

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 32429
Name: CRAWFORD OIL & GAS, INC.
Address: P. O. Box 51
City/State/Zip: Coldwater, Kansas 67029
Purchaser: Post Rock
Operator Contact Person: MARK PINNICK
Phone: (316) 582-2612
Contractor: Name: DUKE DRILLING CO., INC.
License: 5929
Wellsite Geologist: Jon D. Christensen
Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:
Operator: _____
Well Name: _____
Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to Enhr./SWD
 Plug Back _____ Plug Back Total Depth _____
 Commingled _____ Docket No. _____
 Dual Completion _____ Docket No. _____
 Other (SWD or Enhr.?) _____ Docket No. _____
02-10-00 02-21-00 2-28-00
Spud Date or Date Reached TD Completion Date or Recompletion Date

API No. 15 - 033-21049-0000
County: Comanche
25'S & 45'W of C W/2 SW NE Sec. 29 Twp. 33 S. R. 19 East West
2005 feet from S (N) (circle one) Line of Section
2355 feet from E W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
(circle one) (NE) SE NW SW
Lease Name: CHRISTOPHER Well #: 2
Well Name: COLLIER Flats East
Producing Formation: MISSISSIPPIAN
Elevation: Ground: 1954' Kelly Bushing: 1962'
Total Depth: 5515' Plug Back Total Depth: 5442
Amount of Surface Pipe Set and Cemented at 679' Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan AM-1, 8-2-'00 U.C.
(Data must be collected from the Reserve Pit)
Chloride content 12000 ppm Fluid volume 460 bbls
Dewatering method used haul off
Location of fluid disposal if hauled offsite:
Operator Name: GORDON KEANE
Lease Name: HARMON License No.: 5993
Quarter NW Sec. 11 Twp. 33 S. R. 20 East West
County: Comanche Docket No.: 22304

CONSERVATION DIVISION
Wichita, Kansas
MAY 26 2000

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Mark Pinnick
Title: SUPT. OF OPERATIONS Date: 5-25-00
Subscribed and sworn to before me this 25 day of May,
2000.
Notary Public: Pamela Price
Date Commission Expires: Feb. 29, 2004

NOTARY PUBLIC - State of Kansas
PAMELA PRICE
My Appt. Exp. 2-29-04

KCC Office Use ONLY

Letter of Confidentiality Attached

If Denied, Yes Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

KCC

Operator Name: CRAWFORD OIL & GAS, INC. Lease Name: CHRISTOPHER Well #: 2

Sec. 29 Twp. 33 S. R. 19 East West County: Comanche

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken Yes No
(Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
(Submit Copy)

List All E. Logs Run: _____

Log Formation (Top), Depth and Datum Sample

Name _____ Top _____ Datum _____

Comp. NEUTRON 4000'
HIGH RESOL. 680'
Cement Bond Loc 4480'

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./ Ft.	Setting Depth	Type of Cement	# Sacs Used	Type and Percent Additives
Conductor		20"		40'	10-Sk Grout		
Surface	12-1/4"	8-5/8"	24#	679'	Lite Class A	275 100	3%cc, 1/2# Flosea 2%gel, 3%cc
Production	7-7/8"	4-1/2"	19/5#	5495'	Class A	175	10% salt, 1/2# Gilsonite

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)		Depth
	6 SH/FT	5280-5296		300 Bbl H ₂ O 1000 T CO ₂ 1000 Bbls ACID 200 SK SAND	

TUBING RECORD		Size	Set At	Packer At	Liner Run
		2 3/8"	5305	NA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production, SWD or Enhr.		Producing Method			
5-1-00		<input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	100	20		

Disposition of Gas Vented Sold Used on Lease (If vented, Sumit ACO-18.)

METHOD OF COMPLETION Open Hole Perfor. Dually Comp. Commingled Other (Specify)

5280-5296'

ALLIED CEMENTING CO., INC.

1027

Federal Tax I.D.# 48-0727860

ORIGINAL

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT

med. lodg. ks

DATE 02-11-00	SEC. 29	TWP. 33s	RANGE 19w	CALLED OUT 11:00 P.M.	ON LOCATION 11:30 A.M.	JOB START 6:25 A.M.	JOB FINISH 7:30 A.M.
LEASE Christopher		WELL# 2	LOCATION Colchester, South to Jet.		COUNTY Comanche	STATE Ks.	
OLD OR <input checked="" type="radio"/> NEW (Circle one)		4w-3s-12w-5s					

CONTRACTOR Duke Ddq

TYPE OF JOB Surface Csg.

HOLE SIZE 12 1/4 T.D. 680'

CASING SIZE 8 5/8 x 24 DEPTH 670'

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX 400 MINIMUM 150

MEAS. LINE _____ SHOE JOINT 44.93

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT 40 1/2 Bbs. Fresh H₂O

EQUIPMENT _____

OWNER Crawford

CEMENT

AMOUNT ORDERED 2753x ALW + 39cc

1/4# Flo-Seal 100sx CLASS A

3%cc + 2%Gel

COMMON 100

POZMIX _____

GEL 2

CHLORIDE 13

ALW 275

Flo-Seal 69*

CONSERVATION DIVISION
Wichita, Kansas

MAY 26 2000

RECEIVED
STATE CORPORATION COMMISSION

PUMP TRUCK CEMENTER Larry Dreiling

261 HELPER Mark Brungardt

BULK TRUCK

240 DRIVER Rick W

BULK TRUCK

_____ DRIVER _____

HANDLING 375

MILEAGE 375 x 50

REMARKS:

SERVICE

Pipe on Bottom - Break Circ

2753x ALW + 3%cc + 1/4# Flo-Seal

100sx CLASS A + 3%cc + 2%Gel

Release Plug Displace Plug

w/ 40 1/2 Bbs Fresh H₂O Bump Plug

Shut In Cement

Did Circ.

DEPTH OF JOB 679'

PUMP TRUCK CHARGE 0.301

EXTRA FOOTAGE 379'

MILEAGE 50

PLUG Rubber 848"

CHARGE TO: Duke Ddq Co.

STREET P.O. Box 823

CITY GREAT BEND STATE KANSAS ZIP 67530

FLOAT EQUIPMENT

- 1- Baffle Plate
- 1- Basket
- 2- Centralizers

To Allied Cementing Co., Inc.

You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX _____

TOTAL CHARGE _____

DISCOUNT _____

SIGNATURE Mike Godfrey

Mike Godfrey
PRINTED NAME

JUN-30-2000 FRI 11:31 AM ACID SERVICES

318 672 5383

P. 11

TREATMENT REPORT 02031



Customer ID	Date
Customer <i>DAKE DRILLING CO. INC.</i>	<i>2-22-00</i>
Lease <i>CHITSI OPHOLE</i>	Lease No.
	Well # <i>2-</i>

Well Order # <i>22325</i>	Well Name <i>PLATT, Ws.</i>	Coating <i>4 1/2</i>	Depth	County <i>COMMERCE</i>	State <i>KS.</i>
Well Job <i>LONG STICKING - NEW WELL</i>	Formation	Legal Description <i>29-535-19W</i>			

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
casing Size	Tubing Size	Depth	Spacing	Acid	RATE	PRESS	ISP
<i>4 1/2</i>							
Depth	Depth	From	To	Pre Pad	Min		6 Min.
Volume	Volume	From	To	Pad	Min		10 Min.
Min Press	Min Press	From	To	Flush	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HP Used		Annulus Pressure
Top Depth	Footer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative <i>MICHAEL PEDERSEN</i>	Customer Manager <i>DAVE MARTIN</i>	Treater <i>MERVIN GARDNER</i>
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Injection Units	<i>107</i>	<i>23</i>	<i>34</i>	<i>70</i>				
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Time	Casing Pressure	Tubing Pressure	Wbs. Pumped	Rate	Service Log
<i>2:30</i>					<i>ON LOCATION 2-21-00</i>
					<i>RUN 5520.06 4 1/2 10.15' CTS LONG</i>
					<i>AUTO FILL FRONT SHOE LATCH DOWN</i>
					<i>BUFFLE IN 12' COLLAR</i>
					<i>CONTRACTOR - 1-4-7-10-13</i>
					<i>DRIP BALL BURNER FIRE FOR 1 HOUR</i>
<i>9:03</i>	<i>300</i>		<i>20</i>	<i>6</i>	<i>PUMP 20 661 H' FLUSH</i>
	<i>300</i>		<i>0</i>	<i>6</i>	<i>START MIX CEMENT (1500)</i>
	<i>100</i>		<i>44</i>	<i>6</i>	<i>FINISH MIX CEMENT</i>
					<i>SHOT DOWN - WASH LINE - DRIP PUC</i>
	<i>200</i>		<i>0</i>	<i>8</i>	<i>START 2% HCL 4% O DIST.</i>
	<i>300</i>		<i>66</i>	<i>8</i>	<i>START LEFT CEMENT</i>
	<i>600</i>		<i>82</i>	<i>4</i>	<i>SLOW RATE</i>
<i>10:40</i>	<i>1250</i>		<i>87</i>	<i>4</i>	<i>PUC DOWN</i>
					<i>RELEASE PSI - HELIX</i>
					<i>PUC R.H. & M.H. - 25 SEC.</i>
					<i>CONSIL UP - KICK UP</i>
<i>1:00</i>					<i>JOB COMPLETE</i>
					<i>THANKS</i>
					<i>MERVIN</i>



15-033-21049

WELL NAME: Christopher #2
COMPANY: Crawford Oil & Gas
LOCATION: 29-33s-19w
Comanche co KS
DATE: 2/24/00

ORIGINAL

TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Crawford Oil & Gas DATE 02-18-000
 WELL NAME: Christopher #2 KB 1962.00 ft TICKET NO: 12116 DST #1
 LOCATION : 29-33s-19w Comanche co KS GR 1954.00 ft FORMATION: Altamont
 INTERVAL : 5091.00 To 5117.00 ft TD 5117.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10248	10248	2342			PF Fr. 1815 to 1845 hr
SI 45 Range(Psi)	4400.0	4400.0	4995.0	0.0	0.0	IS Fr. 1845 to 1930 hr
SF 45 Clock(hrs)	12 hr	12 hr	batt.			SF Fr. 1930 to 2015 hr
FS 60 Depth(ft)	5114.0	5114.0	5096.0	0.0	0.0	FS Fr. 2015 to 2115 hr

	Field	1	2	3	4	
A. Init Hydro	2470.0	2442.0	2431.0	0.0	0.0	T STARTED 1525 hr
B. First Flow	30.0	45.0	34.0	0.0	0.0	T ON BOTM 1810 hr
B1. Final Flow	30.0	35.0	27.0	0.0	0.0	T OPEN 1815 hr
C. In Shut-in	202.0	194.0	188.0	0.0	0.0	T PULLED 2118 hr
D. Init Flow	34.0	57.0	26.0	0.0	0.0	T OUT 2345 hr
E. Final Flow	34.0	43.0	32.0	0.0	0.0	
F. Fl Shut-in	297.0	301.0	294.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2426.0	2422.0	2426.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	0	0	I	T		Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 70000.00 lbs
						Initial Str Wt 50000.00 lbs
						Unseated Str Wt 50000.00 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 0.00 ft
						D.P. Length 5091.00 ft

RECOVERY

Tot Fluid 30.00 ft of 0.00 ft in DC and 30.00 ft in DP
 270.00 ft of Gas in pipe.
 30.00 ft of Gas cut mud.
 0.00 ft of 15% gas 85% mud
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of Rw n.c. ohms @ degrees F.
 0.00 ft of EST.FT. OF PAY-----6
 SALINITY 5000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
 Weak to fair blow. (2-8").

Initial Shut-In:
 No blow.

Final Flow:
 Fair blow. (5 - 8")

Final Shut-In:
 No blow.

SAMPLES: None
 SENT TO:

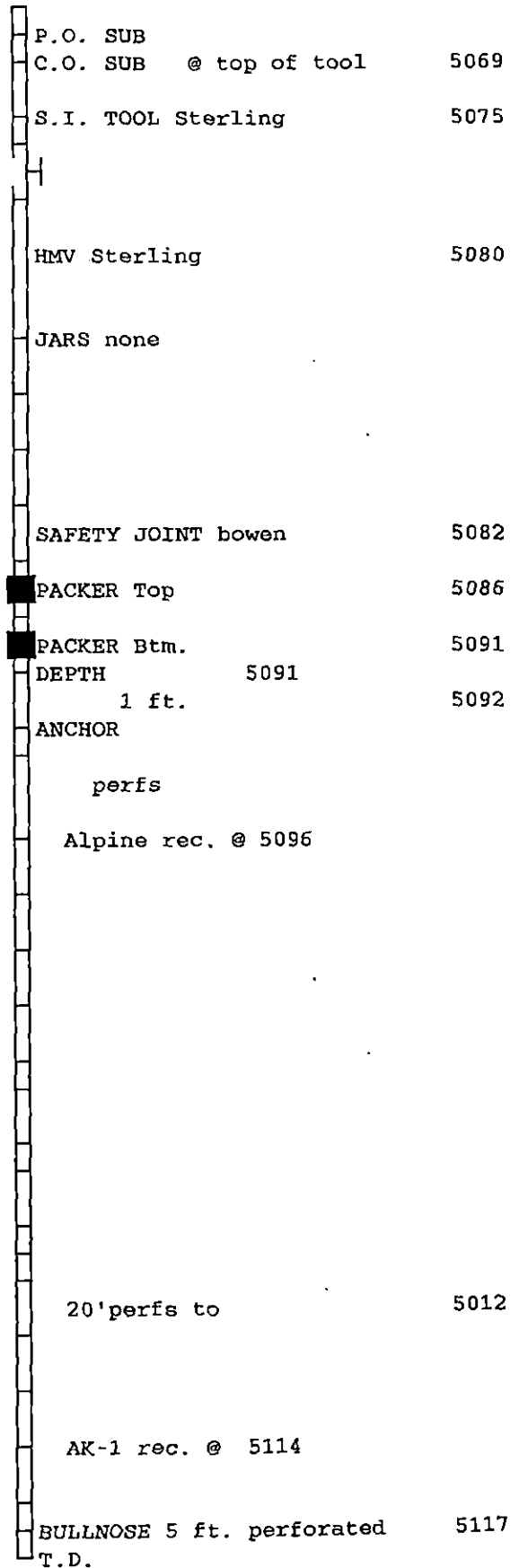
MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb.
Vis.	48.00 S/I
W.L.	8.00 in
F.C.	0.20 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	119.00 F
Hole Condition	good
% Porosity	10.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00 N
Cushion Type	None
Reversed Out N	
Tool Chased N	
Tester	Gary Pevoteaux
Co. Rep.	Jon Christensen
Contr.	Duke Drlg.
Rig #	1
Unit #	
Pump T.	LCM 5 #/bl

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Christopher #2
 LOCATION : 29-33s-19w Comanche co KS
 TICKET No. 12116 D.S.T. No. 1 DATE 02-18-000
 TOTAL TOOL TO BOTTOM OF TOP PACKERS 22
 INTERVAL TOOL
 BOTTOM PACKERS AND ANCHOR 26
 TOTAL TOOL 48
 DRILL COLLAR ANCHOR IN INTERVAL
 D.C. ANCHOR STND:Stands Single Total
 D.P. ANCHOR STND:Stands Single Total
 TOTAL ASSEMBLY 48
 D.C. ABOVE TOOLS:Stands Single Total
 D.P. ABOVE TOOLS:Stands82 Single Total 5091
 TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5139
 TOTAL DEPTH 5117
 TOTAL DRILL PIPE ABOVE K.B. 22
 REMARKS:
 Good oil scum at the top of the tool.



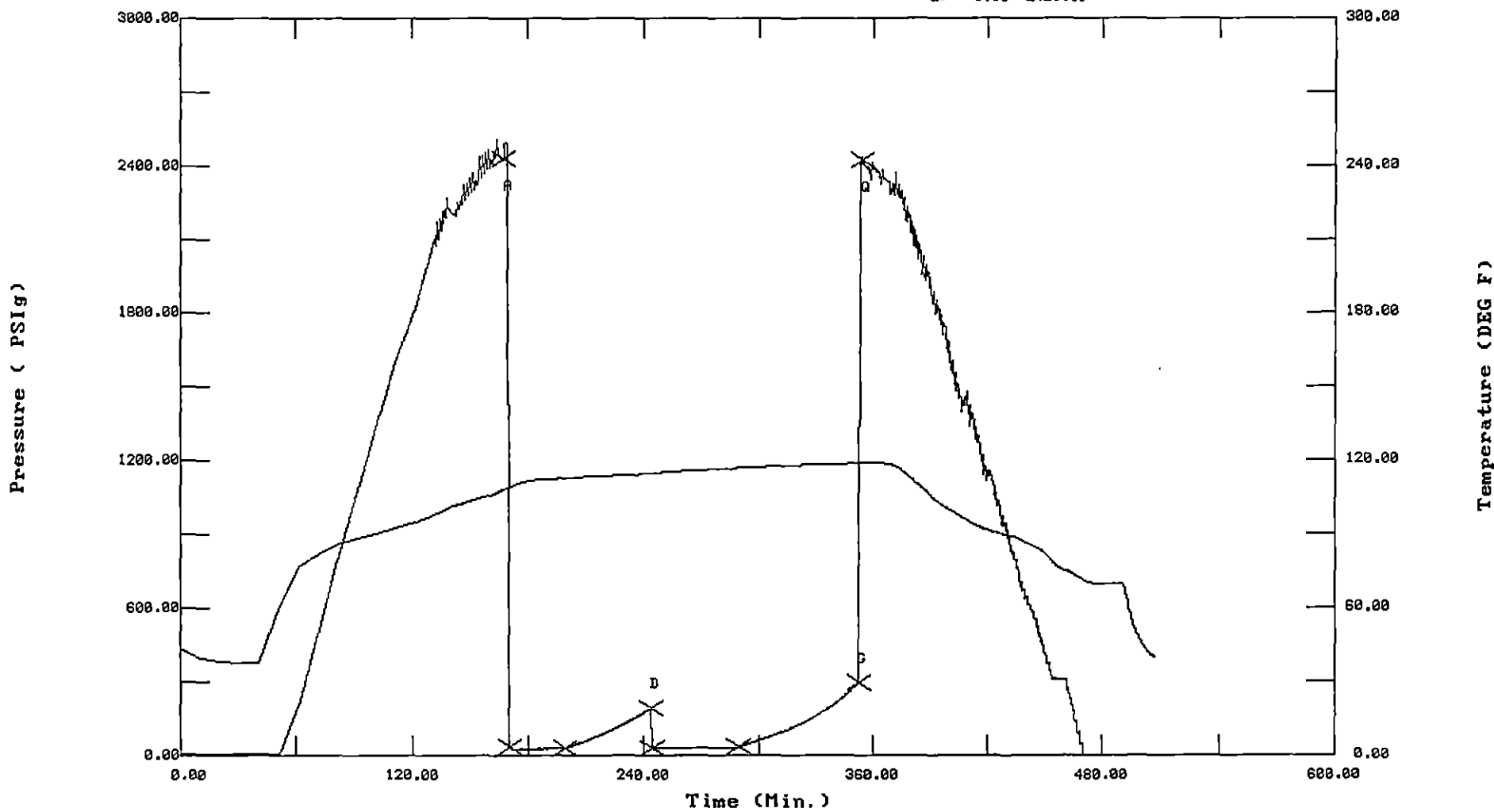
TEST HISTORY

12116 DST#1 CHRISTOPHER #2 CRAWFORD OIL & GAS

Flag Points

t(Min.) P(PSIg)

A:	0.00	2430.00
B:	0.00	34.49
C:	29.00	27.02
D:	44.50	187.91
E:	0.00	26.34
F:	45.00	31.55
G:	63.00	294.16
H:	0.00	2426.09



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

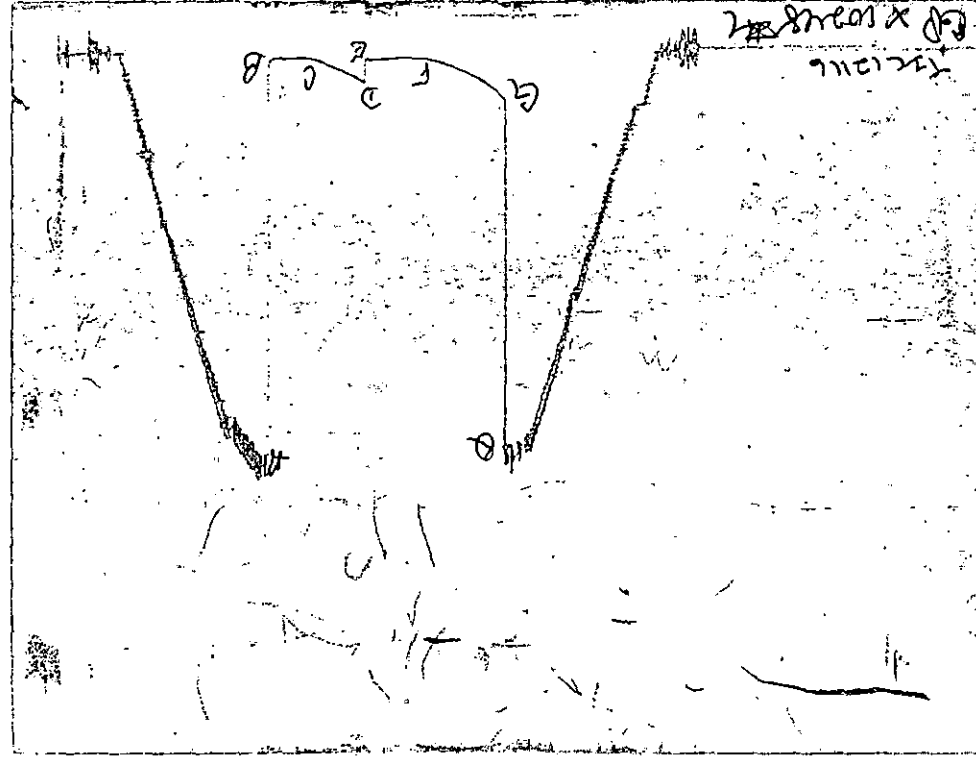


CHART PAGE

772 2686

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

N^o 12116

Test Ticket

Well Name & No. CHRISTOPHER #2 Test No. 1 Date 2-18-2000
 Company CRAWFORD OIL & GAS Zone Tested ALTAMONT
 Address P.O. BOX 454, MOORELAND OK-73843 Elevation 1962 KB 1954 GL
 Co. Rep / Geo. SON CHRISTENSEN Cont. DUKE DRUG #1 Est. Ft. of Pay 6 Por. %
 Location: Sec. 29 Twp. 33S Rge. 19W Co. COMANCHE State KS.
 No. of Copies 5 Distribution Sheet (Y, N) N Turnkey (Y, N) yes Evaluation (Y, N)

Interval Tested 5091 - 5117' Initial Str Wt/Lbs. 50,000 Unseated Str Wt/Lbs. 50,000
 Anchor Length 26' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 70,000
 Top Packer Depth 5086' Tool Weight 2,100 #
 Bottom Packer Depth 5091' Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓
 Total Depth 5117' Wt. Pipe Run NONE Drill Collar Run NONE
 Mud Wt. 9.2 LCM 5# Vis. 48 WL 8.0 cc. Drill Pipe Size 4 1/2" X.H. Ft. Run 5091'
 Blow Description IF: Weak to fair blow. (2-8") ISI: No blow.
FF: Fair blow. (5-8") FSI: No blow.

Recovery — Total Feet 30' GIP 270' Ft. in DC Ft. in DP 30'
 Rec. 30 Feet Of GCM. 15 %gas %oil %water 85 %mud
 Rec. Feet Of Good oil sum @ %gas %oil %water %mud
 Rec. Feet Of top of tool %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 BHT 119 °F Gravity N/A °API D@ °F Corrected Gravity N/A °API
 RW N.C. @ °F Chlorides 5,000 ppm Recovery Chlorides 5,000 ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	2470	2431		2342	1420
(B) First Initial Flow Pressure	30	31	PSI	(depth) 5096'	T-Started 1525
(C) First Final Flow Pressure	30	27	PSI	Recorder No. 10248	T-Open 1815
(D) Initial Shut-In Pressure	202	188	PSI	(depth) 5114'	T-Pulled 2118
(E) Second Initial Flow Pressure	34	26	PSI	Recorder No. <u> </u>	T-Out 2345
(F) Second Final Flow Pressure	34	32	PSI	(depth) <u> </u>	T-Off Location 2030
(G) Final Shut-in Pressure	297	294	PSI	Initial Opening 30	Test <u>✓</u> 800 ⁰⁰
(Q) Final Hydrostatic Mud	2426	2426	PSI	Initial Shut-in 45	Jars <u> </u>
				Final Flow 45	Safety Joint <u>✓</u> 50 ⁰⁰
				Final Shut-in 60	Straddle <u> </u>
					Circ. Sub <u> </u>
					Sampler <u> </u>
					Extra Packer <u> </u>
					Elec. Rec. <u>✓</u> 150 ⁰⁰
					Mileage <u> </u>
					Other <u> </u>
					TOTAL PRICE \$ <u>✓</u> 1,000 ⁰⁰

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 [Signature]
 Our Representative [Signature]

TRILOBITE TESTING L.L.C.

OPERATOR : Crawford Oil & Gas DATE 02-19-000
 WELL NAME: Christopher #2 KB 1962.00 ft TICKET NO: 12117 DST #2
 LOCATION : 29-33s-19w Comanche co KS GR 1954.00 ft FORMATION: Mississippi
 INTERVAL : 5299.00 To 5324.00 ft TD 5324.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10248	10248	2342			PF Fr. 0205 to 0235 hr
SI 45 Range (Psi)	4400.0	4400.0	4995.0	0.0	0.0	IS Fr. 0235 to 0320 hr
SF 60 Clock (hrs)	12 hr	12 hr	batt.			SF Fr. 0320 to 0420 hr
FS 90 Depth (ft)	5321.0	5321.0	5305.0	0.0	0.0	FS Fr. 0420 to 0550 hr

	Field	1	2	3	4	
A. Init Hydro	2589.0	2591.0	2608.0	0.0	0.0	T STARTED 2316 hr
B. First Flow	18.0	38.0	17.0	0.0	0.0	T ON BOTM 0200 hr
B1. Final Flow	21.0	34.0	15.0	0.0	0.0	T OPEN 0205 hr
C. In Shut-in	1563.0	1563.0	1564.0	0.0	0.0	T PULLED 0552 hr
D. Init Flow	18.0	42.0	15.0	0.0	0.0	T OUT 0825 hr
E. Final Flow	18.0	32.0	14.0	0.0	0.0	
F. Fl Shut-in	1747.0	1743.0	1738.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2536.0	2560.0	2580.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	0	0	I	T		Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 70000.00 lbs
						Initial Str Wt 52000.00 lbs
						Unseated Str Wt 52000.00 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 0.00 ft
						D.P. Length 5303.00 ft

RECOVERY

Tot Fluid 20.00 ft of 0.00 ft in DC and 20.00 ft in DP
 0.00 ft of Gas in all fluid free pipe.
 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 Rw n.c. ohms @ degrees F.
 0.00 ft of EST.FT. of PAY-----16
 SALINITY 7000.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----

Mud Type	Chemical
Weight	9.30 lb/c
Vis.	47.00 S/L
W.L.	10.00 in3
F.C.	0.20 in
Mud Drop N	

BLOW DESCRIPTION

Initial Flow:
 Strong blow. Bottom of bucket in 15 seconds.
 Initial Shut-In:
 No blow.

Final Flow:
 Strong blow. Gas to surface in 29 minutes. (see gas volume report)

Final Shut-In:
 No blow.

SAMPLES: None
 SENT TO: Caraway/Liberal

Amt. of fill	0.00 ft
Btm. H. Temp.	125.00 F
Hole Condition	good
% Porosity	10.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00 N
Cushion Type	None
Reversed Out N	
Tool Chased N	
Tester	Gary Pevoteaux
Co. Rep.	Jon Christensen
Contr.	Duke Drlg.
Rig #	1
Unit #	
Pump T.	LCM 6 #/bl

Test Successful: Y

GAS RECOVERY

COMPANY: Crawford Oil & Gas DATE: 02-19-000
WELL NAME: Christopher #2 KB Elev: 1962.00 ft TICKET #12117 DST #2
WELL LOCATION: 29-33s-19w Comanche co KS GR Elev: 1954.00 ft FORMATION: Mississippi
INTERVAL Fr.: 5299.00 To 5324.00 T.D.: 5324.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Adjusting Choke

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
30	0.25	0	5	3710.0
40	0.25	0	5	3710.0
50	0.25	0	5	3710.0
60	0.25	0	5	3710.0

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Christopher #2

LOCATION : 29-33s-19w Comanche co KS

TICKET No. 12117 D.S.T. No. 2 DATE 02-19-000

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 25

TOTAL TOOL 52

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 52

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands85 Single 1 Total 5303

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5355

TOTAL DEPTH 5324

TOTAL DRILL PIPE ABOVE K.B. 31

REMARKS:

	P.O. SUB	
	C.O. SUB @ top of tool	5272
	S.I. TOOL Sterling	5278
	HMV Sterling	5283
	JARS bowen	5288
	SAFETY JOINT bowen	5290
	PACKER Top	5294
	PACKER Btm.	5299
	DEPTH 1 ft.	5299
	ANCHOR	5300
	perfs	
	Alpine rec. @ 5305	
	19'perfs to	5319
	AK-1 rec. @ 5321	
	BULLNOSE 5 ft. perforated	5324
	T.D.	

TEST HISTORY

12117 DST#2 CHRISTOPHER #2 CRAWFORD OIL & GAS

Flag Points

t(Min.) P(PSIg)

R:	0.00	2607.71
B:	0.00	16.61
C:	29.00	14.60
D:	47.00	1564.07
E:	0.00	14.51
F:	57.50	13.51
G:	91.00	1737.88
Q:	0.00	2580.35

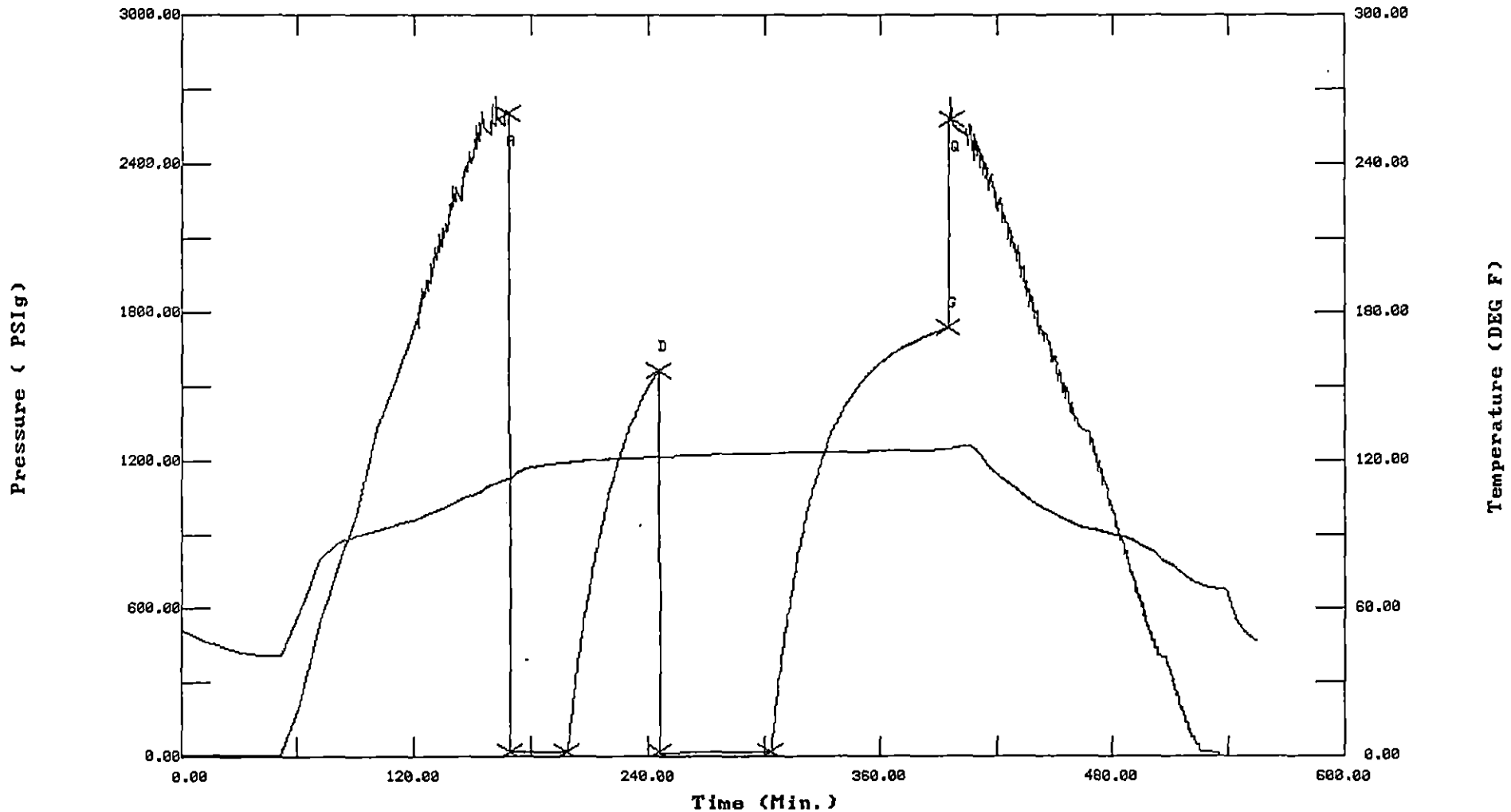
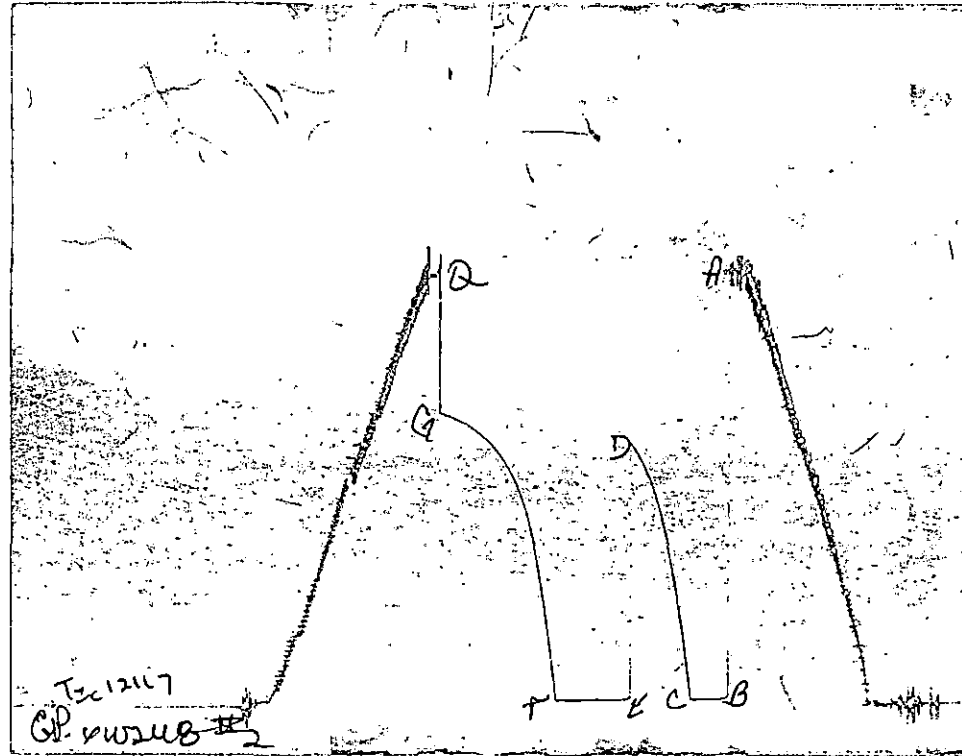
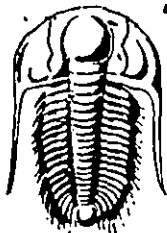


CHART PAGE



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



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

GAS VOLUME REPORT

CRAWFORD OIL & GAS
OPERATOR

CHRISTOPHER # 2
WELL NAME AND NO.

2
DST NO.

INITIAL OPEN

FINAL OPEN

Min.	Ins. of Water PSIG	Orifice Size	CF/D	Min.	Ins. of Water PSIG	Orifice Size	MCF/D
				29	—	1/4"	GTS
				30	5" in H ₂ O	1/4"	3.71
				40	5" in H ₂ O	1/4"	3.71
				50	5" in H ₂ O	1/4"	3.71
				60	5" in H ₂ O	1/4"	3.71

Remarks:

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

No 12117

Test Ticket

Well Name & No. <u>Christopher #2</u>	Test No. <u>2</u>	Date <u>2-19-2000</u>
Company <u>Crawford Oil & Gas</u>	Zone Tested <u>Miss.</u>	
Address <u>P.O. Box 454 Moorland OK. 73843</u>	Elevation <u>1962</u>	KB <u>1984</u> GL
Co. Rep / Geo. <u>Jon Christensen</u>	Cont. <u>Duke Dalg. #1</u>	Est. Ft. of Pay <u>16</u> Por. <u> </u> %
Location: Sec. <u>29</u> Twp. <u>33S</u>	Rge. <u>19W</u>	Co. <u>Comanche</u> State <u>Ks.</u>
No. of Copies <u>5</u>	Distribution Sheet (Y, N) <u>N</u>	Turnkey (Y, N) <u>yes</u> Evaluation (Y, N) <u> </u>

Interval Tested <u>5299 - 5324'</u>	Initial Str Wt./Lbs. <u>52,000</u>	Unseated Str Wt./Lbs. <u>52,000</u>
Anchor Length <u>25'</u>	Wt. Set Lbs. <u>20,600</u>	Wt. Pulled Loose/Lbs. <u>70,000</u>
Top Packer Depth <u>5294'</u>	Tool Weight <u>2100#</u>	
Bottom Packer Depth <u>5299'</u>	Hole Size — 7 7/8" <u>✓</u>	Rubber Size — 6 3/4" <u>✓</u>
Total Depth <u>5324'</u>	Wt. Pipe Run <u>None</u>	Drill Collar Run <u>None</u>
Mud Wt. <u>9.3</u> LCM <u>G#</u> Vis. <u>47</u> WL <u>10.0cc</u>	Drill Pipe Size <u>4 1/2" x 4 1/2"</u>	Ft. Run <u>5303'</u>
Blow Description <u>IF: Strong below. B.O.B. in 15 sec. FSI: No below.</u>		

FF: Strong below. GTS in 29 mins. (see gas volume report)
FSI: No below.

Recovery — Total Feet <u>20</u>	GIP <u>yes</u>	Ft. in DC <u> </u>	Ft. in DP <u>20</u>
Rec. <u>20</u> Feet Of <u>Dry. Mud.</u>	%gas	%oil	%water
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water

BHT 125 °F Gravity N/A °API D@ °F Corrected Gravity N/A °API
 RW N.C. @ °F Chlorides N.C. ppm Recovery Chlorides 7,000 ppm System

(A) Initial Hydrostatic Mud	AK-1 <u>2589</u>	Alpine <u>2608</u>	PSI	Recorder No. <u>2342</u>	T-On Location <u>2255</u>
(B) First Initial Flow Pressure	<u>18</u>	<u>17</u>	PSI	(depth) <u>5305'</u>	T-Started <u>2316</u>
(C) First Final Flow Pressure	<u>21</u>	<u>15</u>	PSI	Recorder No. <u>16248</u>	T-Open <u>0205</u>
(D) Initial Shut-in Pressure	<u>1563</u>	<u>1564</u>	PSI	(depth) <u>5321'</u>	T-Pulled <u>0552</u>
(E) Second Initial Flow Pressure	<u>18</u>	<u>15</u>	PSI	Recorder No. <u> </u>	T-Out <u>0825</u>
(F) Second Final Flow Pressure	<u>18</u>	<u>14</u>	PSI	(depth) <u> </u>	T-Off Location <u>0945</u>
(G) Final Shut-in Pressure	<u>1747</u>	<u>1738</u>	PSI	Initial Opening <u>30</u>	Test <u>✓ 800⁰⁰</u>
(Q) Final Hydrostatic Mud	<u>2536</u>	<u>2580</u>	PSI	Initial Shut-in <u>45</u>	Jars <u>✓ 200⁰⁰</u>
				Final Flow <u>60</u>	Safety Joint <u>✓ 50⁰⁰</u>
				Final Shut-in <u>20</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 [Signature]
 Our Representative [Signature]

Extra Packer
 Elec. Rec. ✓ 150⁰⁰
 Mileage
 Other
 TOTAL PRICE \$ ✓ 1200⁰⁰

RECEIVED
STATE CORPORATION COMMISSION

JON D. CHRISTENSEN
Consulting Geologist
100 S. Main, Suite 200
Wichita, KS 67202

GEOLOGIC
REPORT
LOG

MAY 26 2000

CONSERVATION DIVISION
Wichita, Kansas

API# 15-033-21049

COMPANY CRAWFORD OIL,
GAS & ENERGIES, INC.

WELL #2 CHRISTOPHER

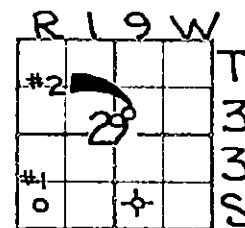
FIELD COLLIER FLATS EAST

LOCATION 2005' FNL & 2355' FEL

SEC. 29 TWP. 33S RGE. 19W

COUNTY COMANCHE

STATE KANSAS



PRODUCTION

ELEVATION KB 1962'
DF 1959'
GL 1954'

Drilling Measured From: KB

Samples Saved From 4000' To: 5515'

Drilling Time From 4000' To: 5515'

Samples Examined From: 4000' To: 5515'

Geological Supervision From 4000' To Total Dept

Wellsite Geologist JON CHRISTENSEN

Electrical Surveys BAKER ATLAS:

DILW/SP, FDC/CNLW/CAL

MICROLOG

OPERATOR CRAWFORD OIL, GAS & ENG.

CONTRACTOR DUKE DRIG. CO. RIG#1

COMM: 2/10/2000 COMP: 2/21/2000

CASING RECORD

SURF: 20" COND. AT 40'; 8 5/8" @ 679' w/ PROD: 4 1/2" e

TOTAL DEPTH DRILLERS: 375 SX. 5515'

TOTAL DEPTH LOG 5496'

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
HEEBNER SHALE	4332	4318	-2356'	+7'
LANSING	4519	4517	-2555	-12'
DRUM	4766	4750	-2788	+7'
STARK SHALE	4872	4860	-2898	+21'
SWOPE	4893	4878	-2916	+32'
BASE K.C.	5020	4999	-3037	+13'
MARMATON	5056	5036	-3074	+9'
ALTAMONT	5100	5085	-3123	+11'
PAWNEE	5147	5130	-3168	+11'
FORT SCOTT	5185	5166	-3204	+15'
CHEROKEE SHALE	5193	5176	-3214	+13'
DETRITAL MISS.	5296	5281	-3319	+16'
MISSISSIPPI	5315	5298	-3336	+10'
"LOWER SPERGEON"	5449	5432	-3470	+10'

REFERENCE WELL FOR STRUCTURE CRAWFORD OIL, GAS &
ENERGIES, INC. #1 CHRISTOPHER: C.SW SW SEC.
29-T33S-R19W, COMANCHE CO., KANSAS

15-033-21049

WELL NAME: Christopher #2
COMPANY: Crawford Oil & Gas
LOCATION: 29-33s-19w
Comanche co KS
DATE: 2/24/00

ORIGINAL

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Christopher #2

LOCATION : 29-33s-19w Comanche co KS

TICKET No. 12116 D.S.T. No. 1 DATE 02-18-000

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 26

TOTAL TOOL 48

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND:Stands Single Total

D.P. ANCHOR STND:Stands Single Total

TOTAL ASSEMBLY 48

D.C. ABOVE TOOLS:Stands Single Total

D.P. ABOVE TOOLS:Stands82 Single Total 5091

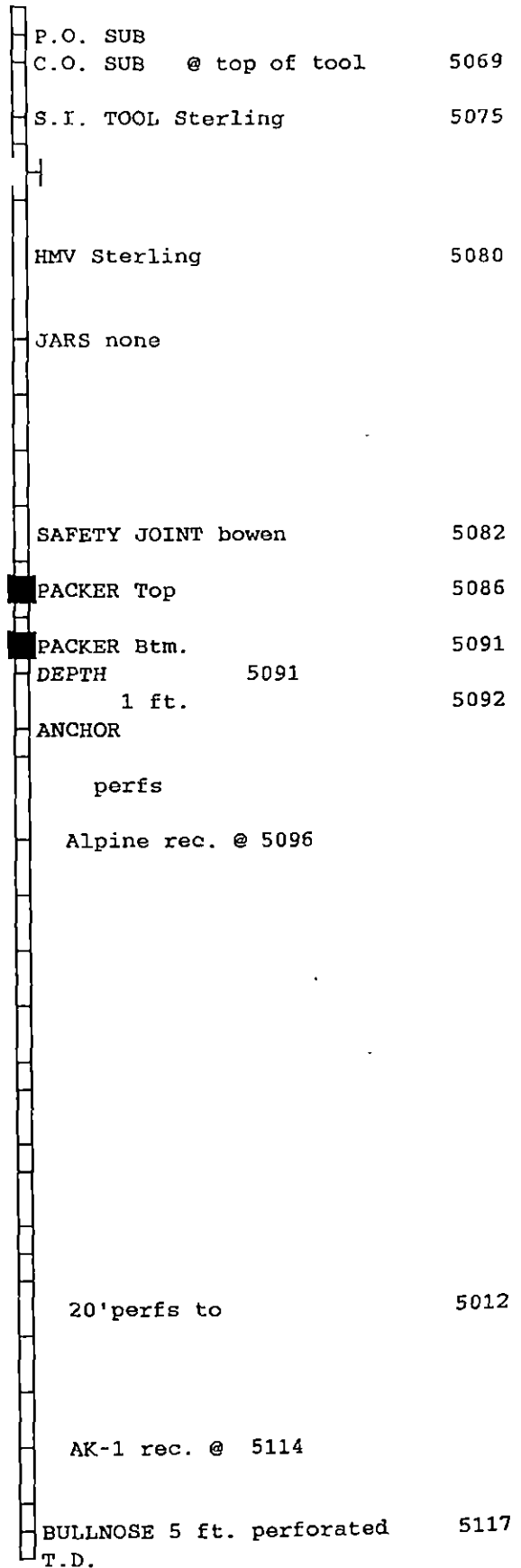
TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5139

TOTAL DEPTH 5117

TOTAL DRILL PIPE ABOVE K.B. 22

REMARKS:

Good oil scum at the top of the tool.



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

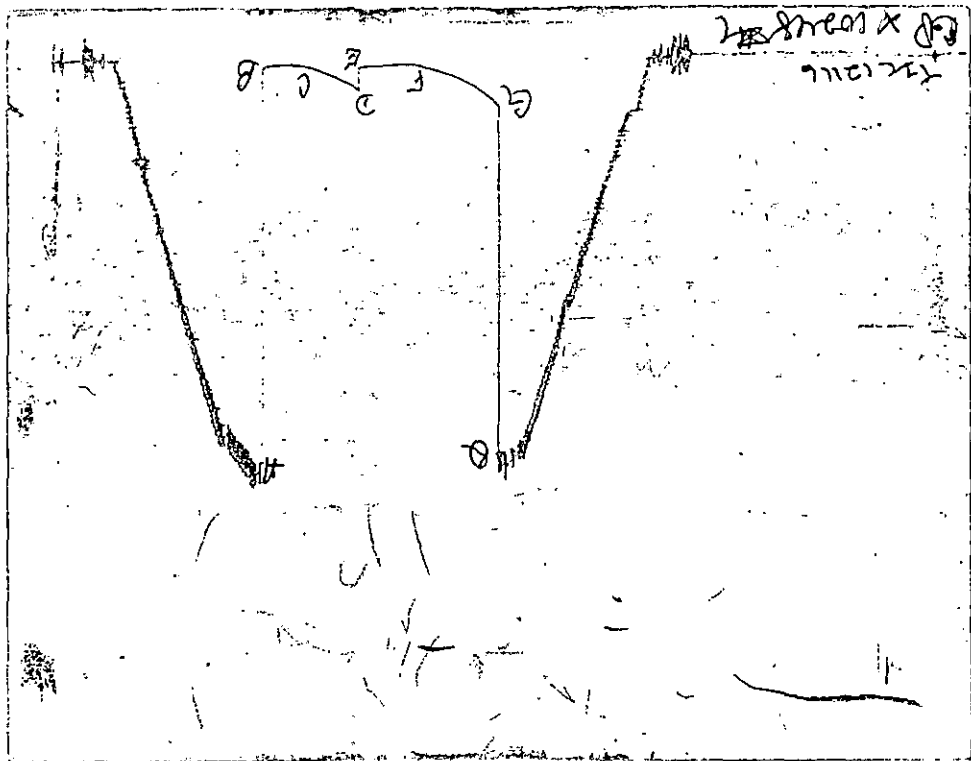


CHART PAGE

GAS RECOVERY

COMPANY: Crawford Oil & Gas DATE: 02-19-000
WELL NAME: Christopher #2 KB Elev: 1962.00 ft TICKET #12117 DST #2
WELL LOCATION: 29-33s-19w Comanche co KS GR Elev: 1954.00 ft FORMATION: Mississippi
INTERVAL Fr.: 5299.00 To 5324.00 T.D.: 5324.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Adjusting Choke

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
30	0.25	0	5	3710.0
40	0.25	0	5	3710.0
50	0.25	0	5	3710.0
60	0.25	0	5	3710.0

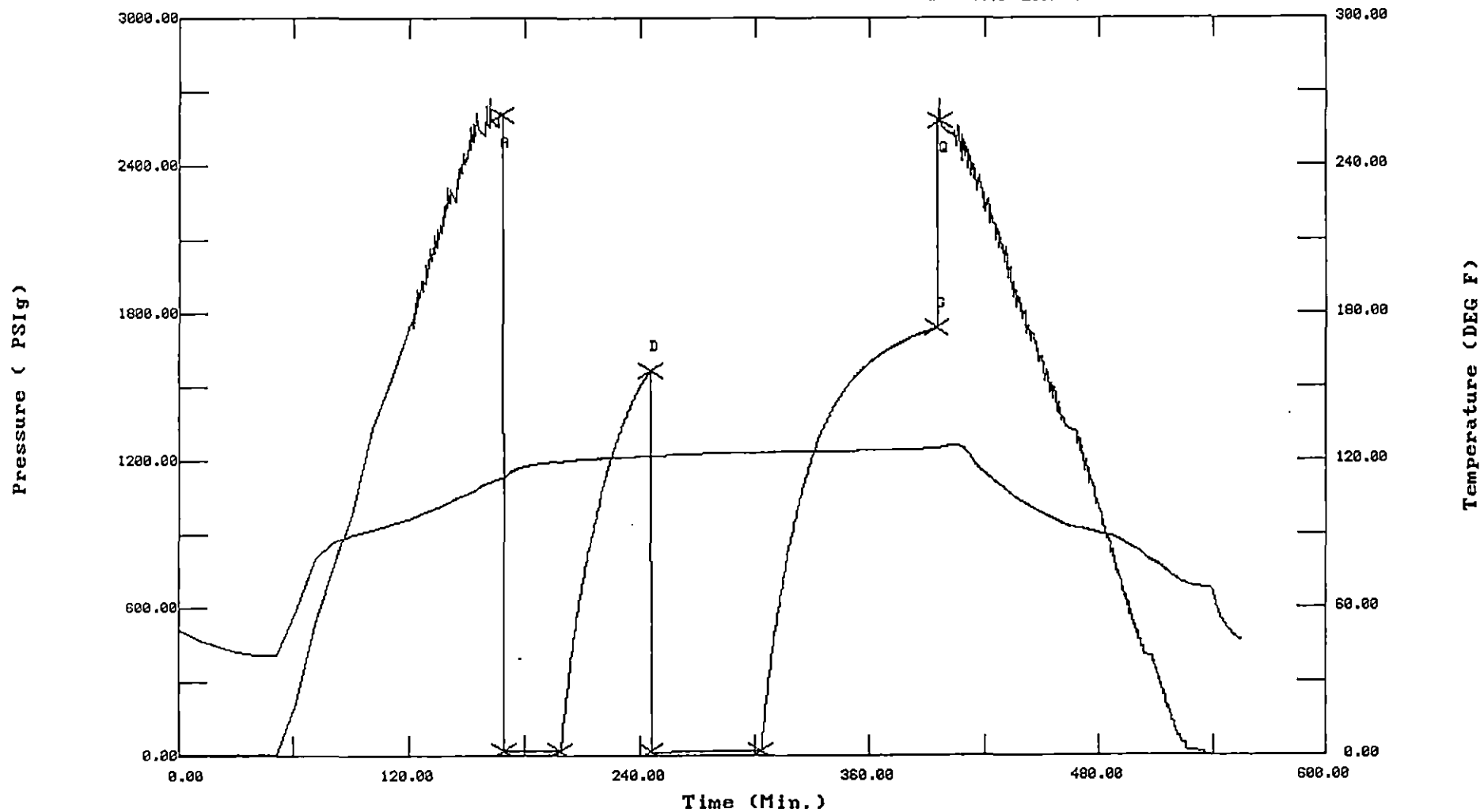
TEST HISTORY

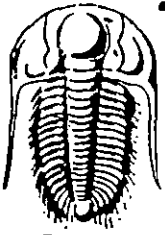
12117 DST#2 CHRISTOPHER #2 CRAWFORD OIL & GAS

Flag Points

t(Min.) P(PSig)

A:	0.00	2607.71
B:	0.00	16.61
C:	29.00	14.60
D:	47.00	1564.07
E:	0.00	14.51
F:	57.50	13.51
G:	91.00	1737.88
Q:	0.00	2500.35





TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

GAS VOLUME REPORT

CRAWFORD OIL & GAS
OPERATOR

CHRISTOPHER # 2
WELL NAME AND NO.

2
DST NO.

INITIAL OPEN { FINAL OPEN

Min.	Ins. of Water PSIG	Orifice Size	CF/D	Min.	Ins. of Water PSIG	Orifice Size	SCFD
				29	—	1/4"	675
				30	5" in H ₂ O	1/4"	3.71
				40	5" in H ₂ O	1/4"	3.71
				50	5" in H ₂ O	1/4"	3.71
				60	5" in H ₂ O	1/4"	3.71

Remarks:



P.O. BOX 1006
PRATT, KANSAS 67124
(316) 672-9508 Phone/(316) 672-9509 Fax

October 31, 2000

Kansas Corporation Commission
Attn: Jim Hemmen
130 S. Market, Room 2078
Wichita, KS 67202-3802

RE: Status on Crawford Oil and Gas Well Tests

Dear Jim:

At the request of your October 27, 2000 letter I have contacted Crawford Oil and Gas by phone and faxed them your letter.

The Christopher #2 is still awaiting a pumping unit and is currently not able to flow. The #1 is not yet able to flow. We will wait on Crawford to call us when both wells are able to be tested.

Their gathering system is still not yet completely up and running and has a few wells flowing into it. The original compressor had to be changed out and the replacement is not yet leveled out. They are also setting pumping units on some of the wells we 4-pointed.

It looks as though we will wait for Crawford Oil and Gas to ready their wells for testing. At this point the rest of their wells will be scheduled after the proper equipment is set for continuous flow. I will await their instructions as to scheduling each well.

At this time I'm sure it will be several weeks before either of the Christopher wells are ready to test and your November 5th deadline would be expired. I will call you when Crawford has the equipment ready for them to be tested.

If you have any other questions please direct them to Pam at Crawford Oil and Gas.

Sincerely,

Steve E. McClain, President of
Sterling Drilling Company

RECEIVED
STATE CORPORATION COMMISSION

NOV 1 2000

CONSERVATION DIVISION
Wichita, Kansas