

WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

ORIGINAL

CONFIDENTIAL

Operator: License # 5144

Name: Mull Drilling Co., Inc.

Address: PO Box 2758

City/State/Zip: Wichita, Kansas 67201-2758

Purchaser: N/A

Operator Contact Person: Mark Shreve

Phone: (316) 264-6366 ext.13

Contractor: Name: Duke Drilling Co., Inc.

License: 5929

Wellsite Geologist: Roger Martin

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  SWD  SIOW  Temp. Abd.

Gas  ENHR  SIGW

Dry  Other (Core, WSW, Expl., Cathodic, etc) KCC

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. \_\_\_\_\_

06-15-00 06-30-00 7-1-00

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - 033-21101-0000

County: Comanche County, Kansas

SE NE SE Sec. 35 Twp. 31 S. R. 19  East  West

1500 feet from S N (circle one) Line of Section

330 feet from E W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

(circle one) NE  NW SW

Base Name: Barnes Well #: 1-35

Field Name: Wildcat

Producing Formation: None

Elevation: Ground: 2085' Kelly Bushing: 2096'

Total Depth: 6050' Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at 661' 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 D&A GH 10/26/00  
(Data must be collected from the Reserve Pit)

Drilling Fluid Content \_\_\_\_\_ ppm Fluid volume \_\_\_\_\_ bbls

Dewatering method used \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

\_\_\_\_\_

Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

STATE CORPORATION COMMISSION RECEIVED

JUL 19 2000  
OFF-10-2000  
JUL 18 2000

CONFIDENTIAL

RELEASED  
JUL 18 2001

FROM CONFIDENTIAL

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 A. Shreve  
Title: President/COO Date: 7/18/00

Subscribed and sworn to before me this 18 day of July

Notary Public: Tannis L. Tritt

Date Commission Expires: March 26, 2003 My Appt. Expires 3-26-2003

KCC Office Use ONLY

- Letter of Confidentiality Attached
- If Denied, Yes  Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution

KCC

TANNIS L. TRITT  
Notary Public - State of Kansas  
My Appt. Expires 3-26-2003

Operator Name: **Mull Drilling Co., Inc.** Lease Name: **Barnes** Well #: **1-35**  
 Sec. **35** Twp. **31** S. R. **19**  East  West County: **Comanche County, Kansas**

**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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i>  List All E. Logs Run: Reeves GR-Array Induction CNL-DNL-GR-ML-Cal GR-Sonic	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;">Name</th> <th style="width:20%;">Top</th> <th style="width:20%;">Datum</th> <th style="width:20%;"></th> </tr> </thead> <tbody> <tr> <td>Anhydrite</td> <td>1044 -1051</td> <td>Stark</td> <td>4751 -2655</td> </tr> <tr> <td>Chase</td> <td>2528 -432</td> <td>Marmaton</td> <td>4910 -2814</td> </tr> <tr> <td>Council Grove</td> <td>2680 -584</td> <td>Altamont</td> <td>4947 -2851</td> </tr> <tr> <td>Admire</td> <td>3247 -1151</td> <td>Pawnee</td> <td>5001 -2905</td> </tr> <tr> <td>Stotler</td> <td>3491 -1395</td> <td>Cherokee</td> <td>5040 -2944</td> </tr> <tr> <td>Shawnee</td> <td>3722 -1626</td> <td>Miss Spgn</td> <td>5104 -3008</td> </tr> <tr> <td>Kanwaka</td> <td>4065 -1969</td> <td>Dolo</td> <td>5167 -3071</td> </tr> <tr> <td>Heebner</td> <td>4243 -2147</td> <td>Kinderhook</td> <td>5520 -3424</td> </tr> <tr> <td>Toronto</td> <td>4253 -2157</td> <td>Viola</td> <td>5622 -3526</td> </tr> <tr> <td>Lansing</td> <td>4437 -2341</td> <td>Simpson</td> <td>5783 -3687</td> </tr> <tr> <td></td> <td></td> <td>Arbuckle</td> <td>5944 -3848</td> </tr> </tbody> </table>	Name	Top	Datum		Anhydrite	1044 -1051	Stark	4751 -2655	Chase	2528 -432	Marmaton	4910 -2814	Council Grove	2680 -584	Altamont	4947 -2851	Admire	3247 -1151	Pawnee	5001 -2905	Stotler	3491 -1395	Cherokee	5040 -2944	Shawnee	3722 -1626	Miss Spgn	5104 -3008	Kanwaka	4065 -1969	Dolo	5167 -3071	Heebner	4243 -2147	Kinderhook	5520 -3424	Toronto	4253 -2157	Viola	5622 -3526	Lansing	4437 -2341	Simpson	5783 -3687			Arbuckle	5944 -3848
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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	# Sacjs Used	Type and Percent Additives
<b>Conductor</b>		<b>20"</b>		<b>40'</b>			
<b>Conductor</b>	<b>17-1/2"</b>	<b>13-3/8"</b>	<b>54#</b>	<b>276'</b>	<b>Lite Class A</b>	<b>125</b> <b>100</b>	<b>3%cc 2%gel</b> <b>3%cc 2%gel</b>
<b>Surface</b>	<b>12-1/4"</b>	<b>8-5/8"</b>	<b>24#</b>	<b>661'</b>	<b>Lite Class A</b>	<b>175</b> <b>100</b>	<b>3%cc 2%gel</b> <b>3%cc 2%gel</b>

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 <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No
---------------	------	--------	-----------	--

Date of First, Resumerd Production, SWD or Enhr. <b>D &amp; A</b>	Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
--	--

Estimated Production Per 24 Hours	Oil Bbls. <b>N/A</b>	Gas Mcf <b>N/A</b>	Water Bbls. <b>N/A</b>	Gas-Oil Ratio	Gravity
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Disposition of Gas	METHOD OF COMPLETION	Production Interval
<input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Sumit ACO-18.)</i>	<input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	_____

# ALLIED CEMENTING CO., INC. 4435

Federal Tax I.D.

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

**CONFIDENTIAL**

SERVICE POINT

med. ledge

ORIGINAL

DATE <u>6-15-00</u>	SEC. <u>35</u>	TWP. <u>31</u>	RANGE <u>19</u>	CALLED OUT <u>9:00 P.M.</u>	ON LOCATION <u>11:30 P.M.</u>	JOB START <u>2:45 A.M.</u>	JOB FINISH <u>3:15 A.M.</u>
LEASE <u>BAMES</u>	WELL # <u>1-35</u>	LOCATION <u>Coldwater, 2N-1W-1S</u>	COUNTY <u>Comanche</u>	STATE <u>KS.</u>			
OLD OR NEW (Circle one)							

CONTRACTOR Duke Drdg. Co.  
 TYPE OF JOB Conductor  
 HOLE SIZE 17 1/2 T.D. 278  
 CASING SIZE 13 3/8 x 54 DEPTH 277  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL DEPTH  
 PRES. MAX 150 MINIMUM 100  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG. 15' By Request  
 PERFS.  
 DISPLACEMENT 40 1/2 Bbls Fresh H<sub>2</sub>O  
 EQUIPMENT  
 PUMP TRUCK CEMENTER LARRY D.  
 # 343 HELPER Justin  
 BULK TRUCK  
 # 214 DRIVER David F.  
 BULK TRUCK  
 # DRIVER

OWNER moll Drdg. Co.  
 CEMENT  
 AMOUNT ORDERED 1255x ALW + 3%cc  
1/4# Flo-Seal. 100sx CLASSA  
3%cc + 2% Gel  
 COMMON A 100 @ 6.35 635.00  
 POZMIX @  
 GEL 2 @ 9.50 19.00  
 CHLORIDE 8 @ 28.00 224.00  
ALW 125 @ 6.00 750.00  
Flo-Seal 31# @ 1.15 35.65  
 @  
 @  
 @  
 HANDLING 225 @ 1.05 236.25  
 MILEAGE 225 x 43 @ .04 387.00  
 TOTAL \$2286.90

KCC

JUL 18 2000

CONFIDENTIAL

RELEASED

JUL 18 2001

FROM CONFIDENTIAL

REMARKS:

SERVICE

Pipe on Bottom Break Circ.  
Pump 1255x ALW + 3%cc  
1/4# Flo-Seal. 100sx CLASSA  
3%cc + 2% Gel. Release Plug  
Displace 40 1/2 Bbls. Fresh H<sub>2</sub>O  
Shut In Cement Did Circ.

DEPTH OF JOB 277'  
 PUMP TRUCK CHARGE 0-300' 470.00  
 EXTRA FOOTAGE @  
 MILEAGE 43 @ 3.00 129.00  
 PLUG 1000.D 13 3/8" @ 70.00 70.00  
 @  
 @

TOTAL \$669.00

CHARGE TO: moll Drdg. Co. Inc.  
 STREET Po Box 2758  
 CITY Wichita STATE KS ZIP 67201

FLOAT EQUIPMENT

@  
 @  
 @  
 @  
 @

TOTAL

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 \$ 2955.90  
 DISCOUNT 295.59 IF PAID IN 30 DAYS  
# 2660.31  
X TOR LEVINGSTON  
 PRINTED NAME

SIGNATURE [Signature]

RECEIVED  
STATE CORPORATION COMMISSION

JUL 19 2000

CONSERVATION DIVISION  
Wichita, Kansas

Federal Tax I.C.

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

**CONFIDENTIAL**

SERVICE POINT:  
med. lodge ks

ORIGINAL

DATE 6-16-00	SEC. 33	TWP. 31	RANGE 19	CALLED OUT 8:00 P.M.	ON LOCATION 10:00 P.M.	JOB START 2:00 A.M.	JOB FINISH 4:00 A.M.
LEASE Barnes	WELL# 1-35	LOCATION Coldwater, 2n-1w-1s			COUNTY Comanche	STATE Ks.	
OLD OR NEW (circle one)							

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CONTRACTOR Duke Drq. Co.  
TYPE OF JOB Surface Csg.  
HOLE SIZE 12 1/4 T.D. 666  
CASING SIZE 8 7/8 x 2 1/4 DEPTH 661  
TUBING SIZE DEPTH  
DRILL PIPE DEPTH  
TOOL DEPTH  
PRES. MAX 150 MINIMUM 100  
MEAS. LINE SHOE JOINT  
CEMENT LEFT IN CSG. 15' By Request  
PERFS.  
DISPLACEMENT 4 1/4 Bbls  
EQUIPMENT

OWNER moll Drq. Co.  
CEMENT  
AMOUNT ORDERED 175sx. ALW + 3%OCC  
1/4# FLO-SEAL 100sx CLASS A  
3%OCC + 2%Gel  
COMMON A 100 @ 6.35 635.00  
POZMIX @  
GEL 2 @ 9.50 19.00  
CHLORIDE 9 @ 28.00 252.00  
ALW 175 @ 6.00 1050.00  
FLO-SEAL 44# @ 1.15 50.60  
@  
@  
@  
@  
HANDLING 275 @ 1.05 288.75  
MILEAGE 275 x 43 .04 473.00

TOTAL \$2768.35

REMARKS:

SERVICE

Pipe on Bottom - Break Circ.  
Pump 175sx. ALW + 3%OCC + 1/4#  
FLO-SEAL 100sx. CLASS A + 3%OCC  
2% Gel. Release Plug. Displace  
Plug w/ 4 1/4 Bbls. Fresh H<sub>2</sub>O. Shift  
In Cement Did Circ.

DEPTH OF JOB 661'  
PUMP TRUCK CHARGE 0-300' 470.00  
EXTRA FOOTAGE 361' @ .43 155.23  
MILEAGE 43 @ 3.00 N/A  
PLUG TRP 2 1/8" @ 90.00 90.00  
@  
@

TOTAL \$715.23

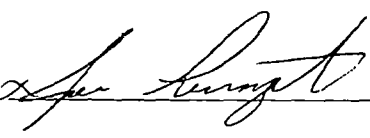
CHARGE TO: moll Drq. Co. Inc  
STREET P.O. Box 2758  
CITY Wichita STATE KS ZIP 67201

RELEASED

JUL 18 2001

FROM CONFIDENTIAL

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.

SIGNATURE 

TAX \_\_\_\_\_  
TOTAL CHARGE 3483.58  
DISCOUNT 348.36 IF PAID IN 30 DAYS  
3135.22  
X JOE LIVINGSTON  
PRINTED NAME

# ALLIED CEMENTING CO., INC. 4394

Federal Tax I.C.

**CONFIDENTIAL**

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

SERVICE POINT:  
112 DECEMBER LODGE

ORIGINAL

DATE 7-1-06	SEC 35	TWP 31s	RANGE 19w	CALLED OUT 11:30 AM	ON LOCATION 2:45 AM	JOB START 3:20 AM	JOB FINISH 1:15 PM
LEASE EARNES	WELL # 1-35	LOCATION GOLDWATER 2N, 1W, 1E			COUNTY	STATE KANSAS	
OLD OR NEW (Circle one)							

KCC

JUL 18 2006

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CONTRACTOR DUKE DRUG #	OWNER Mull Drug Co.
TYPE OF JOB ROTARY AUL	
HOLE SIZE 7 7/8" T.D. 6050'	CEMENT
CASING SIZE 8 7/8" DEPTH 661'	AMOUNT ORDERED
TUBING SIZE DEPTH	225cy 60:40:6
DRILL PIPE 4 1/2" 16.6" DEPTH 5840'	
TOOL DEPTH	
PRES. MAX MINIMUM	COMMON A 135 @ 6.25
MEAS. LINE SHOE JOINT	POZMIX 90 @ 3.25
CEMENT LEFT IN CSG.	GEL 12 @ 9.50
PERFS.	CHLORIDE @
DISPLACEMENT	@
	@
	@
	@
	@
	@
	@
	@
	HANDLING 225 @ 1.05
	MILEAGE 225 x 43 .04
	TOTAL #

**EQUIPMENT**

PUMP TRUCK # 343	CEMENTER KEVIN PRINEARDT
BULK TRUCK # 301	HELPER MARK PRINEARDT
BULK TRUCK #	DRIVER LARRY FELLO
BULK TRUCK #	DRIVER

**REMARKS:**

**SERVICE**

50cy - 5840'	<b>RELEASED</b>	DEPTH OF JOB	5840'
50cy - 1100'		PUMP TRUCK CHARGE	1378.00
50cy - 690'	JUL 18 2006	EXTRA FOOTAGE	@
40cy - 200'		MILEAGE 43	@ 3.00
10cy - 40'		PLUG	@
10cy - MOUSE HOLE	FROM CONFIDENTIAL		@
15cy - RATCHET			@

TOTAL #

CHARGE TO: MULL DRUG CO.  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**FLOAT EQUIPMENT**

	@	
	@	
	@	
	@	
	@	

TOTAL \_\_\_\_\_

To Allied Cementing Co., Inc.  
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TAX \_\_\_\_\_  
TOTAL CHARGE \_\_\_\_\_  
DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

SIGNATURE *[Signature]*

JOE LEVINGSTON  
PRINTED NAME

**CONFIDENTIAL** KCC

JUL 18 2000  
**CONFIDENTIAL**

WELL NAME:  
COMPANY:  
LOCATION:  
DATE:

Barnes #1-35  
Mull Drilling Co., Inc.  
31s-19w  
Comanche co Kansas  
7/5/00

RECEIVED  
STATE CORPORATION COMMISSION

JUL 19 2000

CONSERVATION DIVISION  
Wichita, Kansas

RELEASED  
JUL 18 2001  
**CONFIDENTIAL**

ORIGINAL

CONFIDENTIAL

TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Mull Drilling Co., Inc.

DATE 6-24-00

WELL NAME: Barnes #1-35

KB 2096.00 ft

TICKET NO: 12849 DST #1

LOCATION : 35-31s-19w Comanche co KS

GR 2087.00 ft

FORMATION: Marmaton- Cherokee

INTERVAL : 4823.00 To 5070.00 ft

TD 5070.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.		10991	10991	2350		PF Fr. 1138 to 1208 hr
SI 30	Range(Psi )		4200.0	4200.0	4995.0	0.0 0.0	IS Fr. 1208 to 1238 hr
SF 30	Clock(hrs)		12	12	Elect		SF Fr. 1238 to 1308 hr
FS 3	Depth(ft )		5067.0	5067.0	4829.0	0.0 0.0	FS Fr. 1308 to 1338 hr

	Field	1	2	3	4		
A. Init Hydro		2513.0	2500.0	2410.0	0.0	0.0	T STARTED 0837 hr
B. First Flow		138.0	152.0	31.0	0.0	0.0	T ON BOTM 1133 hr
B1. Final Flow		138.0	151.0	40.0	0.0	0.0	T OPEN 1138 hr
C. In Shut-in		192.0	187.0	91.0	0.0	0.0	T PULLED 1338 hr
D. Init Flow		160.0	153.0	51.0	0.0	0.0	T OUT 1530 hr
E. Final Flow		149.0	169.0	53.0	0.0	0.0	
F. Fl Shut-in		181.0	175.0	94.0	0.0	0.0	TOOL DATA-----
G. Final Hydro		2523.0	2532.0	2352.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside		0	0	I			Wt Set On Packer 20000.00 lbs
							Wt Pulled Loose 75000.00 lbs
							Initial Str Wt 68000.00 lbs
							Unseated Str Wt 68000.00 lbs
							Bot Choke 0.75 in
							Hole Size 7.78 in
							D Col. ID 2.25 in
							D. Pipe ID 3.80 in
							D.C. Length 120.00 ft
							D.P. Length 4688.00 ft

RECOVERY

Tot Fluid	65.00 ft of	65.00 ft in DC and	0.00 ft in DP
65.00	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		

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

BLOW DESCRIPTION

Initial Flow:  
Bubble hose surged and died.

Initial Shut-In:  
No blow back.

Final Flow:  
No blow. Flush tool. Surged and died.

Final Shut-In:  
No blow back.

SAMPLES:

SENT TO:

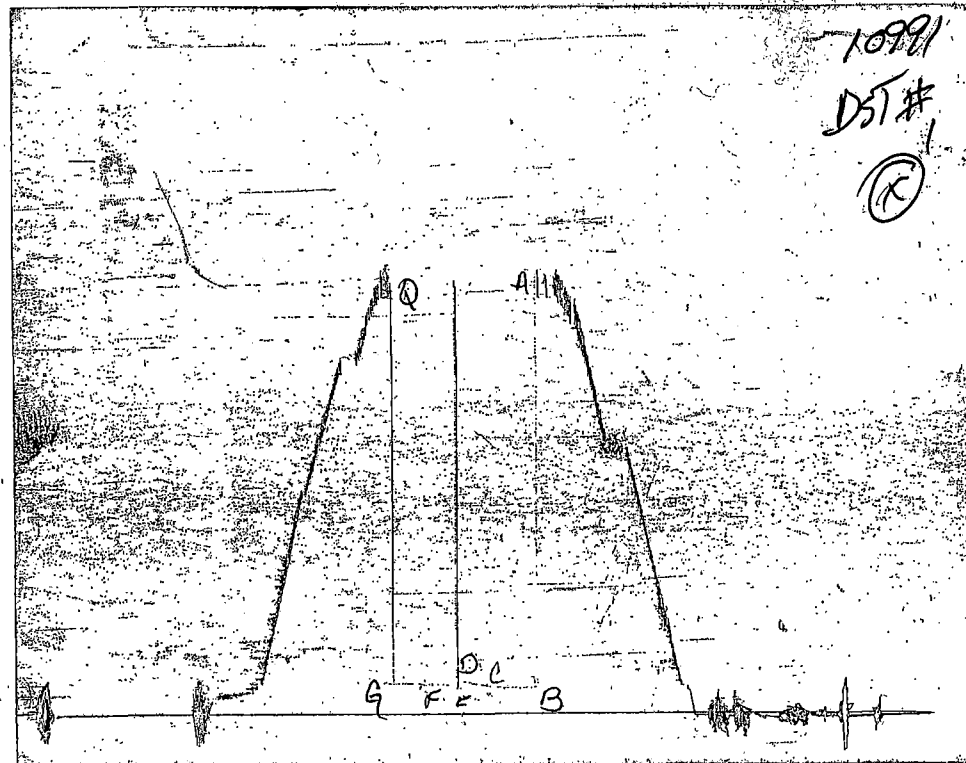
MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	58.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	1140.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Darren Amerine
Co. Rep.	Roger L. Martin
Contr.	Duke
Rig #	5
Unit #	
Pump T.	

KCC  
JUL 8 2000  
CONFIDENTIAL

Test Successful: Y

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> 12849

Well Name & No. <u>Barnes #1-35</u>		Test No. <u>#1</u>	Date <u>06/24/2000</u>
Company <u>Mull Drilling Co, Inc.</u>		Zone Tested <u>(Marmaton - Cherokee)</u>	
Address <u>Po. Box 2758 Wichita, KS 67201-2578</u>		Elevation <u>2096</u>	KB <u>2087</u> GL
Co. Rep / Geo. <u>Ro</u>	Cont. <u>Duke #5</u>	Est. Ft. of Pay	Por. %
Location: Sec. <u>35</u>	Twp. <u>31<sup>s</sup></u>	Rge. <u>19<sup>w</sup></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>4823' - 5070'</u>	Initial Str Wt./Lbs. <u>68,000</u>	Unseated Str Wt./Lbs. <u>68,000</u>
Anchor Length <u>247'</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>75,000</u>
Top Packer Depth <u>4818'</u>	Tool Weight <u>2100</u>	
Bottom Packer Depth <u>4823'</u>	Hole Size — 7 7/8" <input checked="" type="checkbox"/>	Rubber Size — 6 3/4" <input checked="" type="checkbox"/>
Total Depth <u>5070'</u>	Wt. Pipe Run <u>N/A</u>	Drill Collar Run <u>120.77</u>
Mud Wt. <u>9.2</u> LCM <u>4#</u> Vis. <u>58</u> WL <u>8.8</u>	Drill Pipe Size <u>4 1/2 X 11</u>	Ft. Run <u>4688.33</u>
Blow Description <u>IF: Bubble hose surged and died.</u>		
<u>IST: No blow back</u>		
<u>FF: No blow flush tool! Surged and died.</u>		
<u>FST: No blow back</u>		

Recovery — Total Feet <u>65'</u>	GIP	Ft. in DC <u>65'</u>	Ft. in DP
Rec. <u>65'</u> Feet Of <u>Dulling Mud</u>	%gas	%oil	%water %mud
Rec. Feet Of	%gas	%oil	%water %mud
Rec. Feet Of	%gas	%oil	%water %mud
Rec. Feet Of	%gas	%oil	%water %mud
BHT <u>114°</u>	°F Gravity	°API D@	°F Corrected Gravity °API
RW @	°F Chlorides	ppm Recovery	Chlorides <u>5,000</u> ppm System

	AK-1	Alpine	PSI Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2513</u>	<u>2410</u>	<u>2350</u>	
(B) First Initial Flow Pressure	<u>138</u>	<u>31</u>	(depth) <u>4829</u>	T-Started <u>0837</u>
(C) First Final Flow Pressure	<u>138</u>	<u>40</u>	PSI Recorder No. <u>10991</u>	T-Open <u>1138</u>
(D) Initial Shut-In Pressure	<u>192</u>	<u>91</u>	(depth) <u>5067'</u>	T-Pulled <u>1330</u>
(E) Second Initial Flow Pressure	<u>160</u>	<u>51</u>	PSI Recorder No.	T-Out <u>1530</u>
(F) Second Final Flow Pressure	<u>149</u>	<u>53</u>	(depth)	T-Off Location <u>1645</u>
(G) Final Shut-in Pressure	<u>181</u>	<u>94</u>	PSI Initial Opening <u>30</u>	Test <input checked="" type="checkbox"/> <u>800</u>
(Q) Final Hydrostatic Mud	<u>2523</u>	<u>2352</u>	PSI Initial Shut-in <u>30</u>	Jars <input checked="" type="checkbox"/> <u>200</u>
			Final Flow <u>30</u>	Safety Joint <input checked="" type="checkbox"/> <u>50</u>
			Final Shut-in <u>30</u>	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 Roger L. Martin  
 Our Representative Darren Flannery

Circ. Sub  
 Sampler  
 Extra Packer  
 Elec. Rec.  
 Mileage  
 Other  
 TOTAL PRICE \$ 1050

TRILOBITE TESTING L.L.C.

OPERATOR : Mull Drilling Co. Inc.  
 WELL NAME: Barnes #1-35  
 LOCATION : 35-31s-19w Comanche. co KS  
 INTERVAL : 5609.00 To 5628.00 ft

DATE 6-27-00  
 KB 2096.00 ft TICKET NO: 12596 DST #2  
 GR 0.00 ft FORMATION: Viola  
 TD 5628.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	13277	13277	3026			PF Fr. 0944 to 1014 hr
SI 45	Range(Psi )	4125.0	4125.0	4995.0	0.0	0.0	IS Fr. 1014 to 1059 hr
SF 60	Clock(hrs)	18hr	18hr	elect			SF Fr. 1059 to 1159 hr
FS 60	Depth(ft )	5628.0	5628.0	5616.0	0.0	0.0	FS Fr. 1159 to 1259 hr

	Field	1	2	3	4	
A. Init Hydro	2759.0	2784.0	2695.0	0.0	0.0	T STARTED 0720 hr
B. First Flow	86.0	112.0	57.0	0.0	0.0	T ON BOTM 0943 hr
B1. Final Flow	118.0	138.0	119.0	0.0	0.0	T OPEN 0944 hr
C. In Shut-in	1029.0	1055.0	1036.0	0.0	0.0	T PULLED 1259 hr
D. Init Flow	172.0	193.0	132.0	0.0	0.0	T OUT 1640 hr
E. Final Flow	259.0	282.0	236.0	0.0	0.0	
F. Fl Shut-in	855.0	862.0	843.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2729.0	2750.0	2667.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 90000.00 lbs
						Initial Str Wt 72000.00 lbs
						Unseated Str Wt 76000.00 lbs
						Bot Choke 0.78 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.38 in
						D.C. Length 121.00 ft
						D.P. Length 5477.00 ft

RECOVERY

Tot Fluid 682.00 ft of 124.00 ft in DC and 558.00 ft in DP  
 372.00 ft of Clean gassy oil  
 0.00 ft of 30% gas 70% oil  
 186.00 ft of Gas & mud cut Oil  
 0.00 ft of 20% gas 65% oil 15% mud  
 124.00 ft of Gas & oil cut mud  
 0.00 ft of 30% gas 30% oil 40% mud  
 0.00 ft of  
 0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 37.00

BLOW DESCRIPTION

Initial Flow:  
 Strong blow bottom of bucket in 45 seconds. Gas to surface in 19 minutes. Gas will burn.  
 Initial Shut-In:  
 Bled 2". Blow back built to 9"  
 Final Flow:  
 Bottom of bucket as soon as tool opened.  
 Final Shut-In:  
 Bled 2". Blow back built to bottom of bucket.

SAMPLES: Yes  
 SENT TO: Caraway Analytical

Test Successful: Y

MUD DATA-----

Mud Type	Chemical
Weight	9.30 lb/c
Vis.	51.00 S/L
W.L.	8.00 in <sup>3</sup>
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	140.00 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	Scott Bugbee
Co. Rep.	Roger Martin
Contr.	Duke
Rig #	5
Unit #	
Pump T.	

GAS RECOVERY

-----

COMPANY: Mull Drilling Co. Inc. DATE: 6-27-00  
 WELL NAME: Barnes #1-35 KB Elev: 2096.00 ft TICKET #12596 DST #2  
 WELL LOCATION: 35-31s-19w Comanche co KS GR Elev: 0.00 ft FORMATION: Viola  
 INTERVAL Fr.: 5609.00 To 5628.00 T.D.: 5628.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla

\*\*\*\*\* GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
20	0.50	0	16	25100.0
25	0.50	0	19	27300.0
30	0.50	0	20	28000.0

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

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	0.38	0	14	13400.0
10	0.38	0	47	24100.0
15	0.38	0	50	25200.0
20	0.50	0	40	39600.0
25	0.50	0	36	37600.0
30	0.50	0	24	30700.0
35	0.50	0	4	12500.0
40	0.38	0	16	14200.0
50	0.38	0	20	15900.0
60	0.38	0	16	14200.0

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

WELL NAME: Barnes #1-35

LOCATION : 35-31s-19w Comanche co KS

TICKET No. 12596 D.S.T. No. 2 DATE 6-27-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 27

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 19

TOTAL TOOL ..... 46

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.Stands2 Single Total 121

D.P. ABOVE TOOLS.Stands87 Single Total 5477

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5644

TOTAL DEPTH ..... 5628

TOTAL DRILL PIPE ABOVE K.B. .... 16

REMARKS:

P.O. SUB top of tool	5582
C.O. SUB 1' DP	5583
S.I. TOOL 5'	5588
HMV 5'	5593
JARS 5'	5598
SAFETY JOINT 2'	5600
PACKER 5'	5605
PACKER 5'	5609
DEPTH 5609	
1'	5610
ANCHOR	
1' perf	5611
Alpine Rec.	5616
5' PU sub	5616
7' perf	5623
Ak1 Rec.	5628
BULLNOSE	
T.D. 5'	5628

# 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

<b>Lab Number:</b> 20003642	<b>Analyzed:</b> 06/28/00
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Sample From: Barnes 1-35 DST 2	Pressure:
Producer: Mull Drilling Co.	Temperature:

<b>Date:</b> 06/27/00	<b>Location:</b> 35-31-19
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Time:	County:	Comanche
Sampler: Scott	State:	Kansas
Source:	Formation:	Viola

	Mole %	GPM
Helium	He: 0.121	0.000
Hydrogen	H2: 0.011	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 7.822	0.000
Carbon Dioxide	CO2: 0.008	0.000
Methane	C1: 48.900	0.000
Ethane	C2: 13.535	3.620
Propane	C3: 15.085	4.157
Iso Butane	iC4: 2.577	0.843
Normal Butane	nC4: 6.274	1.978
Iso Pentane	iC5: 1.288	0.471
Normal Pentane	nC5: 1.824	0.661
Hexanes Plus	C6+: 2.555	1.115

**TOTAL: 100.000 12.844**

Z Fact: 0.9927

SP.GR.: 1.0626

BTU (SAT): 1644.2 @ 14.73 psia

BTU (DRY): 1673.3 @ 14.73 psia

**OCTANE RATING: 102.9**

COMMENTS:

0.000

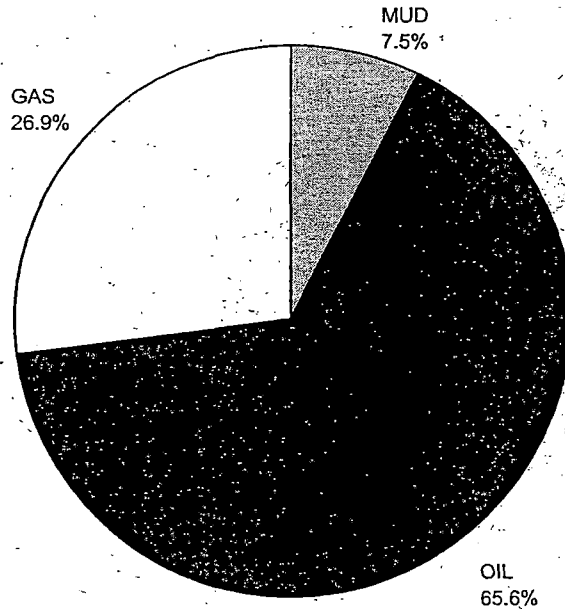
CALCULATED RECOVERY ANALYSIS

DST 2

TICKET 12596

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD		
		%	FEET	%	FEET	%	FEET	%	FEET	
DRILL	1	372	30	111.6	70	260.4	0	0	0	0
PIPE	2	186	20	37.2	65	120.9	0	0	15	27.9
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	124	30	37.2	30	37.2	0	0	40	49.6
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		682	0	186	0	418.5	0	0	0	77.5

BBL OIL= 5.603994 \* HRS OPEN 1.5 = BBL/DAY 89.663904  
 BBL WATER= 0 \* = 0  
 BBL MUD= 0.639282  
 BBL GAS = 2.297844



# TEST HISTORY

12596 DST#2 Barnes #1-35 Mull Drilling Co. Inc.

Flag Points

	t (Min.)	P (PSig)
A:	0.00	2695.41
B:	0.00	57.74
C:	30.00	119.09
D:	45.50	1036.99
E:	0.00	132.16
F:	57.50	236.41
G:	61.00	843.09
Q:	0.00	2667.47

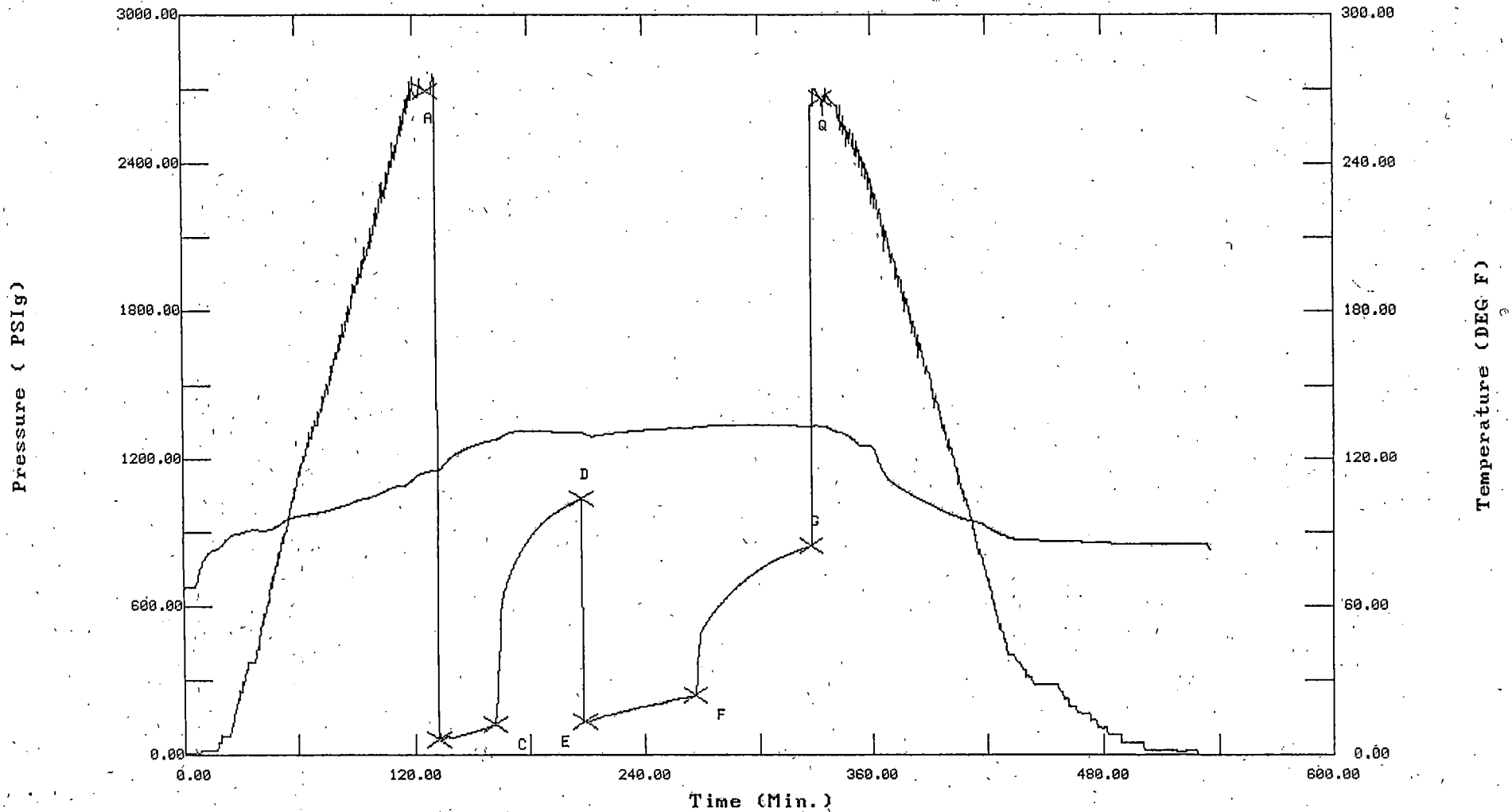
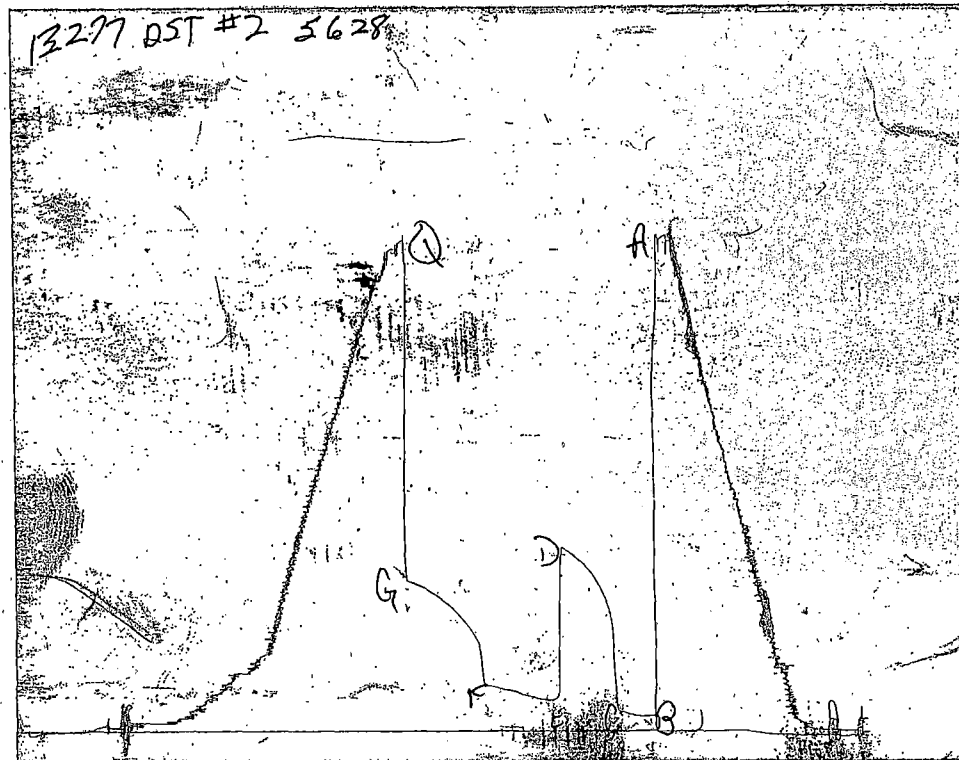
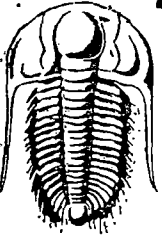


CHART PAGE



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

Mull Drilling Co. Inc.  
OPERATOR

Barnes #1-35  
WELL NAME AND NO.

#2  
DST NO.

Mln.	Ins. of Water PSIG	Orifice Size	MCF/D	Mln.	Ins. of Water PSIG	Orifice Size	MCF/D
20	16	1/2"	25,100	5	14	3/8	13,400
25	19	"	27,300	10	47	3/8	24,100
30	20	"	28,000	15	50	3/8	25,200
				20	40	1/2	39,600
				25	36	1/2	37,600
				30	24	1/2	30,700
				35	4	1/2	12,500
				40	16	3/8	19,200
				50	20	3/8	15,900
				60	16	3/8	14,200

Remarks:

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

No 12596

Well Name & No. <u>Barnes #7-35</u>	Test No. <u>#2</u>	Date <u>6-27-00</u>
Company <u>Mull Drilling Co. Inc.</u>	Zone Tested <u>Viola</u>	
Address <u>P.O. Box 2758 Wichita Ks. 67201-2758</u>	Elevation _____	KB _____ GL _____
Co. Rep / Geo. <u>Roger Martin</u>	Cont. <u>Duke Rig 5</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>35</u> Twp. <u>31S</u> Rge. <u>19W</u>	Co. <u>Comanche</u>	State <u>Ks.</u>
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>5609-5628</u>	Initial Str Wt./Lbs. <u>72,000</u>	Unseated Str Wt./Lbs. <u>76,000</u>
Anchor Length <u>19</u>	Wt. Set Lbs. <u>30,000</u>	Wt. Pulled Loose/Lbs. <u>90,000</u>
Top Packer Depth <u>5604</u>	Tool Weight <u>1800</u>	
Bottom Packer Depth <u>5609</u>	Hole Size — <u>7 7/8"</u> ✓	Rubber Size — <u>6 3/4"</u> ✓
Total Depth <u>5628</u>	Wt. Pipe Run _____	Drill Collar Run <u>121</u>
Mud Wt. <u>9.3</u> LCM <u>4</u> Vis. <u>51</u> WL <u>8.0</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>5477</u>
Blow Description <u>1st open strong blow bottom of Bucket in 45 sec. GTS in 19 min. Gas will bunch</u> <u>Bled 2" blow back built to 9"</u> <u>2nd open B.O.B. as soon as tool opened</u> <u>Bled 2" Blow back built to B.O.B.</u>		

Recovery — Total Feet <u>582</u>	GIP <u>GTS</u>	Ft. in DC <u>124</u>	Ft. in DP <u>558</u>
Rec. <u>372</u>	Feet Of <u>Clean Gassy oil</u>	30 %gas 70 %oil	%water %mud
Rec. <u>186</u>	Feet Of <u>Gas + Mud cut oil</u>	20 %gas 65 %oil	%water 15 %mud
Rec. <u>124</u>	Feet Of <u>Gas + oil cut mud</u>	30 %gas 30 %oil	%water 40 %mud
Rec. _____	Feet Of _____	%gas %oil	%water %mud
Rec. _____	Feet Of _____	%gas %oil	%water %mud
BHT <u>140</u>	°F Gravity <u>38</u>	°API D@ <u>70</u>	°F Corrected Gravity <u>37</u> °API _____
RW _____ @ _____	°F Chlorides _____	ppm Recovery _____	Chlorides <u>6000</u> ppm System _____

(A) Initial Hydrostatic Mud	AK-1 <u>2759</u>	Alpine <u>2695</u>	PSI Recorder No. <u>3026</u>	T-On Location <u>4:30 A.M.</u>
(B) First Initial Flow Pressure	<u>86</u>	<u>57</u>	PSI (depth) <u>5616</u>	T-Started <u>7:20 A.M.</u>
(C) First Final Flow Pressure	<u>118</u>	<u>119</u>	PSI Recorder No. <u>13277</u>	T-Open <u>9:44 A.M.</u>
(D) Initial Shut-In Pressure	<u>1029</u>	<u>1036</u>	PSI (depth) <u>5628</u>	T-Pulled <u>12:59 P.M.</u>
(E) Second Initial Flow Pressure	<u>172</u>	<u>132</u>	PSI Recorder No. _____	T-Out <u>4:40 P.M.</u>
(F) Second Final Flow Pressure	<u>259</u>	<u>236</u>	PSI (depth) _____	T-Off Location _____
(G) Final Shut-in Pressure	<u>855</u>	<u>843</u>	PSI Initial Opening <u>30</u>	Test ✓ <u>800<sup>cc</sup></u>
(Q) Final Hydrostatic Mud	<u>2729</u>	<u>2667</u>	PSI Initial Shut-in <u>45</u>	Jars ✓ <u>200<sup>cc</sup></u>
			Final Flow <u>60</u>	Safety Joint ✓ <u>50<sup>cc</sup></u>
			Final Shut-in <u>60</u>	Straddle _____
				Circ. Sub ✓ _____
				Sampler _____
				Extra Packer _____
				Elec. Rec. ✓ <u>150<sup>cc</sup></u>
				Mileage _____
				Other _____
				TOTAL PRICE \$ <u>1200<sup>cc</sup></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 Roger L. Martin  
 Our Representative Scott Buehler

2.3 bbls Gas  
5.6 bbls Oil  
0.6 bbls Mud  
8.5 bbls T.F.

TRILOBITE TESTING L.L.C.

OPERATOR : Mull Drilling Co., Inc.  
 WELL NAME: Barnes #1-35  
 LOCATION : 35-31s-19w Comanche co KS  
 INTERVAL : 5615.00 To 5638.00 ft

DATE 06-28-000  
 KB 2096.00 ft TICKET NO: 12867 DST #3  
 GR 2085.00 ft FORMATION: Viola  
 TD 5638.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10248	10248	2342			PF Fr. 0638 to 0708 hr
SI 60 Range(Psi )	4400.0	4400.0	4995.0	0.0	0.0	IS Fr. 0708 to 0808 hr
SF 45 Clock(hrs)	12 hr	12 hr	batt.			SF Fr. 0808 to 0853 hr
FS 120 Depth(ft )	5635.0	5635.0	5620.0	0.0	0.0	FS Fr. 0853 to 1053 hr

	Field	1	2	3	4	
A. Init Hydro	2757.0	2739.0	2755.0	0.0	0.0	T STARTED 0419 hr
B. First Flow	87.0	119.0	125.0	0.0	0.0	T ON BOTM 0632 hr
B1. Final Flow	193.0	210.0	216.0	0.0	0.0	T OPEN 0638 hr
C. In Shut-in	1371.0	1375.0	1375.0	0.0	0.0	T PULLED 1058 hr
D. Init Flow	256.0	263.0	236.0	0.0	0.0	T OUT 1450 hr
E. Final Flow	397.0	402.0	406.0	0.0	0.0	
F. Fl Shut-in	1235.0	1235.0	1229.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2702.0	2694.0	2667.0	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 94000.00 lbs
						Initial Str Wt 76000.00 lbs
						Unseated Str Wt 80000.00 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 180.00 ft
						D.P. Length 5415.00 ft

RECOVERY

Tot Fluid 860.00 ft of 180.00 ft in DC and 680.00 ft in DP  
 0.00 ft of Gas in all fluid free pipe.  
 125.00 ft of Clean gassy oil  
 0.00 ft of 5% gas 95% oil  
 240.00 ft of Oil, gas & mud cut water  
 0.00 ft of 42% gas 11% oil 36% water 11% mud  
 495.00 ft of Salt water  
 0.00 ft of 3% gas 97% water  
 0.00 ft of EST.FT. of PAY-----12  
 SALINITY 96000.00 P.P.M. A.P.I. Gravity 41.00

MUD DATA-----

Mud Type	Chemical
Weight	8.90 lb/c
Vis.	83.00 S/L
W.L.	7.20 in3
F.C.	0.20 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	135.00 F
Hole Condition	good
% Porosity	16.00
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.	Roger Martin
Contr.	Duke Drlg.
Rig #	5
Unit #	
Pump T.	LCM 3 #/bl

BLOW DESCRIPTION

Initial Flow:  
 Strong blow. Bottom of bucket in 1 1/2 minutes.  
 Initial Shut-In:  
 Strong blow. Bottom of bucket in 6 minutes.  
 Final Flow:  
 Strong blow. Gas to surface in 9 minutes. (see gas volume report).  
 Final Shut-In:  
 Strong blow. Bottom of bucket in 6 minutes.

SAMPLES: Gas sample  
 SENT TO: Caraway/Liberal

Test Successful: Y

GAS RECOVERY

COMPANY: Mull Drilling Co., Inc.

DATE: 06-28-000

WELL NAME: Barnes #1-35

KB Elev: 2096.00 ft TICKET #12867 DST #3

WELL LOCATION: 35-31s-19w Comanche co KS

GR Elev: 2085.00 ft FORMATION: Viola

INTERVAL Fr.: 5615.00 To 5638.00 T.D.: 5638.00 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)
10	0.25	0	6	4120.0
15	0.25	0	8	4760.0
20	0.25	0	9	5050.0
25	0.25	0	9	5050.0
30	0.25	0	8	4760.0
35	0.25	0	8	4760.0
45	0.25	0	8	4760.0

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

WELL NAME: Barnes #1-35  
 LOCATION : 35-31s-19w Comanche co KS  
 TICKET No. 12867 D.S.T. No. 3 DATE 06-28-000  
 TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 27  
 INTERVAL TOOL .....  
 BOTTOM PACKERS AND ANCHOR ..... 23  
 TOTAL TOOL ..... 50  
 DRILL COLLAR ANCHOR IN INTERVAL .....  
 D.C. ANCHOR STND.Stands Single Total  
 D.P. ANCHOR STND.Stands Single Total  
 TOTAL ASSEMBLY ..... 50  
 D.C. ABOVE TOOLS.Stands3 Single Total 180  
 D.P. ABOVE TOOLS.Stands87 Single Total 5415  
 TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5645  
 TOTAL DEPTH ..... 5638  
 TOTAL DRILL PIPE ABOVE K.B. .... 7

REMARKS:  
 Comments:

FLUID SAMPLER DATA (not run)

GAS----- cubic ft  
 OIL----- ML.  
 MUD----- ML.  
 WATER----- ML.  
 OTHER-----  
 PRESSURE----- PSI  
 Rw----- ohms @ deg. F.  
 CHLORIDES----- ppm.  
 GRAVITY----- deg.API

P.O. SUB  
 C.O. SUB @ top of tool 5588  
 S.I. TOOL Sterling 5594  
 HMV Sterling 5599  
 JARS bowen 5604  
 SAFETY JOINT bowen 5606  
 PACKER Top 5610  
 PACKER Btm. 5615  
 DEPTH 5615  
 1 ft. 5616  
 ANCHOR  
 perfs  
 Alpine rec. @ 5620  
 17' perfs to 5633  
 AK-1 rec. @ 5635  
 BULLNOSE 5 ft. perforated 5638  
 T.D.

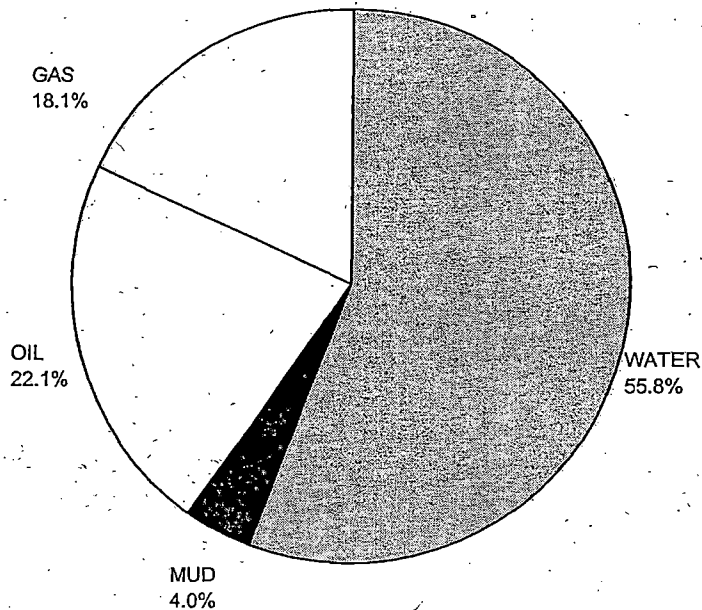
CALCULATED RECOVERY ANALYSIS

DST 3

TICKET 12867

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	125	5	6.25	95	118.75	0	0	0	0
PIPE 2	240	42	100.8	11	26.4	36	0	11	26.4
3	315	3	9.45	0	0	97	305.55	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
WEIGHT 1	0	0	0	0	0	0	0	0	0
PIPE 2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
DRILL 1	180	3	5.4	0	0	97	174.6	0	0
COLLARS 2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
TOTAL	860	0	121.9	0	145.15	0	480.15	0	26.4

BBL OIL=	2.064033	*	HRS OPEN	1.25	=	BBL/DAY	39.629434
BBL WATER=	5.198715	*			=		99.815328
BBL MUD=	0.375408						
BBL GAS =	1.683036						



# TEST HISTORY

12867 DST#3 BARNES #1-35 MULL DRILLING CO.

## Flag Points

t (Min.)	P (PSig)
A: 0.00	2754.75
B: 0.00	124.96
C: 28.00	215.60
D: 64.50	1375.06
E: 0.00	235.58
F: 45.50	405.53
G: 125.50	1228.86
Q: 0.00	2667.30

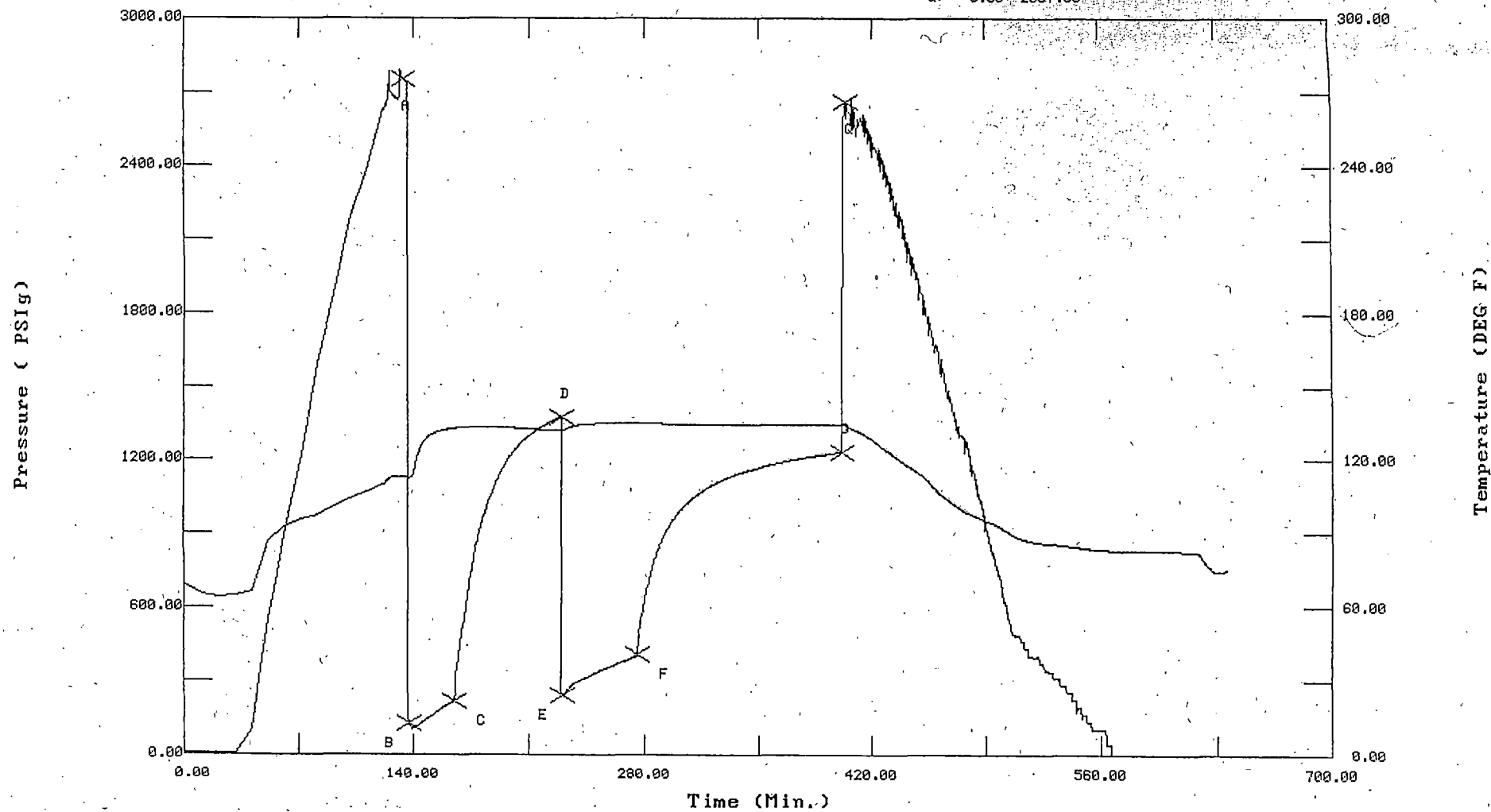
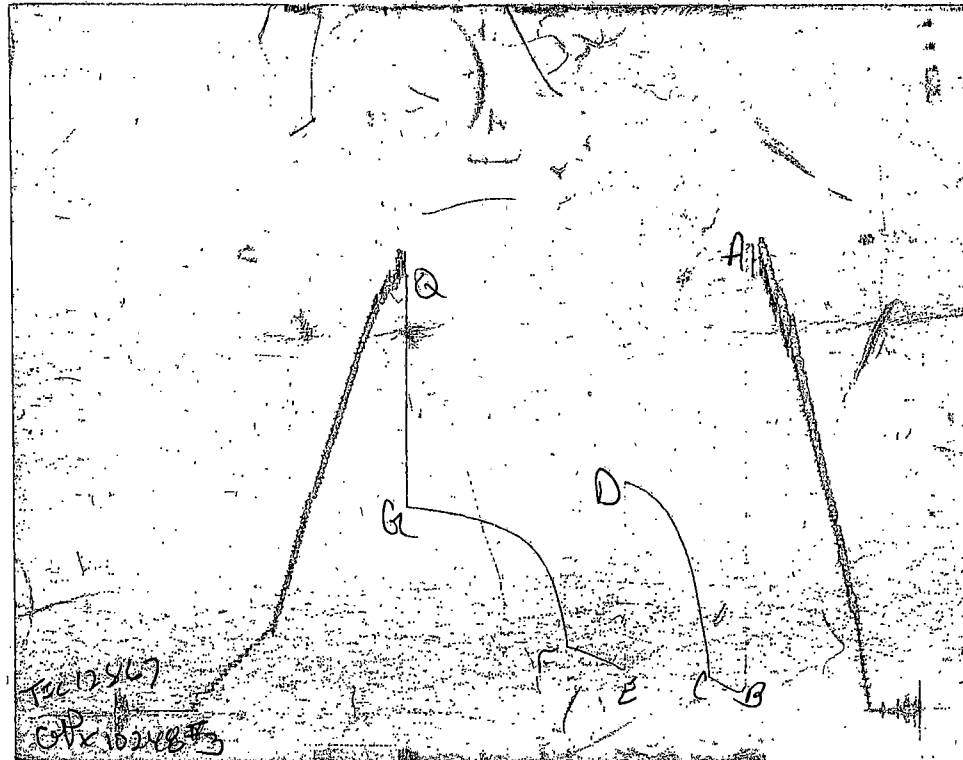


CHART PAGE



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 12867

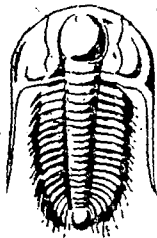
Well Name & No. <u>Barnes # 1-35</u>	Test No. <u>3</u>	Date <u>6-28-2000</u>
Company <u>Mull Drilg. Co. Inc.</u>	Zone Tested <u>Nicola</u>	
Address <u>P.O. Box 2758, Wichita, KS 67201</u>	Elevation <u>2096</u> KB <u>2085</u> SGL	
Co. Rep / Geo. <u>Roger Martin</u>	Cont. <u>Duke Drilg. #5</u>	Est. Ft. of Pay <u>12</u> Por. <u>   </u> %
Location: Sec. <u>35</u>	Twp. <u>36S</u>	Rge. <u>19W</u> Co. <u>Comanche</u> State <u>KS</u>
No. of Copies <u>5</u>	Distribution Sheet (Y, N) <u>Y</u>	Turnkey (Y, N) <u>   </u> Evaluation (Y, N) <u>   </u>

Interval Tested <u>5415 - 5438</u>	Initial Str Wt./Lbs. <u>76,000</u>	Unseated Str Wt./Lbs. <u>80,000</u>
Anchor Length <u>23'</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>94,000</u>
Top Packer Depth <u>5410'</u>	Tool Weight <u>2100#</u>	
Bottom Packer Depth <u>5415'</u>	Hole Size — 7 7/8" <input checked="" type="checkbox"/>	Rubber Size — 6 3/4" <input checked="" type="checkbox"/>
Total Depth <u>5438'</u>	Wt. Pipe Run <u>None</u>	Drill Collar Run <u>180'</u>
Mud Wt. <u>8.9</u> LCM <u>3#</u> Vis. <u>43</u> WL <u>7.2 cc.</u>	Drill Pipe Size <u>4 1/2" X.H.</u>	Ft. Run <u>5415'</u>
Blow Description <u>IF: Strong blow. BOB in 1 1/2 mins.</u>		
<u>ISI: Strong blow. BOB in 6 mins.</u>		
<u>FF: Strong blow. GTS in 9 mins. (see gas volume report)</u>		
<u>FSI: Strong blow. BOB in 6 mins.</u>		
Recovery — Total Feet <u>860</u>	GIP <u>yes</u>	Ft. in DC <u>180</u> Ft. in DP <u>680</u>
Rec. <u>125</u> Feet Of <u>clean gas oil</u>	<u>5</u> %gas <u>95</u> %oil	%water %mud
Rec. <u>240</u> Feet Of <u>O, G, EMC W</u>	<u>42</u> %gas <u>11</u> %oil	<u>36</u> %water <u>11</u> %mud
Rec. <u>495</u> Feet Of <u>salt water</u>	<u>3</u> %gas	<u>97</u> %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>135</u> °F Gravity <u>42</u>	°API D@ <u>49</u>	°F Corrected Gravity <u>41</u> °API
RW <u>.08</u> @ <u>74</u> °F	Chlorides <u>96,000</u> ppm	Recovery Chlorides <u>6,000</u> ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2757</u>	<u>2755</u>		<u>2342</u>	<u>0330</u>
(B) First Initial Flow Pressure	<u>87</u>	<u>125</u>		(depth) <u>5420'</u>	T-Started <u>0419</u>
(C) First Final Flow Pressure	<u>193</u>	<u>216</u>		Recorder No. <u>10248</u>	T-Open <u>0638</u>
(D) Initial Shut-in Pressure	<u>1371</u>	<u>1375</u>		(depth) <u>5435'</u>	T-Pulled <u>1058</u>
(E) Second Initial Flow Pressure	<u>256</u>	<u>236</u>		Recorder No. <u>   </u>	T-Out <u>1450</u>
(F) Second Final Flow Pressure	<u>397</u>	<u>406</u>		(depth) <u>   </u>	T-Off Location <u>1610</u>
(G) Final Shut-in Pressure	<u>1235</u>	<u>1229</u>		Initial Opening <u>30</u>	Test <input checked="" type="checkbox"/> <u>800</u>
(Q) Final Hydrostatic Mud	<u>2202</u>	<u>2667</u>		Initial Shut-in <u>40</u>	Jars <input checked="" type="checkbox"/> <u>200</u>
				Final Flow <u>45</u>	Safety Joint <input checked="" type="checkbox"/> <u>50</u>
				Final Shut-in <u>120</u>	Straddle <u>   </u>
					Circ. Sub <u>   </u>
					Sampler <u>   </u>
					Extra Packer <u>   </u>
					Elec. Rec. <input checked="" type="checkbox"/> <u>150</u>
					Mileage <u>   </u>
					Other <u>   </u> <input checked="" type="checkbox"/> <u>30</u>
					TOTAL PRICE \$ <input checked="" type="checkbox"/> <u>1230<sup>00</sup></u>

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Approved By Roger L. Martin  
 Our Representative Cony Purnell



**TRILOBITE  
TESTING L.L.C.**

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

**GAS VOLUME REPORT**

Miller Drilling Co. Inc.  
OPERATOR

Barnes # 1-35  
WELL NAME AND NO.

3  
DST NO.

Initial Open				Final Open			
Min.	Ins. of Water PSIG	Orifice Size	MCF/D	Min.	Ins. of Water PSIG	Orifice Size	MCF/D
				9	~	1/2"	GTS
				10	6" in H <sub>2</sub> O	1/4"	4.12
				15	8" in H <sub>2</sub> O	1/4"	4.76
				20	9" in H <sub>2</sub> O	1/4"	5.05
				25	9" in H <sub>2</sub> O	1/4"	5.05
				30	8" in H <sub>2</sub> O	1/4"	4.76
				35	8" in H <sub>2</sub> O	1/4"	4.78
				45	8" in H <sub>2</sub> O	1/4"	4.71

Remarks: