

15-033-21057

ORIGINAL

*Ind*

## Computer Inventoried

**WELL NAME:** #1 O. Blount  
**COMPANY:** Crawford Oil & Gas, Inc.  
**LOCATION:** 3-34s-18w  
Comanche co KS  
**DATE:** 5/5/00

RECEIVED  
STATE CORPORATION COMMISSION

AUG - 9 2000

CONSERVATION DIVISION  
Wichita, Kansas

## TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Crawford Oil &amp; Gas

DATE 04/26/200

WELL NAME: #1-O.Blount

KB 1918.00 ft

TICKET NO: 12827

DST #1

LOCATION : 3-34s-18w Comanche co KS

GR 1910.00 ft

FORMATION: Pawnee

INTERVAL : 5151.00 To 5178.00 ft

TD 5178.00 ft

TEST TYPE: CONVENTIONAL

## RECORDER DATA

| Mins              | Field  | 1      | 2      | 3   | 4   | TIME DATA-----         |
|-------------------|--------|--------|--------|-----|-----|------------------------|
| PF 30 Rec.        | 10991  | 10991  | 2350   |     |     | PF Fr. 0103 to 0133 hr |
| SI 45 Range(Psi ) | 4200.0 | 4200.0 | 4995.0 | 0.0 | 0.0 | IS Fr. 0133 to 0218 hr |
| SF 45 Clock(hrs)  | 12hr.  | 12hr.  | elec.  |     |     | SF Fr. 0218 to 0303 hr |
| FS 60 Depth(ft )  | 5173.0 | 5173.0 | 5157.0 | 0.0 | 0.0 | FS Fr. 0303 to 0403 hr |

|                | Field  | 1      | 2      | 3   | 4   |                               |
|----------------|--------|--------|--------|-----|-----|-------------------------------|
| A. Init Hydro  | 2617.0 | 2568.0 | 2586.0 | 0.0 | 0.0 | T STARTED 2224 hr             |
| B. First Flow  | 43.0   | 75.0   | 45.0   | 0.0 | 0.0 | T ON BOTM 0100 hr             |
| B1. Final Flow | 53.0   | 55.0   | 64.0   | 0.0 | 0.0 | T OPEN 0103 hr                |
| C. In Shut-in  | 1850.0 | 1841.0 | 1850.0 | 0.0 | 0.0 | T PULLED 0403 hr              |
| D. Init Flow   | 75.0   | 80.0   | 62.0   | 0.0 | 0.0 | T OUT 0615 hr                 |
| E. Final Flow  | 85.0   | 80.0   | 102.0  | 0.0 | 0.0 |                               |
| F. Fl Shut-in  | 1829.0 | 1829.0 | 1849.0 | 0.0 | 0.0 | TOOL DATA-----                |
| G. Final Hydro | 2607.0 | 2559.0 | 2526.0 | 0.0 | 0.0 | Tool Wt. 2100.00 lbs          |
| Inside/Outside | 0      | 0      | I      |     |     | Wt Set On Packer 20000.00 lbs |
|                |        |        |        |     |     | Wt Pulled Loose 59000.00 lbs  |
|                |        |        |        |     |     | Initial Str Wt 48000.00 lbs   |
|                |        |        |        |     |     | Unseated Str Wt 49000.00 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 29.41 ft          |
|                |        |        |        |     |     | D.P. Length 5120.59 ft        |

## RECOVERY

Tot Fluid 160.00 ft of 29.00 ft in DC and 131.00 ft in DP  
 1000.00 ft of Gas in pipe.  
 40.00 ft of Slightly gas & water cut mud  
 0.00 ft of 2% gas 8% water 90% mud  
 120.00 ft of Slightly mud cut water  
 0.00 ft of 95% water 5% mud  
 0.00 ft of  
 0.00 ft of  
 0.00 ft of

SALINITY 85000.00 P.P.M. A.P.I. Gravity 0.00

## BLOW DESCRIPTION

## Initial Flow:

Weak blow built to bottom of bucket  
 in 10 minutes.

## Initial Shut-In:

Bled down for 2 minutes. No blow back

## Final Flow:

Weak blow bottom of bucket in 34  
 minutes.

## Final Shut-In:

Bled down for 5 minutes. No blow back

## SAMPLES:

## SENT TO:

## MUD DATA-----

| Mud Type   | Chemical   |
|------------|------------|
| Weight     | 9.20 lb/c: |
| Vis.       | 59.00 S/L  |
| W.L.       | 15.20 in3  |
| F.C.       | 0.32 in    |
| Mud Drop N |            |

|                |          |
|----------------|----------|
| Amt. of fill   | 0.00 ft  |
| Btm. H. Temp.  | 126.00 F |
| Hole Condition | good     |
| % Porosity     | 0.00     |
| Packer Size    | 6.75 in  |
| No. of Packers | 2        |
| Cushion Amt.   | 0.00 n   |
| Cushion Type   | none     |
| Reversed Out N |          |
| Tool Chased N  |          |

|          |                  |
|----------|------------------|
| Tester   | Darren L.Amerine |
| Co. Rep. | Jon Christensen  |
| Contr.   | Duke             |
| Rig #    | 1                |
| Unit #   | none             |
| Pump T.  | none             |

Test Successful: Y

\*\*\* TOOL DIAGRAM \*\*\* CONVENTIONAL

WELL NAME: #1-O.Blount

LOCATION : 3-34s-18w Comanche co KS

TICKET No. 12827 D.S.T. No. 1 DATE 04/26/200

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 23

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 27

TOTAL TOOL ..... 50

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands Single 1 Total 29.41

D.P. ABOVE TOOLS.Stands82 Single Total 5120.59

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5200

TOTAL DEPTH ..... 5178

TOTAL DRILL PIPE ABOVE K.B. .... 22

REMARKS:

Slight plugging on initial flow period.

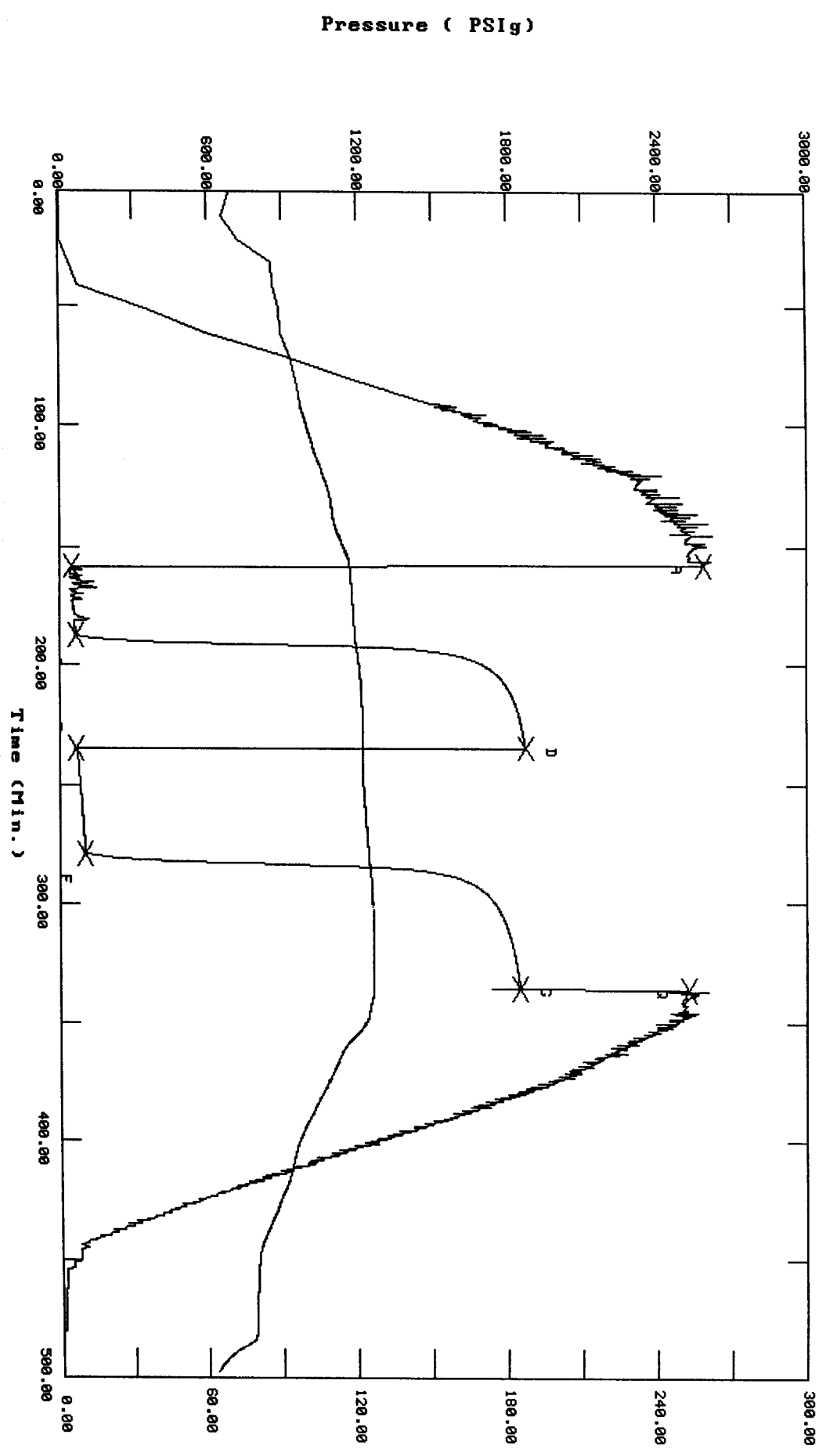
|                             |      |
|-----------------------------|------|
| P.O. SUB top of tool @      | 5129 |
| C.O. SUB                    | 5130 |
| S.I. TOOL                   | 5135 |
| HMV                         | 5140 |
| JARS                        |      |
| SAFETY JOINT                | 5142 |
| PACKER                      | 5146 |
| PACKER                      | 5151 |
| DEPTH 5151                  |      |
| 1'to                        | 5152 |
| ANCHOR 21'of perms.to       | 5173 |
| Alpine rec.@ 5157           |      |
|                             | 5173 |
| Ak-1 rec.@ 5175             |      |
| BULLNOSE 5'bullnose to T.D. | 5178 |

TK#12827 DST#1 #1-0. Blount Crawford Oil & Gas, Inc.

# TEST HISTORY

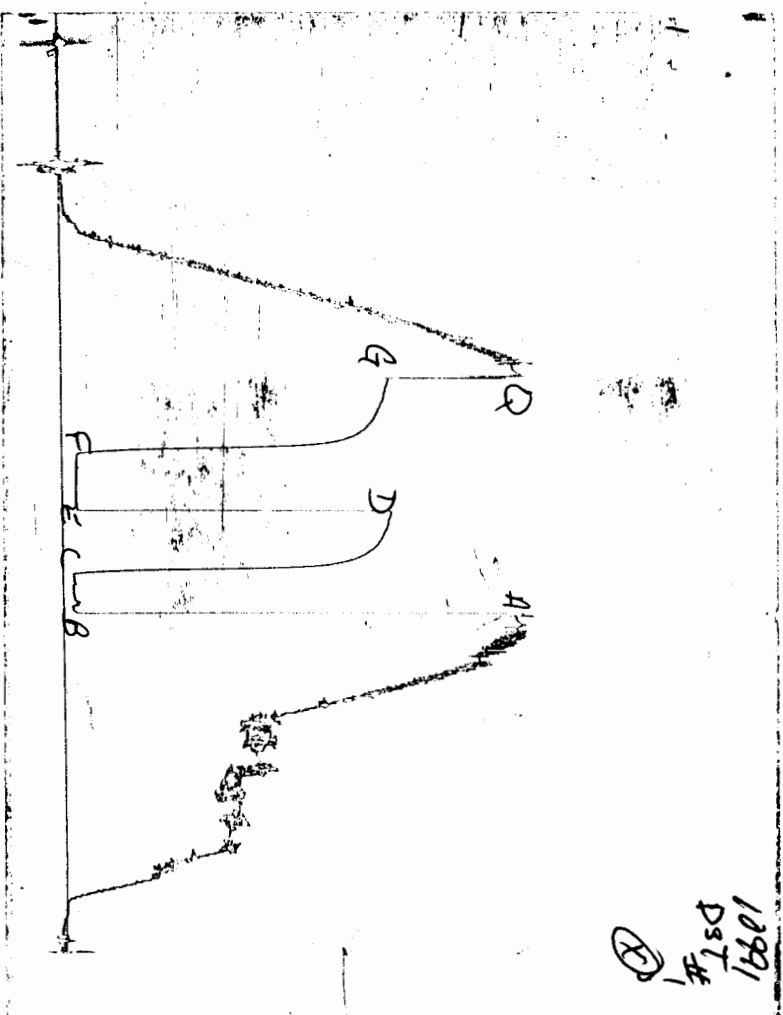
Flag Points  
t (Min.) P (PSig)

|    |       |         |
|----|-------|---------|
| A: | 0.00  | 2586.31 |
| B: | 0.00  | 44.98   |
| C: | 29.33 | 63.51   |
| D: | 47.50 | 1870.41 |
| E: | 0.00  | 61.76   |
| F: | 43.50 | 101.71  |
| G: | 56.67 | 1848.92 |
| Q: | 0.00  | 2525.55 |



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

## Test Ticket

Nº 12827

|                 |                          |                           |          |                   |            |
|-----------------|--------------------------|---------------------------|----------|-------------------|------------|
| Well Name & No. | #10. Blount              | Test No.                  | #1       | Date              | 04/26/2000 |
| Company         | Crawford Oil & Gas, Inc. | Zone Tested               | Lawrence |                   |            |
| Address         |                          | Elevation                 | 1918     | KB                | 1910 GL    |
| Co. Rep / Geo.  | Jon Christensen          | Cont.                     | Duke #1  | Est. Ft. of Pay   | Por. %     |
| Location: Sec.  | 3                        | Twp.                      | 345      | Rge.              | 18W        |
|                 |                          |                           |          | Co.               | Comanche   |
|                 |                          |                           |          | State             | TX         |
| No. of Copies   | 5                        | Distribution Sheet (Y, N) | —        | Turnkey (Y, N)    | —          |
|                 |                          |                           |          | Evaluation (Y, N) | —          |

|                     |                                                                                                                                                                 |                      |            |                       |         |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------------------|---------|
| Interval Tested     | 5151' - 5178'                                                                                                                                                   | Initial Str Wt./Lbs. | 4800       | Unseated Str Wt./Lbs. | 4900    |
| Anchor Length       | 27'                                                                                                                                                             | Wt. Set Lbs.         | 2000       | Wt. Pulled Loose/Lbs. | 3600    |
| Top Packer Depth    | 5146'                                                                                                                                                           | Tool Weight          | 2100       |                       |         |
| Bottom Packer Depth | 5151'                                                                                                                                                           | Hole Size — 7 7/8"   | ✓          | Rubber Size — 6 3/4"  | ✓       |
| Total Depth         | 5178'                                                                                                                                                           | Wt. Pipe Run         | N/A        | Drill Collar Run      | 294     |
| Mud Wt.             | 9.2 LCM 2.5# Vis. 59 WL 15.2                                                                                                                                    | Drill Pipe Size      | 4 1/2 x 11 | Ft. Run               | 5120.59 |
| Blow Description    | IF: Weak blow built to h.o. bin 10 mins<br>IST: Bled down for 2 mins No blow back.<br>FF: Weak blow h.o. bin 34 mins<br>EST: Bled down for 5 mins No blow back. |                      |            |                       |         |

|                       |       |            |             |           |           |                      |              |
|-----------------------|-------|------------|-------------|-----------|-----------|----------------------|--------------|
| Recovery — Total Feet | 160'  | GIP        | 1000'       | Ft. in DC | 29        | Ft. in DP            | 131'         |
| Rec.                  | 40    | Feet Of    | SLCM        | 2 %gas    | %oil      | 8 %water             | 90 %mud      |
| Rec.                  | 120'  | Feet Of    | SMCW        | %gas      | %oil      | 25 %water            | 5 %mud       |
| Rec.                  | 1000' | Feet Of    | Gas In pipe | %gas      | %oil      | %water               | %mud         |
| Rec.                  |       | Feet Of    |             | %gas      | %oil      | %water               | %mud         |
| Rec.                  |       | Feet Of    |             | %gas      | %oil      | %water               | %mud         |
| BHT                   | 126°  | °F Gravity |             | °API D@   |           | °F Corrected Gravity |              |
| RW                    | .11   | @          | 60°         | °F        | Chlorides | 85000                | ppm Recovery |
|                       |       |            |             |           | Chlorides | 6800                 | ppm System   |

|                                  |      |      |      |        |                     |       |                |       |
|----------------------------------|------|------|------|--------|---------------------|-------|----------------|-------|
| (A) Initial Hydrostatic Mud      | 2617 | AK-1 | 2586 | Alpine | PSI Recorder No.    | 2350  | T-On Location  | 2130  |
| (B) First Initial Flow Pressure  | 43   |      | 45   |        | PSI (depth)         | 5152' | T-Started      | 2224  |
| (C) First Final Flow Pressure    | 53   |      | 64   |        | PSI Recorder No.    | 10991 | T-Open         | 0103  |
| (D) Initial Shut-In Pressure     | 1850 |      | 1820 |        | PSI (depth)         | 5175' | T-Pulled       | 0403  |
| (E) Second Initial Flow Pressure | 75   |      | 62   |        | PSI Recorder No.    |       | T-Out          | 0615  |
| (F) Second Final Flow Pressure   | 85   |      | 102  |        | PSI (depth)         |       | T-Off Location | 0730  |
| (G) Final Shut-in Pressure       | 1829 |      | 1849 |        | PSI Initial Opening | 30    | Test           | ✓ 800 |
| (Q) Final Hydrostatic Mud        | 2607 |      | 2526 |        | PSI Initial Shut-in | 45    | Jars           |       |
|                                  |      |      |      |        | Final Flow          | 45    | Safety Joint   | ✓ 50  |
|                                  |      |      |      |        | Final Shut-in       | 60    | Straddle       |       |

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 Jon Christensen

Our Representative Darren Schmeier

Circ. Sub \_\_\_\_\_  
Sampler \_\_\_\_\_  
Extra Packer \_\_\_\_\_  
Elec. Rec. ✓ 150  
Mileage \_\_\_\_\_  
Other \_\_\_\_\_  
TOTAL PRICE \$ 1000

TRILOBITE TESTING L.L.C.

OPERATOR : Crawford Oil & Gas, Inc.  
WELL NAME: #1 O.Blount  
LOCATION : 3-34s-18w Comanche co KS  
INTERVAL : 5283.00 To 5350.00 ft

DATE 04/28/200  
KB 1918.00 ft TICKET NO: 12828 DST #2  
GR 1910.00 ft FORMATION: Mississippi  
TD 5350.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

| Mins              | Field  | 1      | 2      | 3   | 4   | TIME DATA-----         |
|-------------------|--------|--------|--------|-----|-----|------------------------|
| PF 30 Rec.        | 10991  | 10991  | 2350   |     |     | PF Fr. 0612 to 0642 hr |
| SI 45 Range(Psi ) | 4200.0 | 4200.0 | 4995.0 | 0.0 | 0.0 | IS Fr. 0642 to 0727 hr |
| SF 45 Clock(hrs)  | 12hr.  | 12hr.  | elec.  |     |     | SF Fr. 0727 to 0812 hr |
| FS 90 Depth(ft )  | 5347.0 | 5347.0 | 5289.0 | 0.0 | 0.0 | FS Fr. 0812 to 0942 hr |

|                | Field  | 1      | 2      | 3   | 4   |                               |
|----------------|--------|--------|--------|-----|-----|-------------------------------|
| A. Init Hydro  | 2743.0 | 2729.0 | 2739.0 | 0.0 | 0.0 | T STARTED 0233 hr             |
| B. First Flow  | 43.0   | 51.0   | 27.0   | 0.0 | 0.0 | T ON BOTM 0609 hr             |
| B1. Final Flow | 43.0   | 43.0   | 33.0   | 0.0 | 0.0 | T OPEN 0612 hr                |
| C. In Shut-in  | 1871.0 | 1873.0 | 1883.0 | 0.0 | 0.0 | T PULLED 0942 hr              |
| D. Init Flow   | 53.0   | 47.0   | 21.0   | 0.0 | 0.0 | T OUT 1140 hr                 |
| E. Final Flow  | 53.0   | 40.0   | 46.0   | 0.0 | 0.0 |                               |
| F. Fl Shut-in  | 1903.0 | 1901.0 | 1901.0 | 0.0 | 0.0 | TOOL DATA-----                |
| G. Final Hydro | 2732.0 | 2684.0 | 2624.0 | 0.0 | 0.0 | Tool Wt. 2100.00 lbs          |
| Inside/Outside | 0      | 0      | I      |     |     | Wt Set On Packer 20000.00 lbs |
|                |        |        |        |     |     | Wt Pulled Loose 58000.00 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 29.14 ft          |
|                |        |        |        |     |     | D.P. Length 5271.59 ft        |

RECOVERY

Tot Fluid 20.00 ft of 20.00 ft in DC and 0.00 ft in DP  
5249.00 ft of Gas in pipe.  
20.00 ft of Slightly gas cut mud  
0.00 ft of 10% gas 90% 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  
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:  
Strong blow bottom of bucket in 30 seconds.  
Initial Shut-In:  
Bled down for 2 minutes. No blow back  
Final Flow:  
Strong blow bottom of bucket in 20 seconds. Gas to surface in 10 minutes  
Gauge gas.  
Final Shut-In:  
Bled down for 10 minutes.

SAMPLES: Caraway Analytical, 728 N.Roosevelt  
SENT TO: Liberal, Ks 67901

MUD DATA-----  
Mud Type Chemical  
Weight 9.20 lb/cf  
Vis. 65.00 S/L  
W.L. 12.00 in3  
F.C. 0.32 in  
Mud Drop N  
Amt. of fill 0.00 ft  
Btm. H. Temp. 122.00 F  
Hole Condition good  
% Porosity 0.00  
Packer Size 6.75 in  
No. of Packers 2  
Cushion Amt. 0.00 n  
Cushion Type none  
Reversed Out N  
Tool Chased N  
Tester Darren L.Amerine  
Co. Rep. Jon Christensen  
Contr. Duke  
Rig # 1  
Unit # no  
Pump T. none

Test Successful: Y

# GAS RECOVERY

-----

COMPANY: Crawford Oil & Gas, Inc.

DATE: 04/28/200

WELL NAME: #1 O.Blount

KB Elev: 1918.00 ft TICKET #12828 DST #2

WELL LOCATION: 3-34s-18w Comanche co KS

GR Elev: 1910.00 ft FORMATION: Mississippi

INTERVAL Fr.: 5283.00 To 5350.00 T.D.: 5350.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla gauge

## \*\*\*\*\* GAS RATES FOR FLOW #2

| Time<br>(min) | Orifice<br>(in) | Pressure<br>(Psi) | H2O<br>(in) | Rate<br>(cf/d) |
|---------------|-----------------|-------------------|-------------|----------------|
| 15            | 0.12            | 0                 | 22          | 2480.0         |
| 20            | 0.12            | 0                 | 30          | 2890.0         |
| 25            | 0.12            | 0                 | 32          | 2990.0         |
| 30            | 0.12            | 0                 | 32          | 2990.0         |
| 35            | 0.12            | 0                 | 32          | 2990.0         |
| 40            | 0.12            | 0                 | 32          | 2990.0         |
| 45            | 0.12            | 0                 | 32          | 2990.0         |

\*\*\* TOOL DIAGRAM \*\*\* CONVENTIONAL

WELL NAME: #1 O.Blount

LOCATION : 3-34s-18w Comanche co KS

TICKET No. 12828 D.S.T. No. 2 DATE 04/28/200

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 28

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 35

TOTAL TOOL ..... 63

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 32

TOTAL ASSEMBLY ..... 95

D.C. ABOVE TOOLS.Stands Single 1 Total 29.41

D.P. ABOVE TOOLS.Stands84 Single 1 Total 5239.59

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5364

TOTAL DEPTH ..... 5350

TOTAL DRILL PIPE ABOVE K.B. .... 14

REMARKS:

P.O. SUB top of tool @ 5256

C.O. SUB 5257

S.I. TOOL 5262

HMV 5267

JARS 5272

SAFETY JOINT 5274

PACKER 5278

PACKER 5383

DEPTH

1'to 5284

ANCHOR 29'of perfs.to 5213

Alpine rec.@ 5389

32'of drillpipe to 5245

5345

Ak-1 rec.@ 5347

BULLNOSE 5' bullnose to 5350  
T.D.

## NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, L. L. C.  
Hays, Kansas  
Scott City, Kansas  
Phone: 800-728-5369  
Fax: 913-625-5620

Analyzed by:

Caraway Analytical, Inc  
P. O. Box 2137  
Liberal, Kansas 67905  
Phone: 316-624-5389  
Fax: 316-626-7108

Sample From: 2042605

Analyzed: 05/02/00

Sample From: #1 O. Blount DST 2  
Producer: Crawford Oil & Gas

Pressure:  
Temperature:

Time:  
Sampler:  
Source:

County: Comanche  
State: Kansas  
Formation: Miss

|                | Mole %     | GPM   |
|----------------|------------|-------|
| Helium         | He: 0.112  | 0.000 |
| Hydrogen       | H2: 0.007  | 0.000 |
| Oxygen         | O2: 0.000  | 0.000 |
| Nitrogen       | N2: 2.487  | 0.000 |
| Carbon Dioxide | CO2: 0.052 | 0.000 |
| Methane        | C1: 92.409 | 0.000 |
| Ethane         | C2: 2.898  | 0.775 |
| Propane        | C3: 0.952  | 0.262 |
| Iso Butane     | iC4: 0.146 | 0.048 |
| Normal Butane  | nC4: 0.292 | 0.092 |
| Iso Pentane    | iC5: 0.081 | 0.030 |
| Normal Pentane | nC5: 0.107 | 0.039 |
| Hexanes Plus   | C6+: 0.457 | 0.199 |

TOTAL: 100.000 1.445

Z Fact: 0.9978

SP.GR.: 0.6112

BTU (SAT): 1040.2 @ 14.73 psia

BTU (DRY): 1058.6 @ 14.73 psia

**OCTANE RATING: 124.6**

COMMENTS:

0.000

TK#12828 DST#2 #1 O. Blount Crawford Oil & Gas, Inc.

# TEST HISTORY

Flag Points

| t (Min.) | P (PSig) |
|----------|----------|
| A: 0.00  | 2738.64  |
| B: 0.00  | 26.93    |
| C: 28.25 | 32.81    |
| D: 46.00 | 1882.83  |
| E: 0.00  | 21.39    |
| F: 44.00 | 45.82    |
| G: 93.50 | 1900.92  |
| H: 0.00  | 2624.08  |

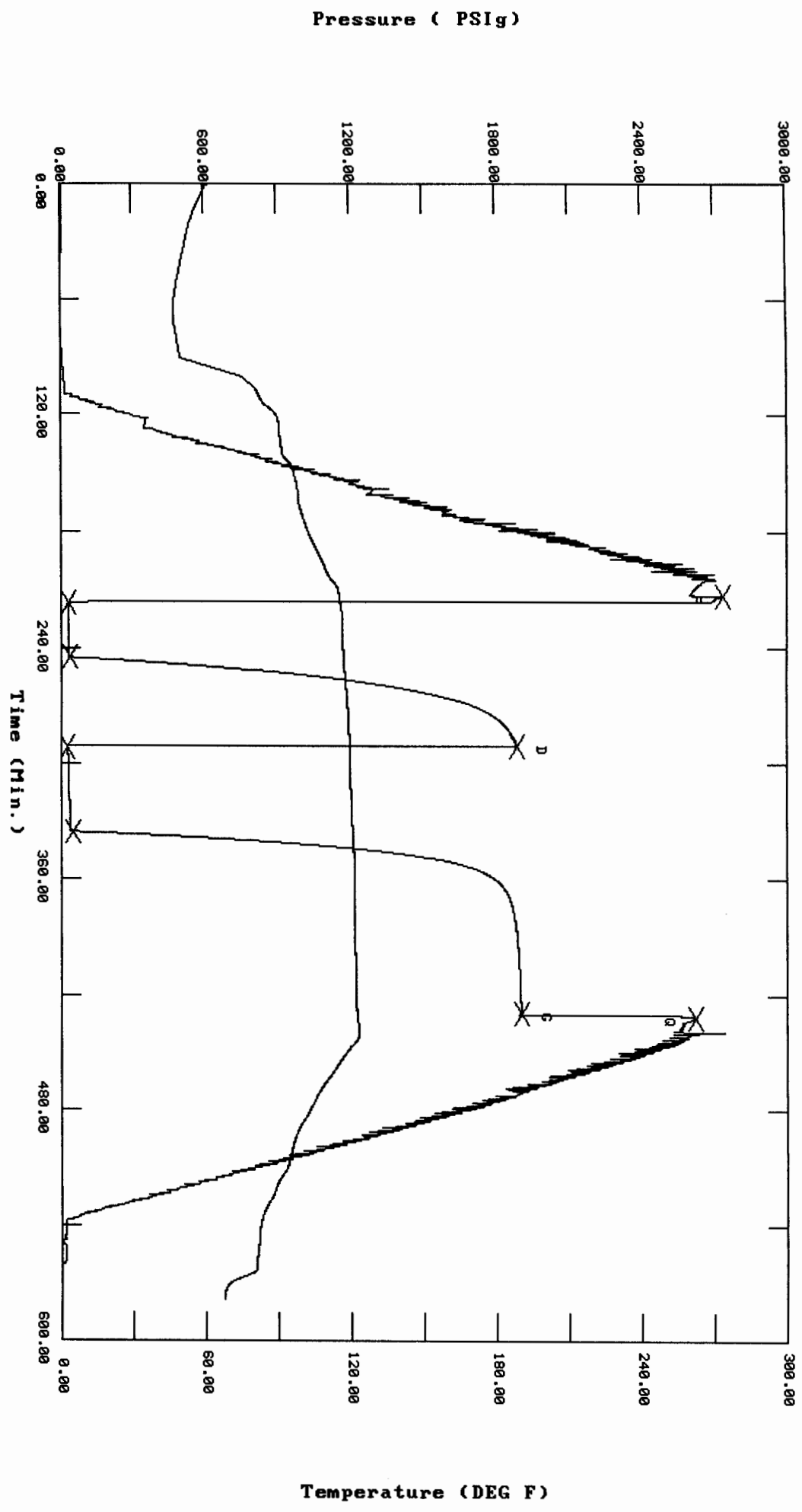
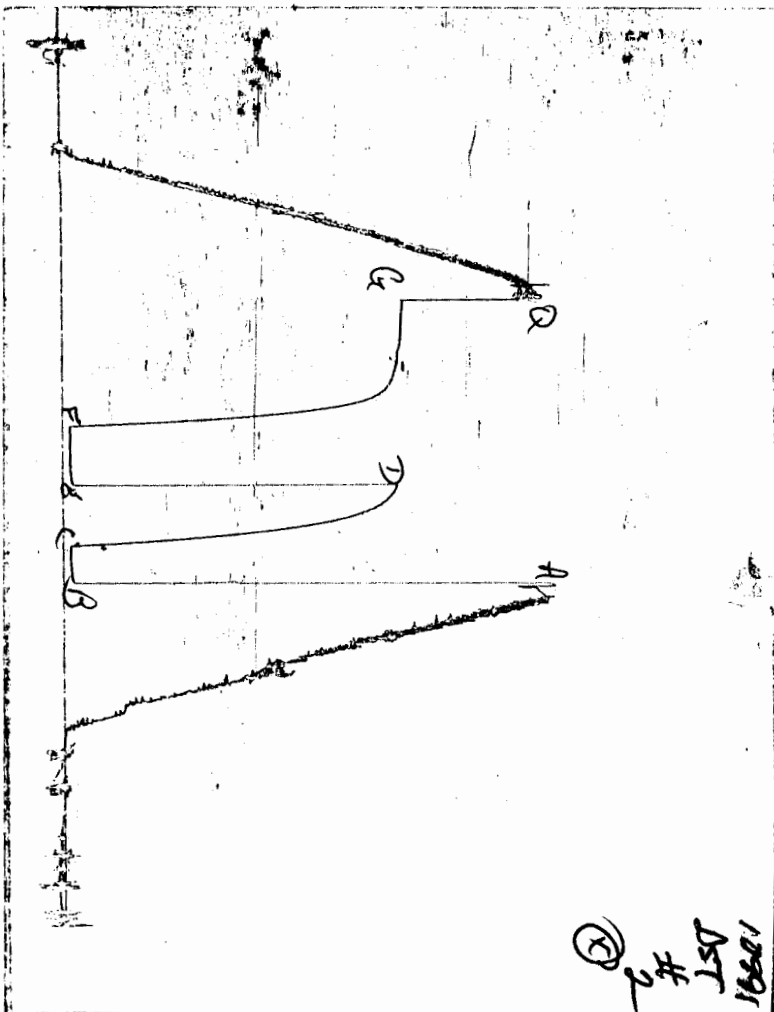


CHART PAGE



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



## GAS VOLUME REPORT

Crawford Oil & Gas Inc.

# 1 C. Bloest  
WELL NAME AND NO.

2  
DST NO

GTS 10 min on Final Flow

[illegible]

Remarks:

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

Nº 12828

|                 |                                            |                           |                |                 |                                                |
|-----------------|--------------------------------------------|---------------------------|----------------|-----------------|------------------------------------------------|
| Well Name & No. | <u>#1 O. Blount</u>                        | Test No.                  | <u>#2</u>      | Date            | <u>04/28/2000</u>                              |
| Company         | <u>Crawford Oil &amp; Gas Inc.</u>         | Zone Tested               | <u>(M55)</u>   |                 |                                                |
| Address         | <u>P.O. box 51 Caldwellwater, KS 67029</u> | Elevation                 | <u>1918</u>    | KB              | <u>1910</u> GL                                 |
| Co. Rep / Geo.  | <u>Jon Christensen</u>                     | Cont.                     | <u>Duke #1</u> | Est. Ft. of Pay | <u>    </u> %                                  |
| Location: Sec.  | <u>3</u>                                   | Twp.                      | <u>34E</u>     | Rge.            | <u>18W</u> Co. <u>Comanche</u> State <u>KS</u> |
| No. of Copies   | <u>5</u>                                   | Distribution Sheet (Y, N) | <u>    </u>    | Turnkey (Y, N)  | <u>    </u> Evaluation (Y, N) <u>    </u>      |

|                     |                                                           |                      |                 |                       |                |
|---------------------|-----------------------------------------------------------|----------------------|-----------------|-----------------------|----------------|
| Interval Tested     | <u>5283' - 5350'</u>                                      | Initial Str Wt./Lbs. | <u>50,000</u>   | Unseated Str Wt./Lbs. | <u>50,000</u>  |
| Anchor Length       | <u>67'</u>                                                | Wt. Set Lbs.         | <u>20,000</u>   | Wt. Pulled Loose/Lbs. | <u>58,000</u>  |
| Top Packer Depth    | <u>5278'</u>                                              | Tool Weight          | <u>2100</u>     |                       |                |
| Bottom Packer Depth | <u>5283'</u>                                              | Hole Size — 7 7/8"   | <u>✓</u>        | Rubber Size — 6 3/4"  | <u>✓</u>       |
| Total Depth         | <u>5350'</u>                                              | Wt. Pipe Run         | <u>N/A</u>      | Drill Collar Run      | <u>29.41</u>   |
| Mud Wt.             | <u>9.2</u> LCM <u>3 1/2</u> Vis. <u>65</u> WL <u>12.0</u> | Drill Pipe Size      | <u>4 1/2 XH</u> | Ft. Run               | <u>5269.59</u> |

Blow Description IF: Strong blow b.o.b in 30 sec.  
IST: Bled down for 2 mins no blow back.  
FF: Strong blow b.o.b in 20 sec GTS in 10 mins Gauge Gas  
FSL: Bled down for 10 mins. No blow back.

|                       |                           |              |                    |                |             |                      |                        |
|-----------------------|---------------------------|--------------|--------------------|----------------|-------------|----------------------|------------------------|
| Recovery — Total Feet | <u>20'</u>                | GIP          | <u>5249'</u>       | Ft. in DC      | <u>20'</u>  | Ft. in DP            | <u>    </u>            |
| Rec.                  | <u>20</u>                 | Feet Of      | <u>SGCM</u>        | <u>10</u> %gas | %oil        | %water               | <u>90</u> %mud         |
| Rec.                  | <u>5249'</u>              | Feet Of      | <u>Gas In Pipe</u> | %gas           | %oil        | %water               | %mud                   |
| Rec.                  | <u>    </u>               | Feet Of      | <u>    </u>        | %gas           | %oil        | %water               | %mud                   |
| Rec.                  | <u>    </u>               | Feet Of      | <u>    </u>        | %gas           | %oil        | %water               | %mud                   |
| Rec.                  | <u>    </u>               | Feet Of      | <u>    </u>        | %gas           | %oil        | %water               | %mud                   |
| BHT                   | <u>122°</u>               | °F Gravity   | <u>    </u>        | °API D@        | <u>    </u> | °F Corrected Gravity | <u>    </u> °API       |
| RW                    | <u>    </u> @ <u>    </u> | °F Chlorides | <u>    </u>        | ppm Recovery   | <u>    </u> | Chlorides            | <u>8100</u> ppm System |

|                                  |             |      |             |        |                     |              |                |             |
|----------------------------------|-------------|------|-------------|--------|---------------------|--------------|----------------|-------------|
| (A) Initial Hydrostatic Mud      | <u>2743</u> | AK-1 | <u>2739</u> | Alpine | PSI Recorder No.    | <u>2350</u>  | T-On Location  | <u>0215</u> |
| (B) First Initial Flow Pressure  | <u>43</u>   |      | <u>27</u>   |        | PSI (depth)         | <u>5289'</u> | T-Started      | <u>0233</u> |
| (C) First Final Flow Pressure    | <u>43</u>   |      | <u>33</u>   |        | PSI Recorder No.    | <u>10991</u> | T-Open         | <u>0612</u> |
| (D) Initial Shut-In Pressure     | <u>1871</u> |      | <u>1883</u> |        | PSI (depth)         | <u>5347'</u> | T-Pulled       | <u>0942</u> |
| (E) Second Initial Flow Pressure | <u>53</u>   |      | <u>21</u>   |        | PSI Recorder No.    | <u>    </u>  | T-Out          | <u>1140</u> |
| (F) Second Final Flow Pressure   | <u>53</u>   |      | <u>46</u>   |        | PSI (depth)         | <u>    </u>  | T-Off Location | <u>1300</u> |
| (G) Final Shut-in Pressure       | <u>1903</u> |      | <u>1901</u> |        | PSI Initial Opening | <u>30</u>    | Test           | <u>✓</u>    |
| (Q) Final Hydrostatic Mud        | <u>2732</u> |      | <u>2624</u> |        | PSI Initial Shut-in | <u>45</u>    | Jars           | <u>✓</u>    |
|                                  |             |      |             |        | Final Flow          | <u>45</u>    | Safety Joint   | <u>✓</u>    |
|                                  |             |      |             |        | Final Shut-in       | <u>90</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 Jon Christensen  
Our Representative Darren J. Christie

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

TRILOBITE TESTING L.L.C.

OPERATOR : Crawford Oil & Gas Inc.

DATE 04/30/200

WELL NAME: #1-O.Blount

KB 1918.00 ft

TICKET NO: 12829

DST #3

LOCATION : 3-34s-18w Comanche co KS

GR 1910.00 ft

FORMATION: Viola

INTERVAL : 5927.00 To 5960.00 ft

TD 5960.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

| Mins              | Field  | 1      | 2      | 3   | 4   | TIME DATA-----         |
|-------------------|--------|--------|--------|-----|-----|------------------------|
| PF 30 Rec.        | 10991  | 10991  | 2350   |     |     | PF Fr. 0245 to 0315 hr |
| SI 45 Range(Psi ) | 4200.0 | 4200.0 | 4995.0 | 0.0 | 0.0 | IS Fr. 0315 to 0400 hr |
| SF 45 Clock(hrs)  | 12hr.  | 12hr.  | elec.  |     |     | SF Fr. 0400 to 0445 hr |
| FS 90 Depth(ft )  | 5957.0 | 5957.0 | 5933.0 | 0.0 | 0.0 | FS Fr. 0445 to 0615 hr |

|                | Field  | 1      | 2      | 3   | 4   |                               |
|----------------|--------|--------|--------|-----|-----|-------------------------------|
| A. Init Hydro  | 2931.0 | 2893.0 | 2928.0 | 0.0 | 0.0 | T STARTED 2318 hr             |
| B. First Flow  | 43.0   | 72.0   | 87.0   | 0.0 | 0.0 | T ON BOTM 0242 hr             |
| B1. Final Flow | 43.0   | 57.0   | 93.0   | 0.0 | 0.0 | T OPEN 0245 hr                |
| C. In Shut-in  | 2040.0 | 2065.0 | 2085.0 | 0.0 | 0.0 | T PULLED 0615 hr              |
| D. Init Flow   | 32.0   | 61.0   | 34.0   | 0.0 | 0.0 | T OUT 0845 hr                 |
| E. Final Flow  | 32.0   | 39.0   | 36.0   | 0.0 | 0.0 |                               |
| F. Fl Shut-in  | 1966.0 | 1967.0 | 1996.0 | 0.0 | 0.0 | TOOL DATA-----                |
| G. Final Hydro | 2900.0 | 2860.0 | 2866.0 | 0.0 | 0.0 | Tool Wt. 2100.00 lbs          |
| Inside/Outside | 0      | 0      | I      |     |     | Wt Set On Packer 20000.00 lbs |
|                |        |        |        |     |     | Wt Pulled Loose 65000.00 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 29.41 ft          |
|                |        |        |        |     |     | D.P. Length 5893.59 ft        |

RECOVERY

Tot Fluid 60.00 ft of 30.00 ft in DC and 30.00 ft in DP  
 5863.00 ft of Gas in pipe.  
 60.00 ft of Slightly oil & gas cut mud  
 0.00 ft of 10% gas 4% oil 86% 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

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

BLOW DESCRIPTION

Initial Flow:

Fair blow bottom of bucket in 2 minutes.

Initial Shut-In:

Bled down for 2 minutes. No blow back

Final Flow:

Strong blow bottom of bucket in 30 seconds. Gas to surface in 10 minutes Gauge gas.

Final Shut-In:

Bled down for 5 minutes. No blow back

SAMPLES: Caraway Analytical

SENT TO: Liberal, Ks 67901

MUD DATA-----

| Mud Type   | Chemical   |
|------------|------------|
| Weight     | 9.40 lb/c: |
| Vis.       | 55.00 S/L  |
| W.L.       | 8.00 in3   |
| F.C.       | 0.32 in    |
| Mud Drop N |            |

|                |                   |
|----------------|-------------------|
| Amt. of fill   | 0.00 ft           |
| Btm. H. Temp.  | 134.00 F          |
| Hole Condition | good              |
| % Porosity     | 0.00              |
| Packer Size    | 6.75 in           |
| No. of Packers | 2                 |
| Cushion Amt.   | 0.00 n            |
| Cushion Type   | none              |
| Reversed Out N |                   |
| Tool Chased N  |                   |
| Tester         | Darren L. Amerine |
| Co. Rep.       | Jon Christensen   |
| Contr.         | Duke              |
| Rig #          | 1                 |
| Unit #         | none              |
| Pump T.        | no                |

Test Successful: Y

# GAS RECOVERY

COMPANY: Crawford Oil & Gas Inc.

DATE: 04/30/200

WELL NAME: #1-O.Blount

KB Elev: 1918.00 ft TICKET #12829 DST #3

WELL LOCATION: 3-34s-18w Comanche co KS

GR Elev: 1910.00 ft FORMATION: Viola

INTERVAL Fr.: 5927.00 To 5960.00 T.D.: 5960.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla gauge

## \*\*\*\*\* GAS RATES FOR FLOW #2

| Time<br>(min) | Orifice<br>(in) | Pressure<br>(Psi) | H2O<br>(in) | Rate<br>(cf/d) |
|---------------|-----------------|-------------------|-------------|----------------|
| 15            | 0.12            | 0                 | 8           | 1500.0         |
| 20            | 0.12            | 0                 | 8           | 1500.0         |
| 25            | 0.12            | 0                 | 10          | 1670.0         |
| 30            | 0.12            | 0                 | 12          | 1830.0         |
| 35            | 0.12            | 0                 | 11          | 1760.0         |
| 40            | 0.12            | 0                 | 12          | 1830.0         |
| 45            | 0.12            | 0                 | 12          | 1830.0         |

\*\*\* TOOL DIAGRAM \*\*\* CONVENTIONAL

WELL NAME: #1-O.Blount

LOCATION : 3-34s-18w Comanche co KS

TICKET No. 12829 D.S.T. No. 3 DATE 04/30/200

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 31

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 33

TOTAL TOOL ..... 64

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands Single 1 Total 29.41

D.P. ABOVE TOOLS.Stands94 Single 1 Total 5893.59

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5987

TOTAL DEPTH ..... 5960

TOTAL DRILL PIPE ABOVE K.B. .... 27

REMARKS:

|                        |      |
|------------------------|------|
| P.O. SUB Top of tool @ | 5900 |
| C.O. SUB               | 5901 |
| S.I. TOOL              | 5906 |
| HMV                    | 5911 |
| JARS                   | 5916 |
| SAFETY JOINT           | 5918 |
| PACKER                 | 5922 |
| PACKER                 | 5927 |
| DEPTH                  |      |
| 1'to                   | 5928 |
| ANCHOR 27' of perfs.to | 5955 |
| Alpine rec.@ 5933      |      |
|                        | 5955 |
| Ak-1 rec. @ 5957       |      |
| BULLNOSE 5'bullnose to | 5960 |
| T.D.                   |      |

## NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, L. L. C.  
Hays, Kansas  
Scott City, Kansas  
Phone: 800-728-5369  
Fax: 913-625-5620

Analyzed by:

Caraway Analytical, Inc  
P. O. Box 2137  
Liberal, Kansas 67905  
Phone: 316-624-5389  
Fax: 316-626-7108

Sample Number: 21002536 Analyzed: 05/02/00

Sample From: #1 O. Blount DST 3  
Producer: Crawford Oil & Gas

Pressure:  
Temperature:

Time: County: Comanche  
Sampler: State: Kansas  
Source: Formation: Viola

|                | Mole %     | GPM   |
|----------------|------------|-------|
| Helium         | He: 0.144  | 0.000 |
| Hydrogen       | H2: 0.004  | 0.000 |
| Oxygen         | O2: 0.000  | 0.000 |
| Nitrogen       | N2: 4.365  | 0.000 |
| Carbon Dioxide | CO2: 0.018 | 0.000 |
| Methane        | C1: 84.481 | 0.000 |
| Ethane         | C2: 5.666  | 1.515 |
| Propane        | C3: 2.878  | 0.793 |
| Iso Butane     | iC4: 0.363 | 0.119 |
| Normal Butane  | nC4: 1.019 | 0.321 |
| Iso Pentane    | iC5: 0.202 | 0.074 |
| Normal Pentane | nC5: 0.309 | 0.112 |
| Hexanes Plus   | C6+: 0.551 | 0.240 |

TOTAL: 100.000 3.175

Z Fact: 0.9973

SP.GR.: 0.6736

BTU (SAT): 1105.7 @ 14.73 psia

BTU (DRY): 1125.3 @ 14.73 psia

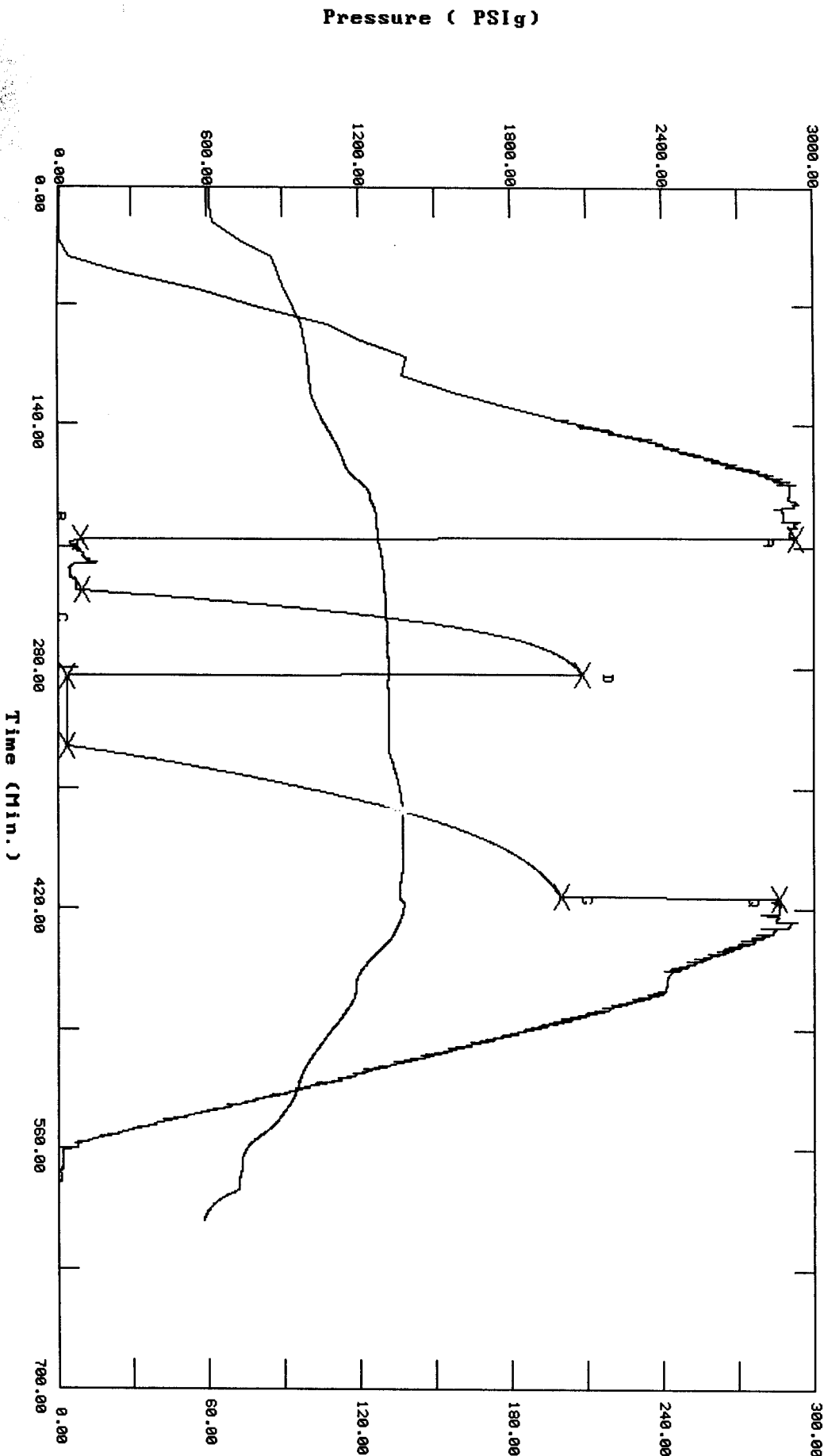
**OCTANE RATING: 120.2**

COMMENTS:

0.000

# TEST HISTORY

TK#12829 DST#3 #1-0. Blount Crawford Oil & Gas Inc.





## GAS VOLUME REPORT

Crawford Oil & Gas Inc.

**OPERATOR**

#1 - O. Blount

WELL NAME AND NO.

#3

DST NO

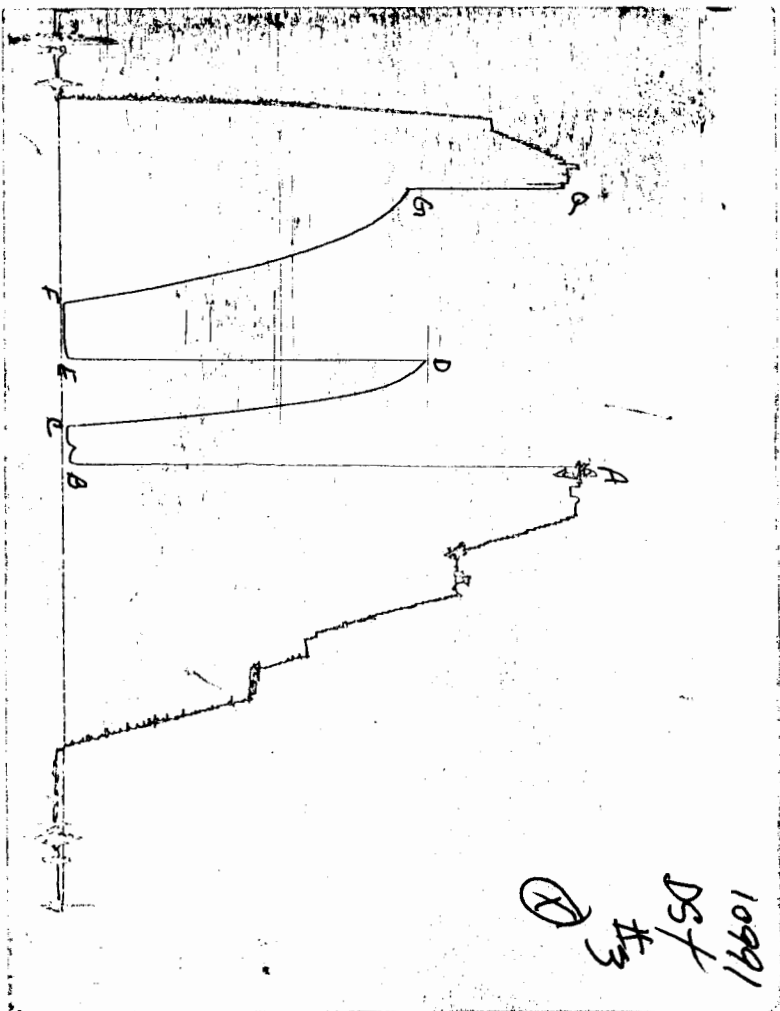
(Viola)

GTS in 10 mins on final flow

[illegible]

Remarks:

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

## Test Ticket

N<sup>o</sup> 12829

|                                                           |                                       |                                                          |
|-----------------------------------------------------------|---------------------------------------|----------------------------------------------------------|
| Well Name & No. <u>#1 - O. Blount</u>                     | Test No. <u>#3</u>                    | Date <u>04/30/2000</u>                                   |
| Company <u>Crawford Oil &amp; Gas Inc.</u>                | Zone Tested <u>Viola</u>              |                                                          |
| Address <u>P.O. Box 51 Coldwater, KS 67029</u>            | Elevation <u>1918</u>                 | KB <u>1910</u> GL                                        |
| Co. Rep / Geo. <u>Jon Christensen</u>                     | Cont. <u>Duke #1</u>                  | Est. Ft. of Pay <u>    </u> Por. <u>    </u> %           |
| Location: Sec. <u>3</u> Twp. <u>34 S</u> Rge. <u>18 E</u> | Co. <u>Comanche</u>                   | State <u>KS</u>                                          |
| No. of Copies <u>5</u>                                    | Distribution Sheet (Y, N) <u>    </u> | Turnkey (Y, N) <u>    </u> Evaluation (Y, N) <u>    </u> |

|                                                               |                                                        |                                                          |
|---------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------|
| Interval Tested <u>5927 - 5960'</u>                           | Initial Str Wt./Lbs. <u>50,000</u>                     | Unseated Str Wt./Lbs. <u>50,000</u>                      |
| Anchor Length <u>33'</u>                                      | Wt. Set Lbs. <u>20,000</u>                             | Wt. Pulled Loose/Lbs. <u>65,000</u>                      |
| Top Packer Depth <u>5922'</u>                                 | Tool Weight <u>2100</u>                                |                                                          |
| Bottom Packer Depth <u>5927'</u>                              | Hole Size — 7 7/8" <input checked="" type="checkbox"/> | Rubber Size — 6 3/4" <input checked="" type="checkbox"/> |
| Total Depth <u>5960'</u>                                      | Wt. Pipe Run <u>N/A</u>                                | Drill Collar Run <u>29.41</u>                            |
| Mud Wt. <u>9.4</u> LCM <u>8"</u> Vis. <u>55</u> WL <u>8.0</u> | Drill Pipe Size <u>4 1/2 x 14</u>                      | Ft. Run <u>5893.59</u>                                   |

Blow Description IF: Fair blow b.o.b in 2 mins.  
ISI: Bled down for 2 mins. No blow back.  
FF: Strong blow b.o.b in 30 sec. GTS in 10 mins. Gauge Gas  
ISI: Bled down for 5 mins. No blow back.

|                                             |                                   |                       |                       |
|---------------------------------------------|-----------------------------------|-----------------------|-----------------------|
| Recovery — Total Feet <u>60'</u>            | GIP <u>5863'</u>                  | Ft. in DC <u>    </u> | Ft. in DP <u>    </u> |
| Rec. <u>60</u> Feet Of <u>50' GCM</u>       | <u>10</u> %gas <u>4</u> %oil      | %water <u>86</u>      | %mud <u>    </u>      |
| Rec. <u>5863</u> Feet Of <u>Gas in Pipe</u> | %gas <u>    </u> %oil <u>    </u> | %water <u>    </u>    | %mud <u>    </u>      |
| Rec. <u>    </u> Feet Of <u>    </u>        | %gas <u>    </u> %oil <u>    </u> | %water <u>    </u>    | %mud <u>    </u>      |
| Rec. <u>    </u> Feet Of <u>    </u>        | %gas <u>    </u> %oil <u>    </u> | %water <u>    </u>    | %mud <u>    </u>      |
| Rec. <u>    </u> Feet Of <u>    </u>        | %gas <u>    </u> %oil <u>    </u> | %water <u>    </u>    | %mud <u>    </u>      |

BHT 134 °F Gravity      °API D@      °F Corrected Gravity      °API  
 RW      @      °F Chlorides      ppm Recovery Chlorides 6500 ppm System

|                                  |                  |                    |                               |                            |
|----------------------------------|------------------|--------------------|-------------------------------|----------------------------|
| (A) Initial Hydrostatic Mud      | AK-1 <u>2931</u> | Alpine <u>2928</u> | PSI Recorder No. <u>2350</u>  | T-On Location <u>2145</u>  |
| (B) First Initial Flow Pressure  | <u>43</u>        | <u>87</u>          | PSI (depth) <u>5933'</u>      | T-Started <u>2318</u>      |
| (C) First Final Flow Pressure    | <u>43</u>        | <u>93</u>          | PSI Recorder No. <u>10991</u> | T-Open <u>0245</u>         |
| (D) Initial Shut-In Pressure     | <u>2080</u>      | <u>2085</u>        | PSI (depth) <u>5957'</u>      | T-Pulled <u>0615</u>       |
| (E) Second Initial Flow Pressure | <u>32</u>        | <u>34</u>          | PSI Recorder No. <u>    </u>  | T-Out <u>0845</u>          |
| (F) Second Final Flow Pressure   | <u>32</u>        | <u>36</u>          | PSI (depth) <u>    </u>       | T-Off Location <u>1000</u> |
| (G) Final Shut-in Pressure       | <u>1966</u>      | <u>1996</u>        | PSI Initial Opening <u>30</u> | Test <u>    </u>           |
| (Q) Final Hydrostatic Mud        | <u>2900</u>      | <u>2866</u>        | PSI Initial Shut-in <u>45</u> | Jars <u>    </u>           |
|                                  |                  |                    | Final Flow <u>45</u>          | Safety Joint <u>    </u>   |
|                                  |                  |                    | Final Shut-in <u>90</u>       | Straddle <u>    </u>       |
|                                  |                  |                    |                               | Circ. Sub <u>    </u>      |
|                                  |                  |                    |                               | Sampler <u>    </u>        |
|                                  |                  |                    |                               | Extra Packer <u>    </u>   |
|                                  |                  |                    |                               | Elec. Rec. <u>    </u>     |
|                                  |                  |                    |                               | Mileage <u>    </u>        |
|                                  |                  |                    |                               | Other <u>    </u>          |
|                                  |                  |                    |                               | TOTAL PRICE \$ <u>    </u> |

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Approved By [Signature]

Our Representative [Signature]