE

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM

Resistivity .37 ohms @ 76 F
Chlorides 18,500 ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13395

Test Ticket

Well Name & No.	<u>Eubank #D-5</u>	Test No.	<u>#1</u>	Date	<u>9-13-00</u>
Company	<u>Helmreich & Payne Inc</u>	Zone Tested	<u>Lansing</u>		
Address	<u>1579 East 21st Tulsa, OK 74114</u>	Elevation	<u>3016'</u>	KB	<u>3005'</u>
Co. Rep / Geo.	<u>Brad Rein</u>	Cont.	<u>Cheyenne #3</u>	Est. Ft. of Pay	<u>Por. %</u>
Location: Sec.	<u>33</u>	Twp.	<u>28</u>	Rge.	<u>34</u>
		Co.	<u>Haskell</u>	State	<u>Ks</u>
No. of Copies	<u>Normal</u>	Distribution Sheet (Y, N)		Turnkey (Y, N)	
		Evaluation (Y, N)			

Interval Tested 4109 4140 Initial Str Wt./Lbs. 80,000 Unseated Str Wt./Lbs. 85,000
Anchor Length 51 Wt. Set Lbs. 26,000 Wt. Pulled Loose/Lbs. 145,000
Top Packer Depth 4104 Tool Weight 4,000
Bottom Packer Depth 4109 Hole Size — 7 7/8" ☒ Rubber Size — 6 3/4" ☒
Total Depth 4140 Wt. Pipe Run — Drill Collar Run 710' 4-90
Mud Wt. 9.2 LCM #4 Vis. 4/6 WL 12.4 Drill Pipe Size 4 1/2" x 4 Ft. Run 3394' x 4
Blow Description B.O.B in 3 1/2 min (pass pluging)
No return
B.O.B in 2 min (pass pluging)
1/4" return in 2 min. died in 35 min.

Recovery — Total Feet 240' GIP — Ft. in DC 240' Ft. in DP —
Rec. 120' Feet Of SWCM w/o. 1.5 cum %gas — %oil 10 %water 90 %mud —
Rec. 120' Feet Of WC M %gas — %oil 40 %water 60 %mud —
Rec. — Feet Of — %gas — %oil — %water — %mud —
Rec. — Feet Of — %gas — %oil — %water — %mud —
Rec. — Feet Of — %gas — %oil — %water — %mud —
BHT 112° °F Gravity — °API D@ — °F Corrected Gravity — °API —
RW .37 @ 76 °F Chlorides 18,900 ppm Recovery Chlorides 1,000 ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2020</u>	<u>2007</u>		<u>2346</u>	<u>23:00 p.m. 11:20</u>
(B) First Initial Flow Pressure	<u>66</u>	<u>25</u>	PSI	(depth) <u>4110'</u>	T-Started <u>12:20 A.M.</u>
(C) First Final Flow Pressure	<u>66</u>	<u>48</u>	PSI	Recorder No. <u>11058</u>	T-Open <u>03:05 A.M.</u>
(D) Initial Shut-In Pressure	<u>322</u>	<u>326</u>	PSI	(depth) <u>4137'</u>	T-Pulled <u>08:20 A.M.</u>
(E) Second Initial Flow Pressure	<u>88</u>	<u>52</u>	PSI	Recorder No. <u>—</u>	T-Out <u>10:30 A.M.</u>
(F) Second Final Flow Pressure	<u>122</u>	<u>116</u>	PSI	(depth) <u>—</u>	T-Off Location <u>11:35 A.M.</u>
(G) Final Shut-in Pressure	<u>322</u>	<u>327</u>	PSI	Initial Opening <u>15</u>	Test <u>750</u>
(Q) Final Hydrostatic Mud	<u>2008</u>	<u>1979</u>	PSI	Initial Shut-in <u>60</u>	Jars <u>X</u> <u>200</u>
				Final Flow <u>60</u>	Safety Joint <u>X</u> <u>50</u>
				Final Shut-in <u>180</u>	Straddle <u>—</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF 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, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Brad Rein

Our Representative —

Circ. Sub X NK
Sampler X 200
Extra Packer —
Elec. Rec X 150
Mileage 20 miles / way 40
Other 2 hrs 60
TOTAL PRICE \$ 1450

TRILOBITE TESTING L.L.C.

OPERATOR : Helmerich & Payne

DATE 9-14-00

WELL NAME: Eubank #D-5

KB 3016.00 ft

TICKET NO: 13396

DST #2

LOCATION : 33-28-34

GR 3005.00 ft

FORMATION: Lansing

INTERVAL : 4165.00 To 4185.00 ft

TD 4185.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	11058	11058	2346			PF Fr. 2145 to 2200 hr
SI 60 Range(Psi)	4475.0	4475.0	4995.0	0.0	0.0	IS Fr. 2200 to 2300 hr
SF 60 Clock(hrs)	12	12	alpin			SF Fr. 2300 to 1200 hr
FS 180 Depth(ft)	4183.0	4183.0	4166.0	0.0	0.0	FS Fr. 1200 to 0300 hr

	Field	1	2	3	4	
A. Init Hydro	2031.0	2037.0	2020.0	0.0	0.0	T STARTED 1940 hr
B. First Flow	466.0	483.0	582.0	0.0	0.0	T ON BOTM 2143 hr
B1. Final Flow	895.0	911.0	944.0	0.0	0.0	T OPEN 2145 hr
C. In Shut-in	1008.0	996.0	1006.0	0.0	0.0	T PULLED 0300 hr
D. Init Flow	986.0	985.0	960.0	0.0	0.0	T OUT 0710 hr
E. Final Flow	997.0	995.0	1006.0	0.0	0.0	
F. Fl Shut-in	1008.0	990.0	1009.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2020.0	1951.0	1981.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	i	i	o			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 125000.00 lbs
						Initial Str Wt 82000.00 lbs
						Unseated Str Wt 92000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 710.00 ft
						D.P. Length 3458.00 ft

RECOVERY

Tot Fluid 2100.00 ft of 710.00 ft in DC and 1390.00 ft in DP

120.00 ft of Mud cut sulfur water

0.00 ft of 70% water 30% mud

120.00 ft of Slightly mud cut sulfur water

0.00 ft of 90% water 10% mud

1860.00 ft of Sulfur water

0.00 ft of 100% water

0.00 ft of

0.00 ft of

SALINITY 58500.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:

Bottom of bucket in 1/2 minute.

Initial Shut-In:

Bled off for 2 1/2 minutes. Return in 1/2 minute. Built to bottom of bucket in 25 minutes.

Final Flow:

Bottom of bucket @ open, started to died in 10 minutes. Died back to 10".

Final Shut-In:

Bled off for 1 1/2 minutes. Return in 5 minutes. Built to 1". Died in 20 minutes.

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	42.00 S/L
W.L.	9.30 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00 ft
Btm. H. Temp.	113.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Shane McBride
Co. Rep.	Brad Rein
Contr.	Cheyenne
Rig #	3
Unit #	
Pump T.	

Test Successful: Y

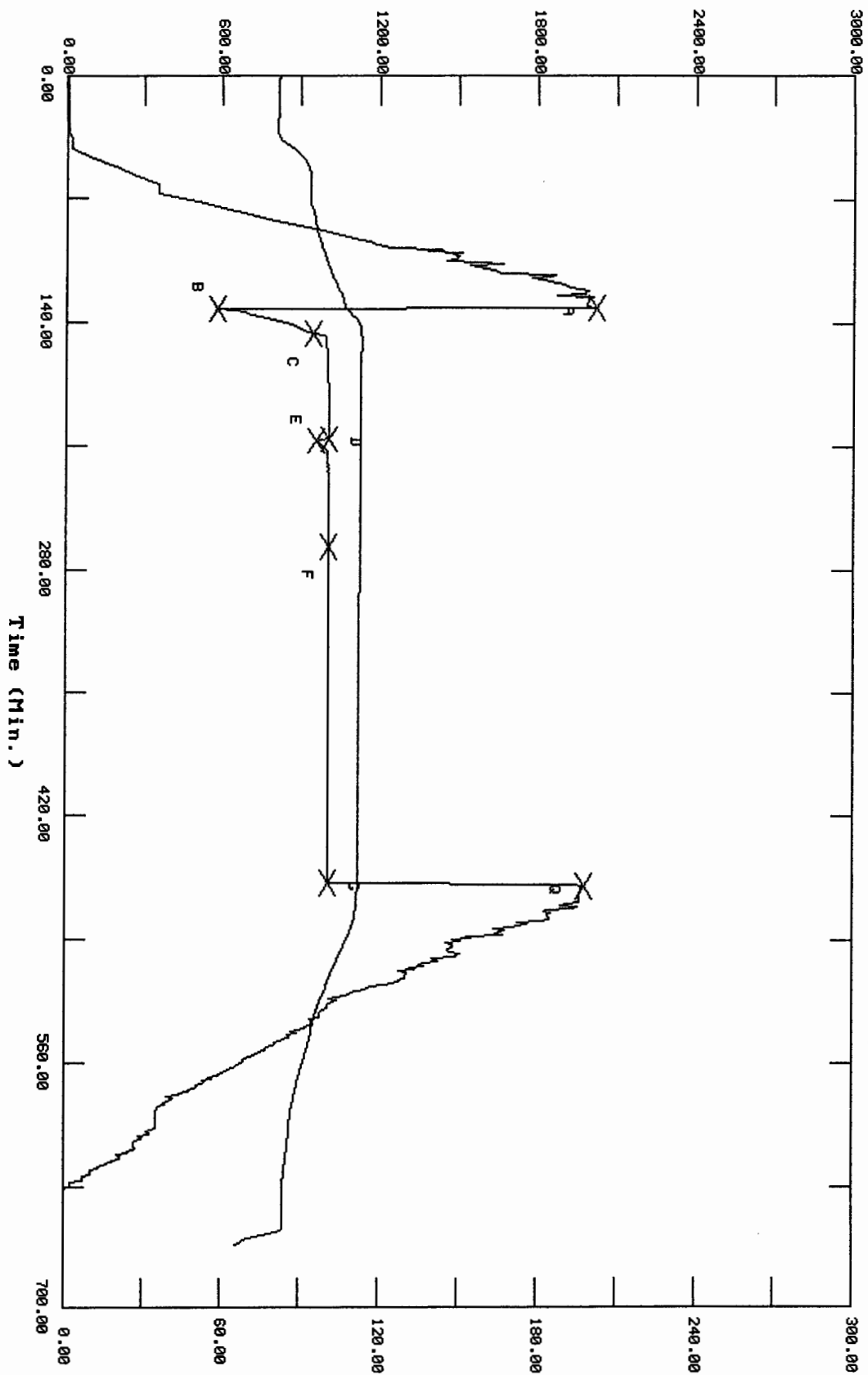
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Chlorides in sampler 58,500

P.O. SUB	
C.O. SUB 1'	4136
S.I. TOOL 5'	4140
sampler 3'	4143
HMV 5'	4148
JARS 5'	4153
SAFETY JOINT 2'	4155
PACKER top	4160
PACKER bottom	4165
DEPTH 4165	
1'	4166
ANCHOR alpine recorder	4166
15'perf	4181
ak-1 recorder	4183
BULLNOSE 5'bullplug perf	4186
T.D.	4186

TEST HISTORY

13396 DST #2 Eubank #D-5 Helmerich & Payne Inc.

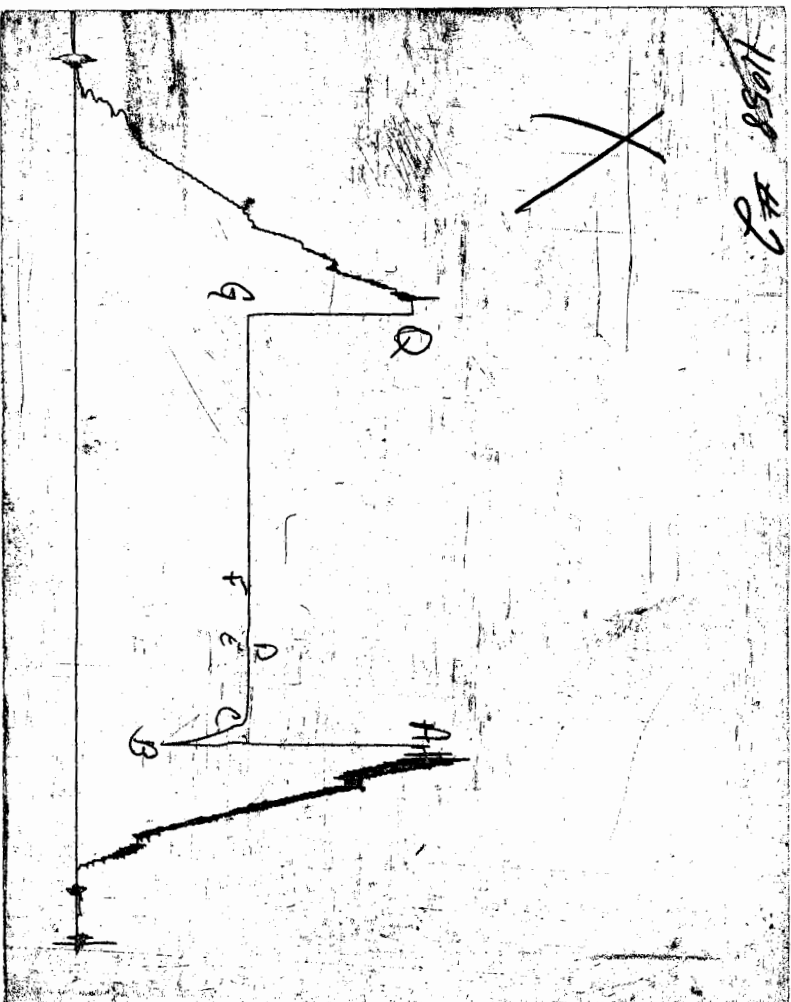


Flag Points

t (Min.)	P (PSIg)
A: 0.00	2020.01
B: 0.00	582.22
C: 14.00	944.35
D: 60.00	1006.31
E: 0.00	960.61
F: 60.00	1006.42
G: 191.00	1009.54
H: 0.00	1981.64

Temperature (DEG F)

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 13396 Date 9-14-00
Company Name Helmerich, Payne Inc.
Lease Embark #D-5 Test No. 2
County Haskell, KS Sec. 33 Twp. 28S Rng. 34W

SAMPLER RECOVERY

Gas — ML
Oil — ML
Mud — ML
Water 4000 ML
Other — ML
Pressure — PSI
Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 1000 ppm.
Resistivity 5.42 ohms @ 70° F
Viscosity 42
Mud Weight 9.2
Filtrate 9.3
Other LCM #2

SAMPLER ANALYSIS

Resistivity .152 ohms @ 65° F
Chlorides 58,500 ppm.
Gravity — corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity .16 ohms @ 58° F
Chlorides 58,500 ppm.
MIDDLE
Resistivity — ohms @ — F
Chlorides — ppm.
BOTTOM
Resistivity .16 ohms @ 58° F
Chlorides 58,500 ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13396

Test Ticket

Well Name & No. <u>Gubank # D-5</u>	Test No. <u>#2</u>	Date <u>9-14-00</u>
Company <u>Helmerich & Payne Inc</u>	Zone Tested <u>Lansing</u>	
Address <u>1579 21st Tulsa, OK 74114</u>	Elevation <u>3016"</u> KB <u>3005'</u> GL	
Co. Rep / Geo. <u>Brad Rein</u>	Cont. <u>Cheyenne #3</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>33</u> Twp. <u>28</u> Rge. <u>34</u>	Co. <u>Haskell</u> State <u>KS</u>	
No. of Copies <u>None</u> Distribution Sheet (Y, N) <u> </u>	Turnkey (Y, N) <u> </u>	Evaluation (Y, N) <u> </u>

Interval Tested 4165 4186 Initial Str Wt./Lbs. 81,000 Unseated Str Wt./Lbs. 92,000
 Anchor Length 21 Wt. Set Lbs. 26,000 Wt. Pulled Loose/Lbs. 125,000
 Top Packer Depth 4160 Tool Weight 4,000
 Bottom Packer Depth 4165 Hole Size — 7 7/8" ☒ Rubber Size — 6 3/4" ☒
 Total Depth 4186 Wt. Pipe Run Drill Collar Run 710'
 Mud Wt. 9.2 LCM #2 Vis. 42 WL 9.3 Drill Pipe Size 4 7/8 X 4 Ft. Run 3458'
 Blow Description B.O.B in 1/2 min.
Bleed off for 2 1/2 min — return in 1/2 min, built to B.O.B in 25 min.
B.O.B @ open, started to die in 10 min, died back to 10" in.
Bleed off for 1 1/2 min, return in 5 min built to 1" in died in 20 min.

Recovery — Total Feet 2100' GIP Ft. in DC 710' Ft. in DP 1390
 Rec. 120' Feet Of 4 Mud Cont. Sulfur Water %gas %oil 70% water 30% mud
 Rec. 120' Feet Of SMCW %gas %oil 90% water 10% mud
 Rec. 1860' Feet Of Sulfur Water %gas %oil 100% water %mud
 Rec. Feet Of %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 BHT 113° °F Gravity °API D@ °F Corrected Gravity °API
 RW .16 @ 58° °F Chlorides 58,500 ppm Recovery Chlorides 1,000 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud	<u>2031</u>	<u>2020</u>	PSI	Recorder No. <u>2346</u>	T-On Location <u>19:00 am</u>	<u>140</u>
(B) First Initial Flow Pressure	<u>466</u>	<u>582</u>	PSI	(depth) <u>4166'</u>	T-Started <u>19:40 P.m</u>	
(C) First Final Flow Pressure	<u>895</u>	<u>944</u>	PSI	Recorder No. <u>11058</u>	T-Open <u>21:45 P.m</u>	<u>12:30</u>
(D) Initial Shut-In Pressure	<u>1008</u>	<u>1006</u>	PSI	(depth) <u>4183'</u>	T-Pulled <u>03:00 am</u>	<u>13:10</u>
(E) Second Initial Flow Pressure	<u>986</u>	<u>960</u>	PSI	Recorder No. <u> </u>	T-Out <u>07:10 am</u>	
(F) Second Final Flow Pressure	<u>997</u>	<u>1006</u>	PSI	(depth) <u> </u>	T-Off Location <u>8:10 am</u>	
(G) Final Shut-in Pressure	<u>1008</u>	<u>1009</u>	PSI	Initial Opening <u>15</u>	Test <u>750</u>	
(Q) Final Hydrostatic Mud	<u>2020</u>	<u>1981</u>	PSI	Initial Shut-in <u>60</u>	Jars <u>200</u>	
				Final Flow <u>60</u>	Safety Joint <u>50</u>	
				Final Shut-in <u>180</u>	Straddle <u> </u>	
					Circ. Sub <u>N/C</u>	
					Sampler <u>x</u> <u>200</u>	
					Extra Packer <u> </u>	
					Elec. Rec. <u>x</u> <u>150</u>	
					Mileage <u>28 miles</u> <u>1 way</u> <u>40</u>	
					Other <u>3.5 hrs</u> <u>105</u>	
					TOTAL PRICE \$ <u>1495</u>	

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Approved By Brad Rein
 Our Representative Shank 20793rd

TRILOBITE TESTING L.L.C.

OPERATOR : Helmerich & Payne Inc.
WELL NAME: Eubank D-5
LOCATION : 33-28-34 Haskell co KS
INTERVAL : 4657.00 To 4684.00 ft

DATE 9-16-00
KB 3016.00 ft TICKET NO: 13397 DST #3
GR 3005.00 ft FORMATION: Marmaton
TD 4684.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	11058	11058	2346			PF Fr. 1720 to 1735 hr
SI 60 Range(Psi)	4475.0	4475.0	4995.0	0.0	0.0	IS Fr. 1735 to 1835 hr
SF 60 Clock(hrs)	12	12	alpin			SF Fr. 1835 to 1935 hr
FS 180 Depth(ft)	4681.0	4681.0	4659.0	0.0	0.0	FS Fr. 1935 to 2235 hr

	Field	1	2	3	4	
A. Init Hydro	2289.0	2338.0	2199.0	0.0	0.0	T STARTED 1530 hr
B. First Flow	77.0	125.0	44.0	0.0	0.0	T ON BOTM 1720 hr
B1. Final Flow	77.0	104.0	52.0	0.0	0.0	T OPEN 1720 hr
C. In Shut-in	322.0	327.0	312.0	0.0	0.0	T PULLED 2235 hr
D. Init Flow	88.0	111.0	44.0	0.0	0.0	T OUT 0140 hr
E. Final Flow	100.0	113.0	64.0	0.0	0.0	
F. Fl Shut-in	300.0	304.0	302.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2278.0	2300.0	2151.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	i	i	o			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 120000.00 lbs

RECOVERY

Tot Fluid 130.00 ft of 130.00 ft in DC and 0.00 ft in DP	Unseated Str Wt 91000.00 lbs
130.00 ft of Slightly oil cut gassy mud	Bot Choke 0.75 in
0.00 ft of 30% gas 5% oil 65% mud	Hole Size 7.88 in
0.00 ft of	D Col. ID 2.25 in
0.00 ft of	D. Pipe ID 3.80 in
0.00 ft of	D.C. Length 710.00 ft
0.00 ft of	D.P. Length 3928.00 ft
0.00 ft of	
0.00 ft of	
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00	

BLOW DESCRIPTION

Initial Flow:
Bottom of bucket in 1/2 minute.
Initial Shut-In:
Gas to surface 2 1/2 minutes into shut-In. No return.
Final Flow:
Gauging gas
Final Shut-in:
No return.

SAMPLES: gas
SENT TO: Caraway, Liberal, Ks

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c:
Vis.	38.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	119.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Shane McBride
Co. Rep.	Brad Rine
Contr.	Cheyenne
Rig #	3
Unit #	
Pump T.	

Test Successful: Y

GAS RECOVERY

COMPANY: Helmerich & Payne Inc.

DATE: 9-16-00

WELL NAME: Eubank D-5

KB Elev: 3016.00 ft TICKET #13397 DST #3

WELL LOCATION: 33-28-34 Haskell co KS

GR Elev: 3005.00 ft FORMATION: Marmaton

INTERVAL Fr.: 4657.00 To 4684.00 T.D.: 4684.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH merla

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
10	0.25	0	20	7.5
20	0.25	0	38	10.4
30	0.25	0	38	10.4
40	0.25	0	36	10.1
50	0.25	0	32	9.5
60	0.25	0	32	9.5

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Eubank D-5

LOCATION : 33-28-34 Haskell co KS

TICKET No. 13397 D.S.T. No. 3 DATE 9-16-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 27

TOTAL TOOL 57

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 57

D.C. ABOVE TOOLS.Stands12 Single Total 710

D.P. ABOVE TOOLS.Stands63 Single 1 Total 3928

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4695

TOTAL DEPTH 4684

TOTAL DRILL PIPE ABOVE K.B. 11

REMARKS:

Gas: 1.2 cubic ft.

Oil: 500 ml.

Water:

Mud: 800 ml.

Total: 1300 ml. oil & mud 1.2cubic ft gas

Pressure 240 psi.

P.O. SUB	
C.O. SUB 1'	4626
S.I. TOOL 5'	4632
sampler 3'	4635
HMV 5'	4640
JARS 5'	4645
SAFETY JOINT 2'	4647
PACKER top	4652
PACKER bottom	4657
DEPTH 4657	
1'	4658
ANCHOR 1' perf	4659
alpine recorder	4659
20' perf	4679
ak-1 recorder	4681
BULLNOSE 5'bullplug perf	4684
T.D.	4684

13397 DST #3 Eubank D-5 Helmerich & Payne Inc.

TEST HISTORY

Flag Points

t(Min.)	P(PSig)
A: 0.00	2199.70
B: 0.00	44.48
C: 12.00	52.01
D: 59.00	312.25
E: 0.00	44.06
F: 58.00	64.21
G: 180.00	302.48
H: 0.00	2151.95

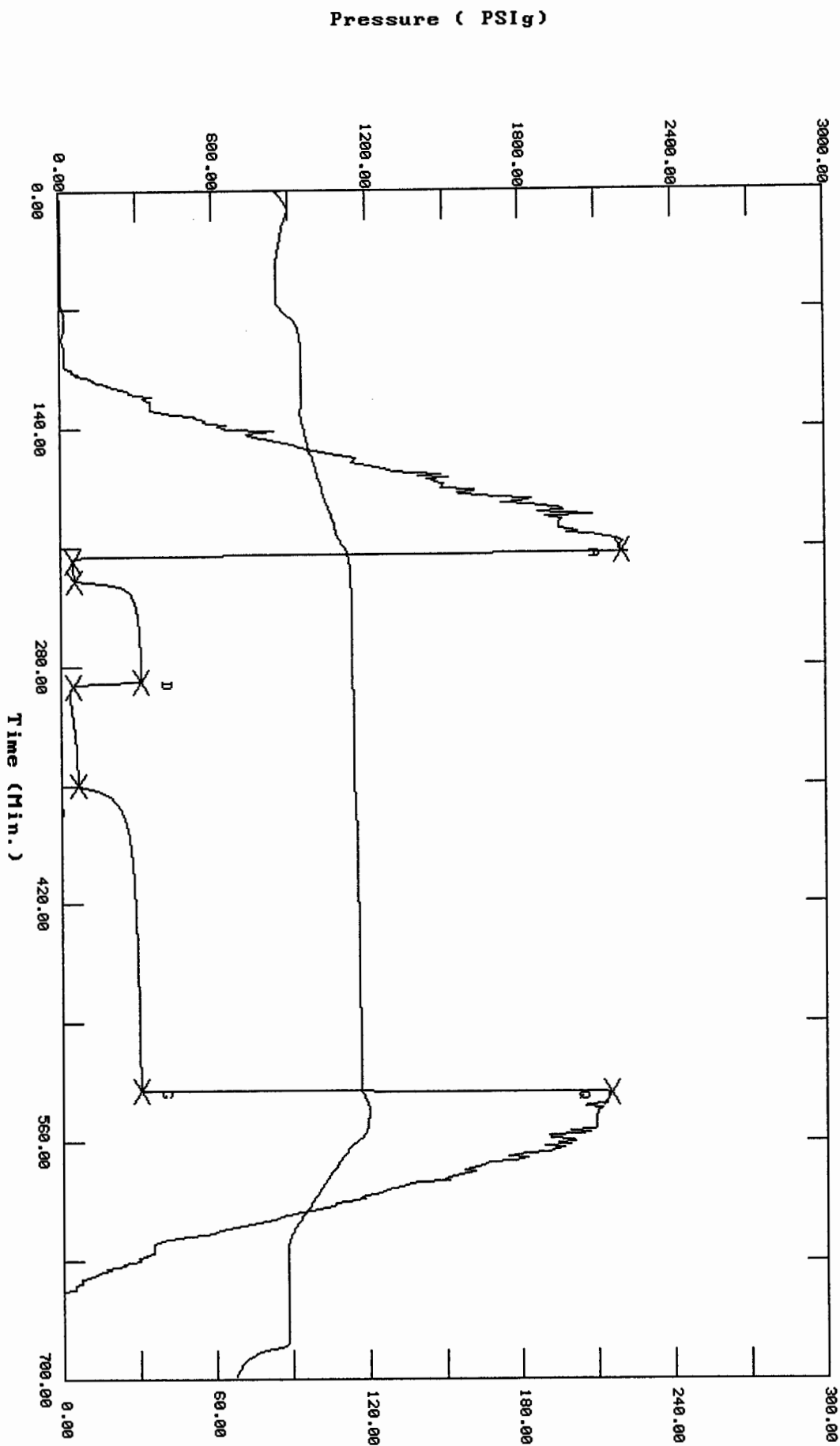
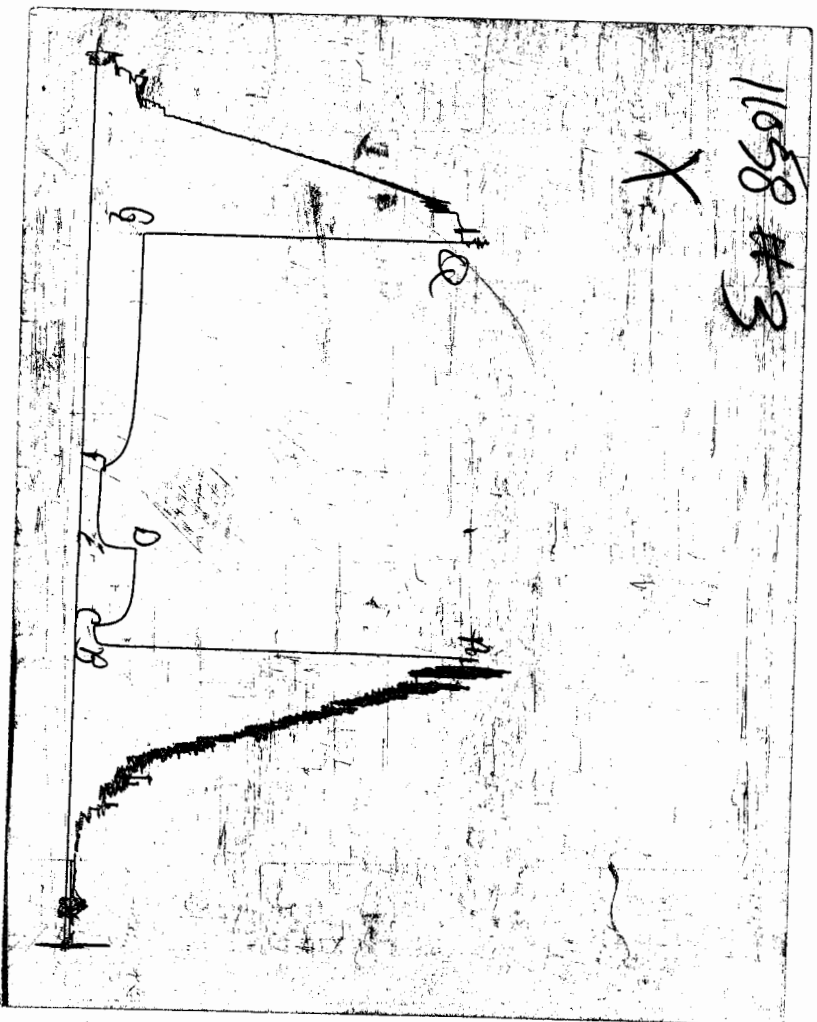


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 13397 Date 9-16-00
Company Name Hehmersch & Payne Inc
Lease _____ Test No. #3
County Haskell, KS Sec. 33 Twp. 28 Rng. 34

SAMPLER RECOVERY

Gas 1.2 cft _____
Oil 500 _____ ML
Mud 800 _____ ML
Water _____ ML
Other _____ ML
Pressure 240 _____ PSI
Total 1,300 mL (0.13 mmo) 1.2 cft gas

PIT MUD ANALYSIS

Chlorides 1000 _____ ppm.
Resistivity 5.42 ohms @ 70° F
Viscosity 38 _____
Mud Weight 9.2 _____
Filtrate 8.0 _____
Other LCM #2 _____

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13397

Test Ticket

Well Name & No. <u>Lubank # D-5</u>	Test No. <u>#3</u>	Date <u>9-16-00</u>
Company <u>Helmerich & Payne Inc</u>	Zone Tested <u>maximization</u>	
Address <u>1579 East 21st Tulsa, OK 74114</u>	Elevation <u>3016</u> KB <u>3005</u> GL	
Co. Rep / Geo. <u>Brad Rine</u>	Cont. <u>Cheyenne #3</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>33</u> Twp. <u>28S</u> Rge. <u>34W</u> Co. <u>Haskell</u> State <u>Ks</u>		
No. of Copies <u>Norm</u> Distribution Sheet (Y, N) <u> </u>	Turnkey (Y, N) <u> </u>	Evaluation (Y, N) <u> </u>

Interval Tested <u>4657</u> <u>4684</u>	Initial Str Wt./Lbs. <u>90,000</u>	Unseated Str Wt./Lbs. <u>91,000</u>
Anchor Length <u>27</u>	Wt. Set Lbs. <u>26,000</u>	Wt. Pulled Loose/Lbs. <u>120,000</u>
Top Packer Depth <u>4652</u>	Tool Weight <u>4,000</u>	
Bottom Packer Depth <u>4657</u>	Hole Size — 7 7/8" ☒	Rubber Size — 6 3/4" ☒
Total Depth <u>4684</u>	Wt. Pipe Run <u> </u>	Drill Collar Run <u>710'</u>
Mud Wt. <u>9.2</u> LCM <u>#2</u> Vis. <u>38</u> WL <u>8.0</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>3928'</u>
Blow Description <u>B.O. B in 1/2 min.</u>		
<u>Gas to Surface 2 1/2 min into Shut in — No return</u>		
<u>Gauging gas</u>		
<u>No return</u>		

Recovery — Total Feet <u>130'</u>	GIP <u>G.T.S.</u>	Ft. in DC <u>130'</u>	Ft. in DP <u> </u>
Rec. <u>130'</u>	Feet Of <u>50 c g m</u>	30 % gas	5 % oil
Rec. <u> </u>	Feet Of <u> </u>	% gas	% oil
Rec. <u> </u>	Feet Of <u> </u>	% gas	% oil
Rec. <u> </u>	Feet Of <u> </u>	% gas	% oil
Rec. <u> </u>	Feet Of <u> </u>	% gas	% oil
BHT <u>119°</u>	°F Gravity <u> </u>	°API D@ <u> </u>	°F Corrected Gravity <u> </u>
RW <u> </u> @ <u> </u>	°F Chlorides <u> </u>	ppm Recovery	Chlorides <u>1000</u> ppm System

(A) Initial Hydrostatic Mud	<u>2289</u> <u>2199</u>	PSI	Recorder No. <u>2346</u>	T-On Location <u>13:20 am</u>
(B) First Initial Flow Pressure	<u>77</u> <u>44</u>	PSI	(depth) <u>4659'</u>	T-Started <u>15:30 pm</u>
(C) First Final Flow Pressure	<u>77</u> <u>52</u>	PSI	Recorder No. <u>11058</u>	T-Open <u>17:20 pm</u>
(D) Initial Shut-In Pressure	<u>322</u> <u>312</u>	PSI	(depth) <u>4681'</u>	T-Pulled <u>22:35 pm</u>
(E) Second Initial Flow Pressure	<u>88</u> <u>44</u>	PSI	Recorder No. <u> </u>	T-Out <u>01:40 am</u>
(F) Second Final Flow Pressure	<u>100</u> <u>64</u>	PSI	(depth) <u> </u>	T-Off Location <u>02:40 am</u>
(G) Final Shut-in Pressure	<u>300</u> <u>302</u>	PSI	Initial Opening <u>15</u>	Test <u>X</u> <u>750</u>
(Q) Final Hydrostatic Mud	<u>2278</u> <u>2151</u>	PSI	Initial Shut-in <u>60</u>	Jars <u>X</u> <u>200</u>
			Final Flow <u>60</u>	Safety Joint <u>X</u> <u>50</u>
			Final Shut-in <u>180</u>	Straddle <u> </u>
				Circ. Sub <u>X</u> <u>N/C</u>
				Sampler <u>X</u> <u>200</u>
				Extra Packer <u> </u>
				Elec. Rec. <u>X</u> <u>150</u>
				Mileage <u>78 miles</u> <u>1 way</u> <u>40</u>
				Other <u>3hs</u> <u>90</u>
				TOTAL PRICE \$ <u>1480</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF 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, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Brad Rine
 Our Representative Shawn Rine

TRILOBITE TESTING L.L.C.

OPERATOR : Helmerich & Payne Inc.
WELL NAME: Eubank D-5
LOCATION : 33-28-34 Haskell co KS
INTERVAL : 5312.00 To 5400.00 ft

DATE 9-19-00
KB 3016.00 ft TICKET NO: 13398 DST #4
GR 3005.00 ft FORMATION: Chester
TD 5400.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	11058	11058	2346			PF Fr. 0750 to 0805 hr
SI 60 Range(Psi)	4475.0	4475.0	4995.0	0.0	0.0	IS Fr. 0805 to 0905 hr
SF 60 Clock(hrs)	12	12	alpin			SF Fr. 0905 to 1005 hr
FS 180 Depth(ft)	5397.0	5397.0	5332.0	0.0	0.0	FS Fr. 1005 to 1305 hr

	Field	1	2	3	4	
A. Init Hydro	2513.0	2513.0	2623.0	0.0	0.0	T STARTED 0515 hr
B. First Flow	122.0	121.0	42.0	0.0	0.0	T ON BOTM 0747 hr
B1. Final Flow	122.0	131.0	51.0	0.0	0.0	T OPEN 0750 hr
C. In Shut-in	211.0	200.0	172.0	0.0	0.0	T PULLED 1305 hr
D. Init Flow	133.0	141.0	65.0	0.0	0.0	T OUT 1555 hr
E. Final Flow	144.0	133.0	110.0	0.0	0.0	
F. Fl Shut-in	277.0	270.0	258.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2502.0	2513.0	2441.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	i	i	o			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 165000.00 lbs
						Initial Str Wt 102000.00 lbs
						Unseated Str Wt 102000.00 lbs

RECOVERY

Tot Fluid 20.00 ft of 20.00 ft in DC and 0.00 ft in DP
20.00 ft of Drilling mud
0.00 ft of 100% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 800.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak 1" blow.
Initial Shut-In:
No return.
Final Flow:
No blow @ open, weak 1" @ end of open
Final Shut-In:
No return.

SAMPLES:

SENT TO:

MUD DATA-----
Mud Type Chemical
Weight 9.00 lb/cf
Vis. 47.00 S/L
W.L. 7.60 in3
F.C. 0.00 in
Mud Drop N
Amt. of fill 0.00 ft
Btm. H. Temp. 125.00 F
Hole Condition good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Shane McBride
Co. Rep. Brad Rine
Contr. Cheyenne
Rig # 3
Unit #
Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Eubank D-5

LOCATION : 33-28-34 Haskell co KS

TICKET No. 13398 D.S.T. No. 4 DATE 9-19-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 27

TOTAL TOOL 57

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single Total 62

TOTAL ASSEMBLY 119

D.C. ABOVE TOOLS.Stands12 Single Total 710

D.P. ABOVE TOOLS.Stands Single Total 4577

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5406

TOTAL DEPTH 5400

TOTAL DRILL PIPE ABOVE K.B. 6

REMARKS:

Gas:

Oil:

Water:

Mud: 4,000 ml.

Total: 4,000 ml.

Pressure 60 psi.

P.O. SUB	
C.O. SUB 1'	5281
S.I. TOOL 5'	5287
sampler 3'	5290
HMV 5'	5295
JARS 5'	5300
SAFETY JOINT 2'	5302
PACKER top	5307
PACKER bottom	5312
DEPTH 5312	
1'	5313
ANCHOR 18'perf	5331
1' c.o.	5332
alpine recorder	5332
62' drillpipe	5394
1' c.o.	5395
ak-1 recorder	5397
BULLNOSE 5'bullplug perf	5400
T.D.	5400

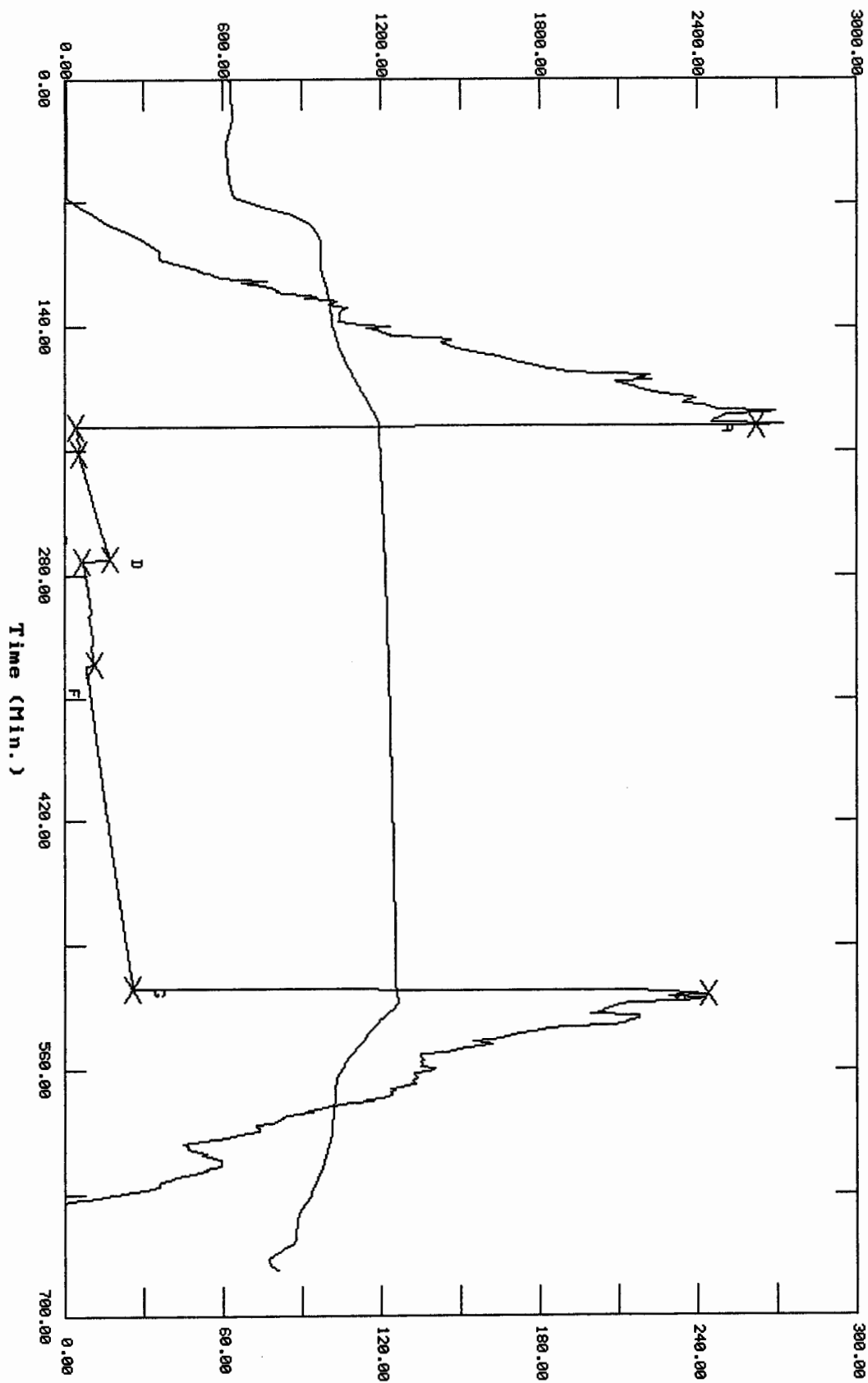
13398

DST #4 Eubank D-5 Helmerich & Payne Inc.

TEST HISTORY

Flag Points
t(Min.) P(PSig)

R:	0.00	2623.99
B:	0.00	42.10
C:	15.00	51.09
D:	59.00	172.36
E:	0.00	65.05
F:	59.00	110.63
G:	184.00	258.30
Q:	0.00	2441.46

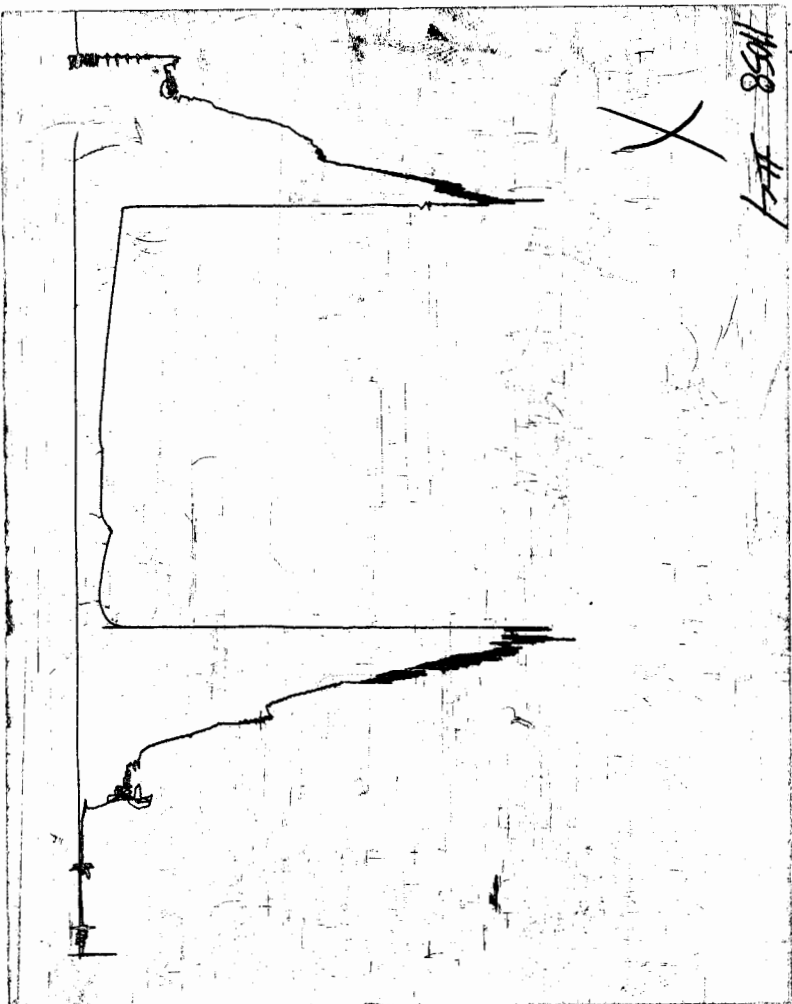


Pressure (PSig)

Temperature (DEG F)

Time (Min.)

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 13398 Date 9-19-00
Company Name Helmreich & Payne Inc.
Lease Cubank # D-5 Test No. _____
County Haskell, KS Sec. 33 Twp. 28 Rng. 34

SAMPLER RECOVERY

Gas - ML
Oil - ML
Mud 4,000 ML
Water - ML
Other - ML
Pressure 600 PSI
Total 4,000 Drilling Mud ML

PIT MUD ANALYSIS

Chlorides 800 ppm.
Resistivity 5.31 ohms @ 90° F
Viscosity 47
Mud Weight 9.0
Filtrate 7.6
Other LCM #5

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13399

Test Ticket

Well Name & No.	<u>Cubark #D-5</u>	Test No.	<u>#4</u>	Date	<u>9-19-00</u>
Company	<u>Helmerich & Payne Inc.</u>	Zone Tested	<u>Chester</u>		
Address	<u>1579 East 21st Tulsa, OK 74114</u>	Elevation	<u>3016'</u>	KB	<u>3005'</u> GL
Co. Rep / Geo.	<u>Brad Rine</u>	Cont.	<u>Cheyenne #3</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>33</u>	Twp.	<u>28.5</u>	Rge.	<u>34W</u> Co. <u>Haskell</u> State <u>KS</u>
No. of Copies	<u>None</u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>5312'</u>	<u>5400'</u>	Initial Str Wt./Lbs.	<u>102,000</u>	Unseated Str Wt./Lbs.	<u>102,000</u>
Anchor Length	<u>88'</u>		Wt. Set Lbs.	<u>26,000</u>	Wt. Pulled Loose/Lbs.	<u>165,000</u>
Top Packer Depth	<u>5307'</u>		Tool Weight	<u>4,000</u>		
Bottom Packer Depth	<u>5312'</u>		Hole Size — 7 7/8"	<u>✓</u>	Rubber Size — 6 3/4"	<u>✓</u>
Total Depth	<u>5400'</u>		Wt. Pipe Run	<u> </u>	Drill Collar Run	<u>710'</u>
Mud Wt.	<u>9.0</u>	LCM <u>#5</u> Vis. <u>47</u> WL <u>7.6</u>	Drill Pipe Size	<u>4 1/2 XH</u>	Ft. Run	<u>4639' H-90</u>
Blow Description	<u>weak 1'in blow</u>					

No return
No blow @ open, weak 1'in @ end of open
No return

Recovery — Total Feet	<u>20'</u>	GIP	<u> </u>	Ft. in DC	<u>20'</u>	Ft. in DP	<u> </u>
Rec.	<u>20'</u>	Feet Of	<u>Drilling Mud</u>	%gas	<u> </u>	%oil	<u> </u>
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	<u> </u>	%oil	<u> </u>
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	<u> </u>	%oil	<u> </u>
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	<u> </u>	%oil	<u> </u>
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	<u> </u>	%oil	<u> </u>
BHT	<u>125°</u>	°F Gravity	<u> </u>	°API D@	<u> </u>	°F Corrected Gravity	<u> </u>
RW	<u> </u>	@	<u> </u>	°F Chlorides	<u> </u>	ppm Recovery	<u>800</u>
						Chlorides	<u>800</u> ppm System

(A) Initial Hydrostatic Mud	<u>2513</u>	AK-1	<u>2623</u>	Alpine	PSI Recorder No.	<u>2346</u>	T-On Location	<u>12:15 AM. 5</u>
(B) First Initial Flow Pressure	<u>122</u>		<u>42</u>		PSI (depth)	<u>5332'</u>	T-Started	<u>05:15 AM.</u>
(C) First Final Flow Pressure	<u>122</u>		<u>51</u>		PSI Recorder No.	<u>11058</u>	T-Open	<u>07:50 AM</u>
(D) Initial Shut-In Pressure	<u>211</u>		<u>172</u>		PSI (depth)	<u>5397'</u>	T-Pulled	<u>13:05 pm.</u>
(E) Second Initial Flow Pressure	<u>133</u>		<u>65</u>		PSI Recorder No.	<u> </u>	T-Out	<u>15:55 pm</u>
(F) Second Final Flow Pressure	<u>144</u>		<u>110</u>		PSI (depth)	<u> </u>	T-Off Location	<u>17:30 p.m.</u>
(G) Final Shut-in Pressure	<u>277</u>		<u>258</u>		PSI Initial Opening	<u>15</u>	Test	<u>X 850</u>
(Q) Final Hydrostatic Mud	<u>2502</u>		<u>2441</u>		PSI Initial Shut-in	<u>60</u>	Jars	<u>X 200</u>
					Final Flow	<u>60</u>	Safety Joint	<u>X 50</u>
					Final Shut-in	<u>180</u>	Straddle	<u> </u>

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Approved By

Our Representative

Circ. Sub X N/C
Sampler X 200
Extra Packer
Elec. Rec. X 150
Mileage 78 miles 1 way 40
Other 5 hrs 150
TOTAL PRICE \$ 1640