

**CONFIDENTIAL**

SIDE ONE

**CONFIDENTIAL**

**ORIGINAL**

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACD-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

Operator: License # 5144

Name: Mull Drilling Company, Inc.

Address P.O. Box 2758

Wichita

City/State/Zip Kansas 67201-2758

Purchaser: NCRA - McPherson (OP#5565)

Operator Contact Person: John M. Parker

Phone (316) 264-6366

Contractor: Name: Duke Drilling

License: 5929

Wellsite Geologist: John Parker

Designate Type of Completion

New Well  Re-Entry  Workover

Oil  SWD  S10W  Temp. Abd.

Gas  ENHR  SIGW

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

If Workover/Re-Entry: old well info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_

Deepening  Re-perf.  Conv. to Inj/SWD

Plug Back  PBD

Commingled  Docket No. \_\_\_\_\_

Dual Completion  Docket No. \_\_\_\_\_

Other (SWD or Inj?)  Docket No. \_\_\_\_\_

04/01/95 04/07/95 04/08/95

Spud Date 04/01/95 Date Reached TD 04/07/95 Completion Date 04/08/95

API NO. 15- 135-23868

County Ness

S/2-S/2-SE/4 Sec. 5 Twp. 19S Rge. 24 XX<sup>E</sup><sub>W</sub>

330 Feet from (S)N (circle one) Line of Section

1320 Feet from (E)W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:  
NE.  NW or SW (circle one)

Lease Name Borger Well # #5

Field Name McDonald

Producing Formation Mississippian-Warsaw

Elevation: Ground 2327' KB 2336'

Total Depth 4450' PBD 4410'

Amount of Surface Pipe Set and Cemented at 241' Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set 1605' Feet

If Alternate II completion, cement circulated from 1605'

feet depth to surface w/ 260 ex cat.

Drilling Fluid Management Plan ALT 2 2/2 5-8-96  
(Data must be collected from the Reserve Pit)

Chloride content 27,000 ppm Fluid volume 800 bbls

Dewatering method used evaporation

Location of fluid disposal if hauled offsite: NUL

Operator Name RELEASED **JUN 6**

Lease Name \_\_\_\_\_ License No. \_\_\_\_\_ **CONFIDENTIAL**

Quarter 1 Sec. 5 Twp. 19S Rng. 24 E/W

County FROM CONFIDENTIAL Docket No. \_\_\_\_\_

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-13v, 82-3-106 and 82-3-107 apply. Information on 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 John M. Parker

Title Geologist Date 6/06/95

Notary Public Patricia L. Ungleton State of Kansas

Notary Public Patricia L. Ungleton

Date Commission Expires March 27, 1999

**RECEIVED**  
K.C.C. OFFICE USE ONLY  
CORPORATION COMMISSION

F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Geologist Report Received **JUN 07 1995**

Distribution  
 KCC  SWD/Rep.  NGPA  
 KGS  Plug  Other (Specify)

Operator Name Mull Drilling Company, Inc. Lease Name BORGER Well # #5  
 Sec. 5 Twp. 19S Rge. 24  East  West  
 County Ness

**CONFIDENTIAL**

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test. Attach extra sheet if more space is needed. Attach copy of log.

See DST Chart  
 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:  
 DIL, Density-Neutron, Microlog

Formation (Top)	Depth	Datum
T/Anhydrite	1599	+ 737
B/Anhydrite	1634	+ 702
Heebner	3704	-1368
Toronto	3726	-1390
Lansing	3780	-1444
B/KC	4062	-1726
Marmaton	4070	-1734
Pawnee	4174	-1838
Ft Scott	4254	-1918
Cherokee	4280	-1944

CASING RECORD  Miss-Warsaw 4358 -2022  
 New  Used LTD 4454 -2118  
 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	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	24#	241'	Poz(#2#3)	160	
Production	7 7/8"	5 1/2"	15.5#	4453'	60/40 Common	100	5#Gil, 3/4% Halad, 5% Cal Seal, 18% Sil
		Stage 2		1605'	Poz(60/40)	260sx	6%gel/1/4#FloSl

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input checked="" type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing	4281-4376	Common	75	10% Salt/3/4% Halad-322 + 10% salt
<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
4	4360-4368 (packer @ 4338')	500 gal 15% MCA + 30 ball sealers	
4	4360-4368	50 gal 20% FE + 350 gal 20% FE	

TUBING RECORD Size 2.375 Set At 4387' Packer At - Liner Run  Yes  No

Date of First, Resumed Production, SWD or Inj. 04/15/95 Producing Method  Flowing  Pumping  Gas Lift  Other (Explain)

Estimated Production Per 24 Hours Oil 100 BOPD Gas -0- Mcf -0- Water 2 BWPD Bbls. -0- Gas-Oil Ratio -0- Gravity

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)  
 METHOD OF COMPLETION:  Open Hole  Perf.  Dually Comp.  Commingled  Other (Specify) \_\_\_\_\_  
 Production Interval 4360-4368

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

API NO. 15- 135-23868

County Ness

S/2-S/2 - SE/4 Sec. 5 Twp. 19S Rge. 24 XX<sup>E</sup>

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Drilling Fluid Management Plan ALT 2 894 5-8-96  
(Data must be collected from the Reserve Pit)

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Location of fluid disposal if hauled offsite:

Operator Name \_\_\_\_\_

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

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Rng. \_\_\_\_\_ E/W

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

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 Gas  ENHR  SIGW  
 Dry  Other (Core, WSW, Expl., Cathodic, etc)

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Well Name: \_\_\_\_\_

Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_

Deepening  Re-perf.  Conv. to Inj/SVD  
 Plug Back  PBDT  
 Commingled  Docket No. \_\_\_\_\_  
 Dual Completion  Docket No. \_\_\_\_\_  
 Other (SVD or Inj?)  Docket No. \_\_\_\_\_

04/01/95 04/07/95 04/08/95  
Spud Date Date Reached TD Completion Date

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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 John M. Parker

Title Geologist Date 6/06/95

**NOTARY PUBLIC**  
STATE OF KANSAS  
My Appl. Exp. 3/27/99

Notary Public Patricia L. Ungleish

Date Commission Expires March 27, 1999

K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Geologist Report Received  
Distribution  
 KCC  SVD/Rep  NGPA  
 XGS  Plug  Other  
(Specify)

CONFIDENTIAL

ORIGINAL

TRILOBITE TESTING L.L.C.

OPERATOR : MULL DRILLING CO., INC.

DATE 04/06/95

WELL NAME: BORGER #5

KB 0.00 ft

TICKET NO: 8034

DST #1

LOCATION : 5-19S-24W

GR 2327.00 ft

FORMATION: ARBUCKLE

INTERVAL : 0.00 To 0.00 ft

TD 0.00 ft

TEST TYPE: CONVENTIONAL

API #15-135-23868-0000

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11086	11086	2341			PF Fr. 30 to hr
SI 45 Range(Psi)	4350.0	4350.0	4995.0	0.0	0.0	IS Fr. 45 to hr
SF 60 Clock(hrs)	25828	25828				SF Fr. to 1 hr
FS 60 Depth(ft)	4385.0	4385.0	4340.0	0.0	0.0	FS Fr. to 1 hr

	Field	1	2	3	4	
A. Init Hydro	2120.0	2158.0	2127.0	0.0	0.0	T STARTED hr
B. First Flow	185.0	185.0	104.0	0.0	0.0	T ON BOTM hr
B1. Final Flow	353.0	336.0	317.0	0.0	0.0	T OPEN 20:5 hr
C. In Shut-in	1096.0	1085.0	1126.0	0.0	0.0	T PULLED 01:1 hr
D. Init Flow	414.0	412.0	352.0	0.0	0.0	T OUT hr
E. Final Flow	667.0	642.0	650.0	0.0	0.0	
F. Fl Shut-in	1128.0	1100.0	1123.0	0.0	0.0	
G. Final Hydro	2098.0	2121.0	2096.0	0.0	0.0	
Inside/Outside	0	0	I			

TOOL DATA-----

Tool Wt.	0.00 lbs
Wt Set On Packer	0.00 lbs
Wt Pulled Loose	0.00 lbs
Initial Str Wt	0.00 lbs
Unseated Str Wt	0.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	0.00 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	0.00 ft

RECOVERY

Tot Fluid 1420.00 ft of 0.00 ft in DC and 1420.00 ft in DP  
 50.00 ft of CLEAN GAS IN PIPE  
 0.00 ft of CLEAN GASSY OIL - 5% GAS/95% OIL  
 60.00 ft of GASSY MUD CUT OIL - 10% GAS/50% OIL/40% MUD  
 240.00 ft of GAS & MUDDY OIL CUT H2O - 30%GAS/25% OIL/  
 .00 ft of 35% H2O/10% MUD  
 80.00 ft of WATER - 100% WATER  
 0.00 ft of  
 0.00 ft of  
 SALINITY 19000.00 P.P.M. A.P.I. Gravity 38.00

JUN 6  
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FLOW DESCRIPTION

PF - STRONG BLOW OFF BOTTOM OF BUCKET IN  
 3 1/2 MIN.  
 SF - STRONG BLOW OFF BOTTOM OF BUCKET IN  
 4 MIN.

MUD DATA-----

Mud Type	CHEMICAL
Weight	9.00 lb/cf
Vis.	49.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	

RELEASED

JUL 15 1996

FROM CONFIDENTIAL

Amt. of fill	0.00 ft
Btm. H. Temp.	128.00 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	GARY SPEER
Co. Rep.	JOHN PARKER
Contr.	DUKE
Rig #	4
Unit #	
Pump T.	

SAMPLES:  
SENT TO:

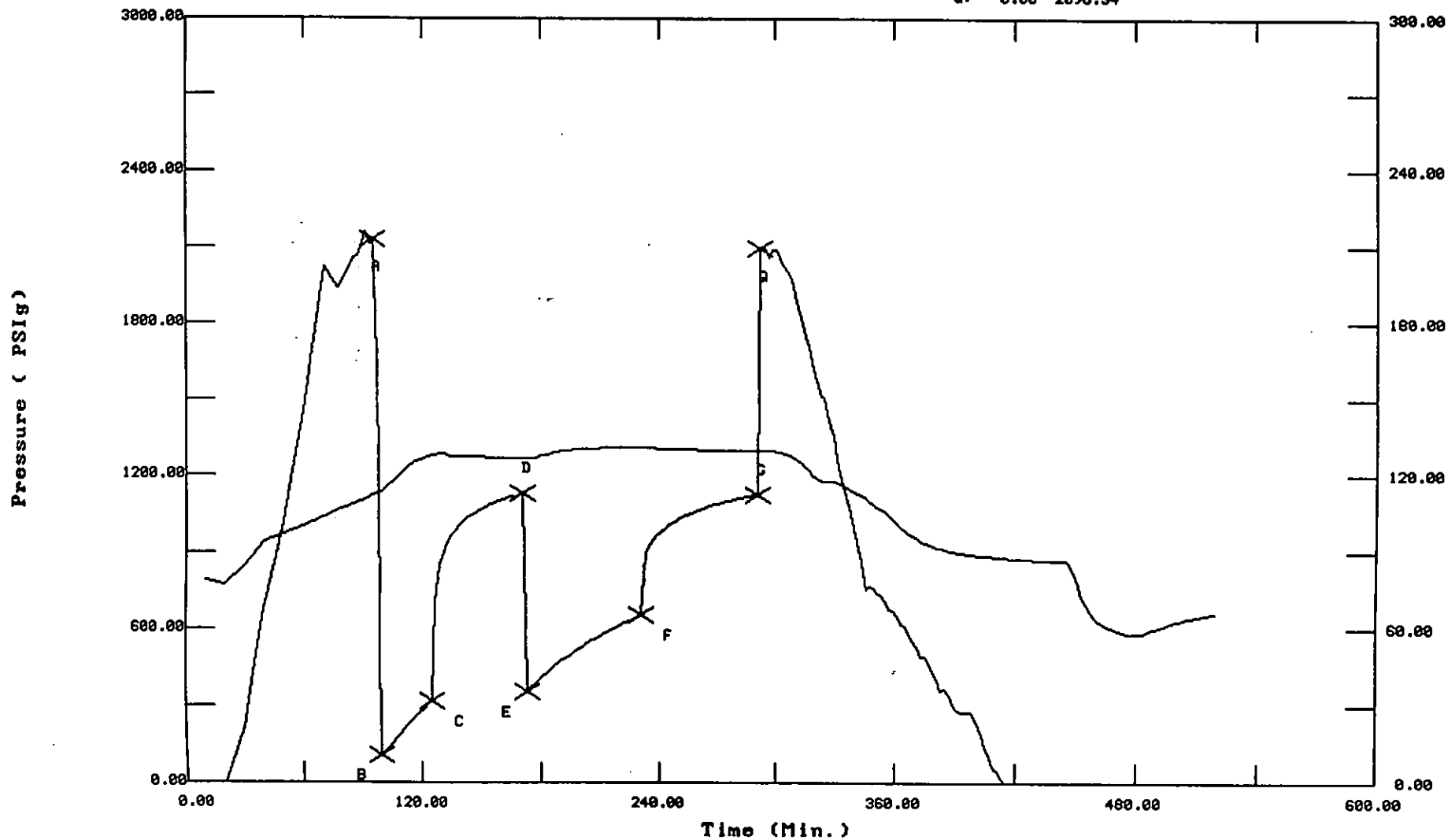
Test Successful: Y

# TEST HISTORY

Mull Drig Borger 5 DST 1

Flag Points  
t (Min.) P (PSig)

A:	0.00	2127.48
B:	0.00	184.40
C:	26.00	317.87
D:	46.00	1126.38
E:	0.00	352.87
F:	58.00	658.26
G:	60.00	1123.11
Q:	0.00	2098.34



## ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Mull Drlg Borger 5 DST 1

DATE: 04/06/95

TIME: 18:18:32

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** Initial Hydro.	95.00	2127.5	0.0	112.28		
***** Start Flow 1	0.00	104.4	0.0	113.54		
	2.00	115.9	11.5	114.80		
	4.00	135.3	30.9	116.24		
	6.00	153.7	49.3	117.32		
	8.00	172.9	68.5	118.76		
	10.00	191.3	86.9	120.56		
	12.00	208.9	104.5	122.00		
	14.00	225.9	121.5	123.44		
	16.00	242.2	137.8	124.52		
	18.00	258.2	153.8	125.42		
	20.00	273.5	169.1	125.96		
	22.00	288.6	184.2	126.68		
	24.00	302.1	197.7	127.04		
***** End Flow 1	26.00	317.1	212.7	127.58		
***** Start Shutin 1	0.00	317.1	0.0	127.58	0.0000	0.101
	2.00	704.5	387.4	127.94	14.0000	0.496
	4.00	848.9	531.9	128.30	7.5000	0.721
	6.00	900.7	583.6	128.12	5.3333	0.811
	8.00	935.5	618.5	127.76	4.2500	0.875
	10.00	962.1	645.0	127.40	3.6000	0.926
	12.00	983.4	666.3	127.22	3.1667	0.967
	14.00	1001.2	684.1	127.04	2.8571	1.002
	16.00	1016.4	699.3	127.04	2.6250	1.033
	18.00	1029.0	712.0	126.86	2.4444	1.059
	20.00	1041.1	724.0	126.86	2.3000	1.084
	22.00	1051.3	734.2	126.86	2.1818	1.105
	24.00	1060.6	743.5	126.86	2.0833	1.125
	26.00	1069.1	752.0	126.86	2.0000	1.143
	28.00	1076.8	759.7	126.68	1.9286	1.159
	30.00	1083.9	766.8	126.68	1.8667	1.175
	32.00	1090.4	773.3	126.68	1.8125	1.189
	34.00	1096.6	779.5	126.68	1.7647	1.203
	36.00	1102.3	785.2	126.68	1.7222	1.215
	38.00	1107.8	790.7	126.50	1.6842	1.227
	40.00	1112.8	795.7	126.50	1.6500	1.238
	42.00	1117.5	800.4	126.50	1.6190	1.249
	44.00	1122.2	805.1	126.50	1.5909	1.259
***** End Shut-in 1	46.00	1126.3	809.2	126.50	1.5652	1.269
***** Start Flow 2	0.00	352.1	0.0	126.32		
	2.00	368.4	16.4	126.32		
	4.00	384.4	32.3	126.68		
	6.00	399.3	47.3	127.04		
	8.00	413.5	61.4	127.58		
	10.00	427.0	74.9	127.94		
	12.00	440.0	88.0	128.48		
	14.00	452.4	100.4	128.84		
	16.00	464.4	112.3	129.02		
	18.00	475.9	123.8	129.38		
	20.00	487.1	135.0	129.56		
	22.00	498.0	146.0	129.74		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Mull Drlg Borger 5 DST 1

DATE: 04/06/95

TIME: 18:18:32

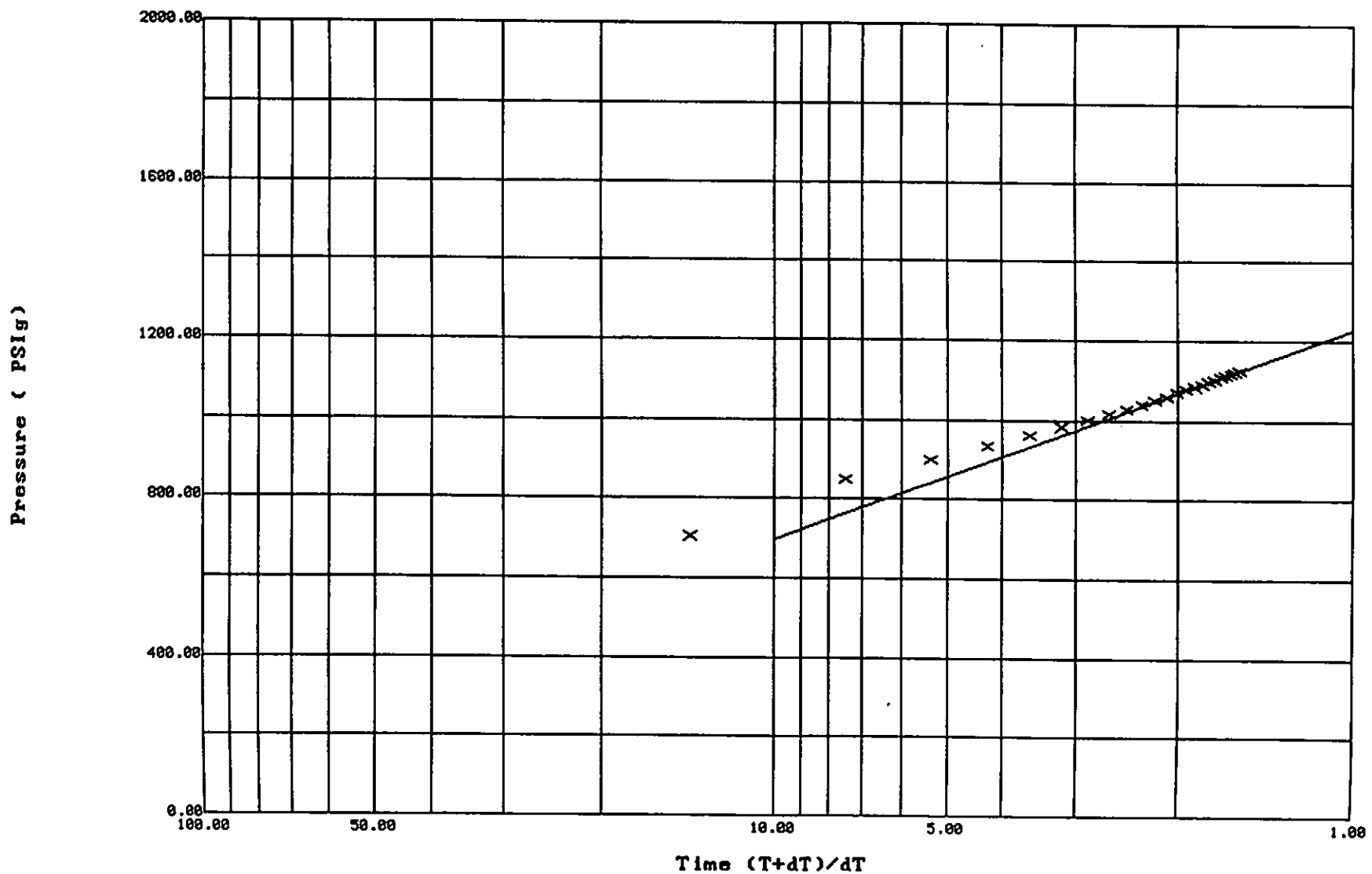
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	24.00	508.8	156.7	129.92		
	26.00	518.9	166.8	129.92		
	28.00	528.1	176.0	130.10		
	30.00	538.0	185.9	130.10		
	32.00	547.5	195.4	130.28		
	34.00	556.6	204.5	130.28		
	36.00	565.3	213.3	130.28		
	38.00	574.1	222.1	130.46		
	40.00	582.6	230.5	130.46		
	42.00	590.5	238.4	130.46		
	44.00	598.5	246.4	130.46		
	46.00	606.2	254.1	130.64		
	48.00	613.9	261.9	130.64		
	50.00	621.1	269.1	130.64		
	52.00	628.8	276.7	130.64		
	54.00	636.2	284.2	130.64		
	56.00	643.2	291.1	130.64		
***** End Flow 2	58.00	650.3	298.2	130.64		
***** Start Shutin 2	0.00	650.3	0.0	130.64	0.0000	0.423
	2.00	890.0	239.7	130.64	43.0000	0.792
	4.00	923.0	272.8	130.64	22.0000	0.852
	6.00	945.4	295.1	130.46	15.0000	0.894
	8.00	962.9	312.6	130.28	11.5000	0.927
	10.00	977.6	327.3	130.10	9.4000	0.956
	12.00	990.3	340.0	130.10	8.0000	0.981
	14.00	1001.4	351.2	130.10	7.0000	1.003
	16.00	1011.3	361.1	129.92	6.2500	1.023
	18.00	1020.3	370.0	129.92	5.6667	1.041
	20.00	1028.7	378.4	129.92	5.2000	1.058
	22.00	1036.0	385.7	129.92	4.8182	1.073
	24.00	1043.2	393.0	129.92	4.5000	1.088
	26.00	1049.8	399.6	129.92	4.2308	1.102
	28.00	1056.1	405.8	129.92	4.0000	1.115
	30.00	1062.0	411.7	129.74	3.8000	1.128
	32.00	1067.4	417.1	129.74	3.6250	1.139
	34.00	1072.7	422.4	129.74	3.4706	1.151
	36.00	1077.6	427.4	129.74	3.3333	1.161
	38.00	1082.4	432.1	129.74	3.2105	1.172
	40.00	1086.9	436.7	129.74	3.1000	1.181
	42.00	1091.1	440.9	129.74	3.0000	1.191
	44.00	1095.2	445.0	129.56	2.9091	1.200
	46.00	1099.3	449.0	129.56	2.8261	1.208
	48.00	1103.1	452.8	129.56	2.7500	1.217
	50.00	1106.6	456.3	129.56	2.6800	1.225
	52.00	1110.0	459.8	129.56	2.6154	1.232
	54.00	1113.2	462.9	129.56	2.5556	1.239
	56.00	1116.7	466.5	129.56	2.5000	1.247
	58.00	1120.1	469.8	129.38	2.4483	1.255
***** End Shut-in 2	60.00	1123.1	472.8	129.38	2.4000	1.261
***** Final Hydro.	293.00	2096.3	0.0	129.56		

# Horner Plot: shut-in #1

Mull Drlg Borger 5 DST 1

Slope: 530.3840 PSig/cycle

Ext. Pressure: 1220.2750 PSig



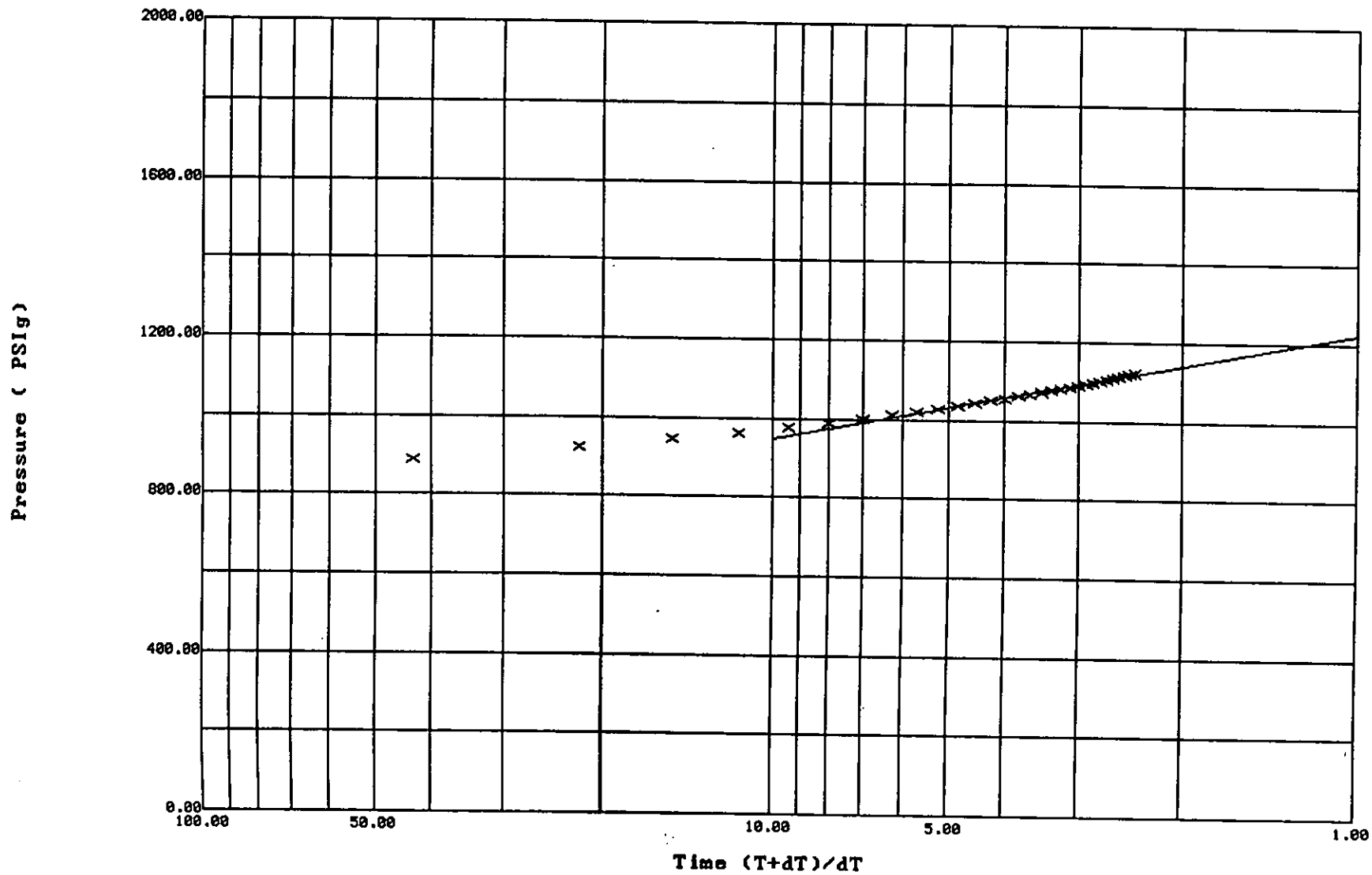


# Horner Plot: shut-in #2

Mull Drlg Borger 5 DST 1

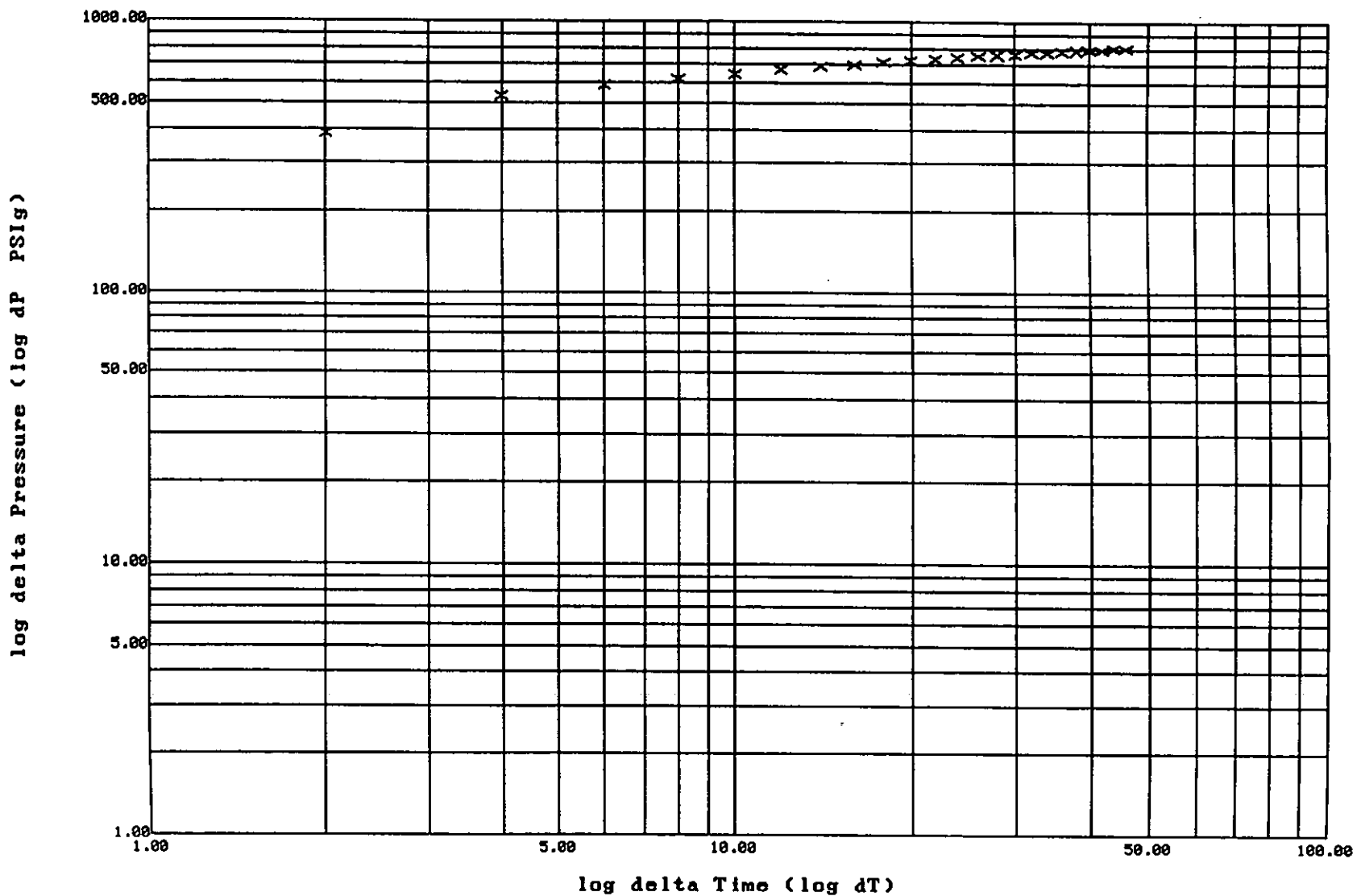
Slope: 278.5295 PSig/cycle

Ext. Pressure: 1225.4886 PSig



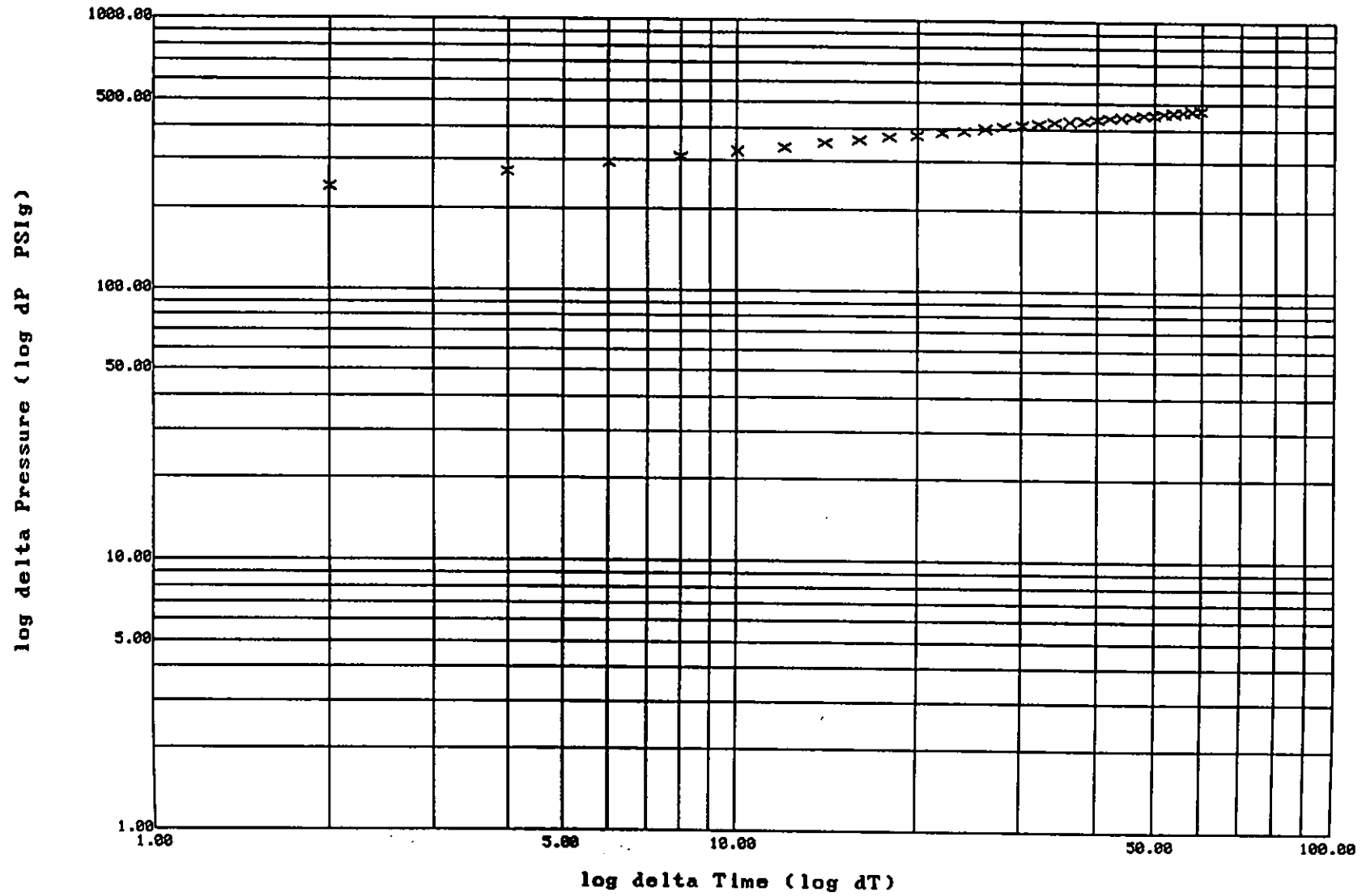
# Ramey Plot: shut-in #1

Mull Drig Borger 5 DST 1



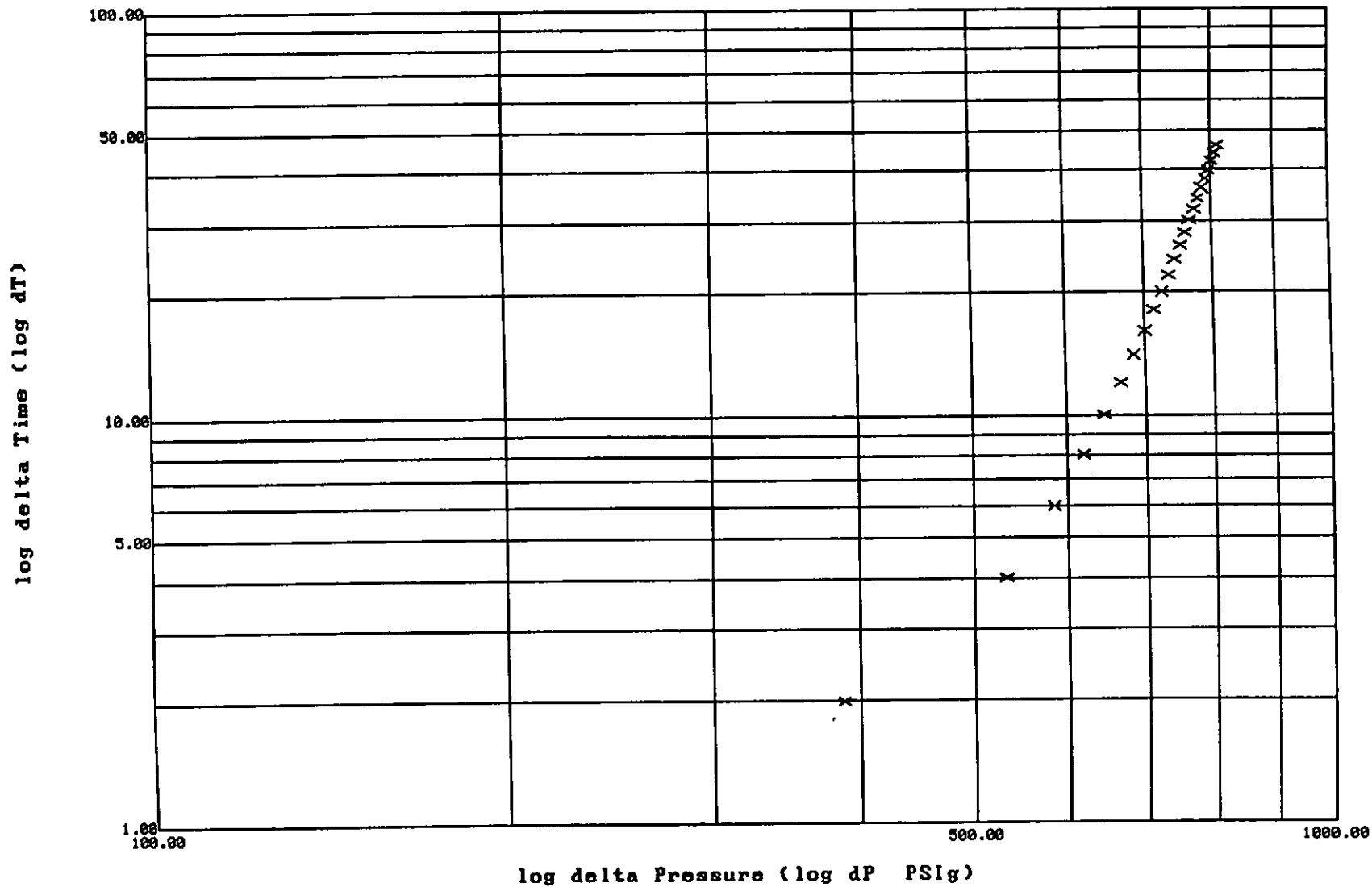
# Ramey Plot: shut-in #2

Mull Drlg Borger 5 DST 1



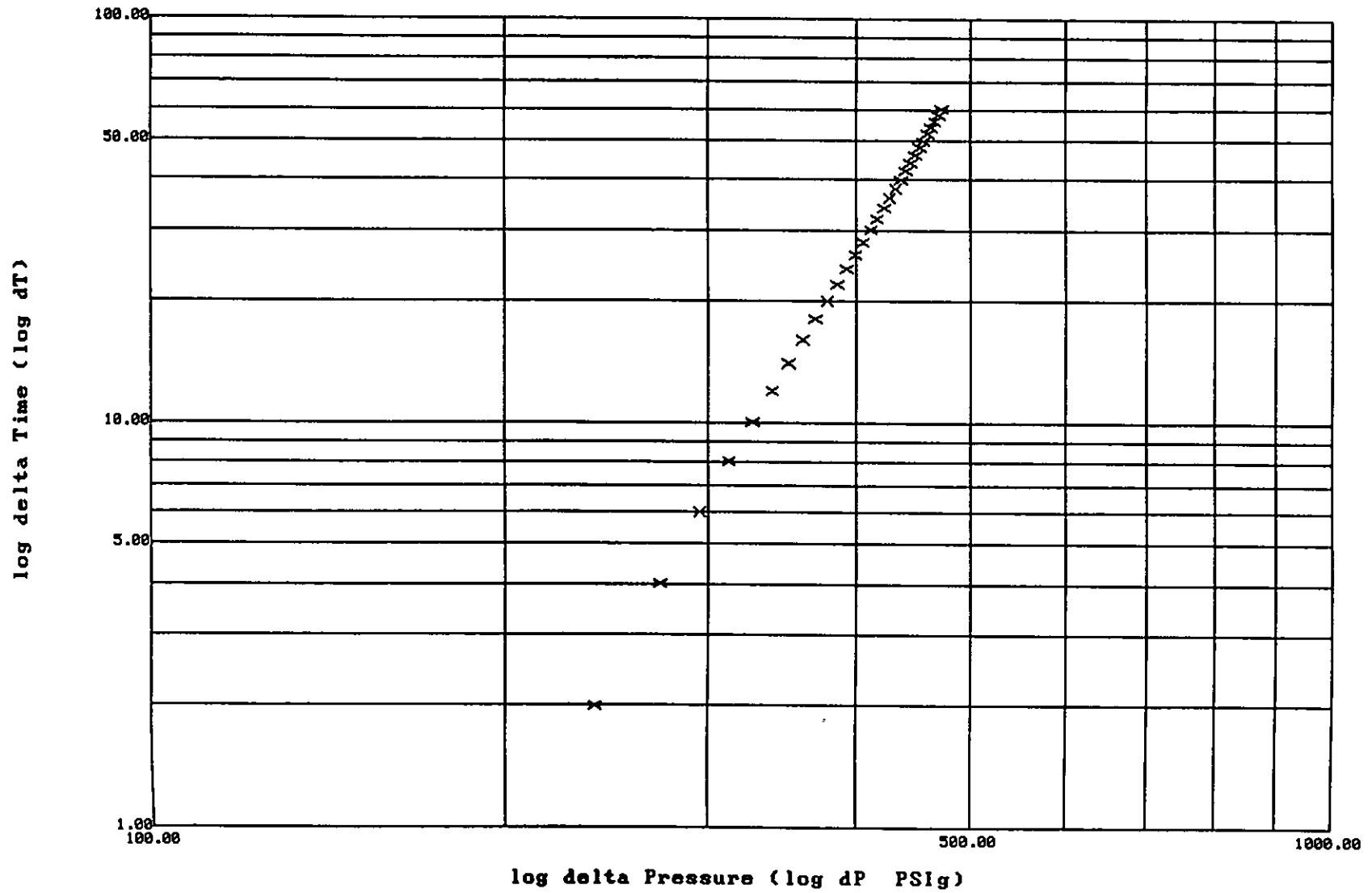
# McKinley Plot: shut-in #1

Mull Drlg Borger 5 DST 1



# McKinley Plot: shut-in #2

Mull Drig Borger 5 DST 1





HALLIBURTON CONFIDENTIAL

DATE 4-7-95 PAGE NO. 1

JOB LOG HAL-2013-C

CUSTOMER Mull Drilling Co	WELL NO. 5	LEASE BORGER	JOB TYPE 2-STAGE	TICKET NO. 806712
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CHART NO.	TIME	RATE (GPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
1	19:00							ON location set up TRK + discuss job
	21:25							RIG Lying Down D.P. STC 56 Run Insert Valve Floats w/AUTOFILL, Centralizers on Collars 1, 3, 5, 7, 9, 11, 13, 15, 68 Cement Bask ON bottom of JT 69; D.V. Tool on Top OFF JT 69 1609', Baffle on Top of JT
	23:00							C/G on bottom hookup w/ Rotating be. + ST Circ w/ mud + Rotating PIPE
	24:30							Finish Circ
	24:35	6						ST 500 Gal mud Flush + 100SKS ST Cement w/ 5% Colseal, 18% Salt, 5# Gils 3/4% Halad 322
	24:42	6	26 BBL				200	Finish mixing cement washout P+L
	24:45	6 1/2					200	Release bottom Plug + ST disp w/ 60BBL water + 45 BBL mud
	01:05	5					900	Plug Down
	01:10							Release Float Head
	01:30	4					750	Open D.V. Tool + Circ w/ mud 15 BBL
		4					200	Pump 10 BBL water + 200 SKS 40/G
		4					200	POZ 6% Gel, 1/4# Floccle/sk
	02:02	4					200	Finish mixing cement + Plug Rathole Release Top Plug
	02:05	5					50	ST disp w/ 33 BBL water
	02:13						1800	Plug Down Close D.V. cement DICIL
	02:15							Release Head
	03:00							JOB Complete

CONFIDENTIAL

ORIGINAL

RELEASED

JUL 15 1995

FROM CONFIDENTIAL

mul Thank You! Larry + B.

JUN 6

CONFIDENTIAL

RECEIVED STATE COOPERATION COMMISSION

JUN 6 1995

CONFIDENTIAL



**CONFIDENTIAL**

**WELL DATA**

FIELD 5 TWP. 19<sup>S</sup> RNG. 24<sup>W</sup> COUNTY NEOSHO STATE KS

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_  
 FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_  
 INITIAL PROD: OIL \_\_\_\_\_ BPO. WATER \_\_\_\_\_ BPO. GAS \_\_\_\_\_ MCFD  
 PRESENT PROD: OIL \_\_\_\_\_ BPO. WATER \_\_\_\_\_ BPO. GAS \_\_\_\_\_ MCFD  
 COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_  
 PACKER TYPE DV Tool SET AT 11609  
 BOTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_  
 MISC DATA \_\_\_\_\_ TOTAL DEPTH \_\_\_\_\_

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	U	15 1/2	542	K13	4553	
LINER						
TUBING						
OPEN HOLE				4553	54	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

**JOB DATA**

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>4-7-95</u> TIME <u>1:50 PM</u>	DATE <u>4-7-95</u> TIME <u>1:40</u>	DATE <u>4-7-95</u> TIME <u>2:35</u>	DATE <u>4-8-95</u> TIME <u>03:00</u>

**TOOLS AND ACCESSORIES**

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE <u>1/2" 11609</u>	1	H...
GLIDE SHOE		
CENTRALIZERS <u>1 1/2" 5/8"</u>	9	H...
BOTTOM PLUG <u>5/8"</u>	1	H...
TOP PLUG		
HEAD		
PACKER <u>5/8" Cemented 11609</u>	1	H...
OTHER <u>Cemented 11609</u>	1	H...

**PERSONNEL AND SERVICE UNITS**

NAME	UNIT NO. & TYPE	LOCATION
<u>D. D. D. Brown</u>	AM 40437	Hays, KS
	RT	
<u>C. P. Young</u>	51160 51145	Hays, KS
	B.T.	
<u>M. K. ...</u>	51252	Hays, KS
	B.T.	
<u>D. ...</u>	0212	Hays, KS

**MATERIALS**

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. @ 60°F  
 DISPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. @ 60°F  
 PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.  
 ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %  
 SURFACTANT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN.  
 NE AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN.  
 FILLING AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ LB. \_\_\_\_\_ IN.  
 GELLING AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ LB. \_\_\_\_\_ IN.  
 FRIC. RED. AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ LB. \_\_\_\_\_ IN.  
 BREAKER TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ LB. \_\_\_\_\_ IN.  
 BLOCKING AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ LB. \_\_\_\_\_ IN.  
 PERFRAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_  
 OTHER \_\_\_\_\_  
 OTHER \_\_\_\_\_

DEPARTMENT Cement  
 DESCRIPTION OF JOB 2 1/2" 11609  
 JUN 6  
 ORIGINAL  
 JOB DONE THRU: TUBING  CASING  ANNULUS  TBG/ANN.   
 CUSTOMER REPRESENTATIVE [Signature]  
 HALLIBURTON OPERATOR [Signature] COPIES REQUESTED \_\_\_\_\_

**CEMENT DATA**

STAGE	NUMBER OF BAGS	CEMENT	BRAND	BULK BAGGED	ADDITIVES	YIELD CU.FT./BBL.	MIXED LBS./GAL.
1	100	31d		B	5% Colant, 1.5% Salt, 5% Colant, 1/2% Habi 1322	1.41	15.3
2	200	40/160		B	6% Gel, 1/4% Habi 1322	1.7	12.7

**PRESSURES IN PSI**

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_  
 BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_  
 AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_  
 SHUT-IN INSTANT \_\_\_\_\_ 5-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_  
 HYDRAULIC HORSEPOWER \_\_\_\_\_  
 ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_  
 AVERAGE RATES IN BPM \_\_\_\_\_  
 TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_  
 CEMENT LEFT IN PIPE \_\_\_\_\_  
 FEET 42 REASON slur Joint

**SUMMARY**

PRELUSH: BBL. GAL. 500 TYPE COUD FLUSH  
 LOAD & BKON: BBL. GAL. \_\_\_\_\_ PAD. BBL. GAL. \_\_\_\_\_  
 TREATMENT: BBL. GAL. \_\_\_\_\_ DISPL: BBL. GAL. 115 / 32  
 CEMENT SLURRY: BBL. GAL. 2 / 21  
 TOTAL VOLUME: BBL. GAL. \_\_\_\_\_  
 REMARKS \_\_\_\_\_  
 STATE CODE \_\_\_\_\_ PERM. NO. \_\_\_\_\_  
 JUN 6 1995

CUSTOMER

WICHITA KIMBERLY

CUSTOMER  
 LEASE  
 WELL NO.  
 JOB TYPE  
 DATE  
 4-7-95