FORM MUST BE TYPED **ORIGINAL** SIDE ONE

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

CONFIDENTIAL

Operator: License # 5144

Name: Mull Drilling Company, Inc.

Address P.O. Box 2758

City/State/Zip Wichita, Kansas 67201-2758

Purchaser: N/A

Operator Contact Person: Scott E. Hampel

Phone (316) 264-6366 ext. 12

Contractor: Name: Pickrell Drilling Co., Inc.

License: 5123

Wellsite Geologist: William M. Stout

Designate Type of Completion
X New Well ____ Re-Entry ____ Workover

____ Oil ____ SWD ____ SIOW ____ Temp. Abd.
____ Gas ____ ENHR ____ SIGW
X Dry ____ Other (Core, WSW, Expl., Cathodic, etc)

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

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Operator: ____

Well Name: ____

Comp. Date ____ Old Total Depth ____

____ Deepening ____ Re-perf. ____ Conv. to Inj/SWD
____ Plug Back ____ PBTD
____ Commingled Docket No. ____
____ Dual Completion Docket No. ____
____ Other (SWD or Inj?) Docket No. ____

11/17/97 Spud Date | 11/23/97 Date Reached TD | 11/24/97 Completion Date

API NO. 15- 137-20406-00-00

County Norton

NE
- - NW NW Sec. 10 Twp. 4S Rge. 23 E X W

4680 Feet from (S) N (circle one) Line of Section

1920 Feet from (E) W (circle one) Line of Section

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

Lease Name Henry Well # 1-10

Field Name Harting

Producing Formation N/A

Elevation: Ground 2351' KB 2356'

Total Depth 3750' PBTD ____

Amount of Surface Pipe Set and Cemented at 219 Feet

Multiple Stage Cementing Collar Used? ____ Yes X No

If yes, show depth set ____ Feet

If Alternate II completion, cement circulated from 219'

feet depth to Surface w/ 150 sx cmt.

Drilling Fluid Management Plan D&A JR 8-24-98
(Data must be collected from the Reserve Pit)

Chloride content ____ ppm Fluid volume ____ bbls

Dewatering method used ____

Location of fluid disposal if hauled offsite:

Operator Name ____

JAN 13
CONFIDENTIAL

Lease Name ____ License No. ____

____ Quarter Sec. ____ Twp. ____ S Rng. ____ E/W

County ____ 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 82-3-130, 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.

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STATE CORPORATION COMMISSION

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.

JAN 21 1998 1-21-98
CONSERVATION DIVISION

Signature Scott Hampel

Title VP-Production & Engineering Date 1/12/98

Subscribed and sworn to before me this 12th day of January, 19 98.

Notary Public Tannis L Tritt

Date Commission Expires March 26, 1999

TANNIS L. TRITT
Notary Public - State of Kansas
My Appt. Expires 3-26-99

K.C.C. OFFICE USE ONLY
F ✓ Letter of Confidentiality Attached
C ✓ Wireline Log Received
C ✓ Geologist Report Received

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

Form ACO-1 (7-91)

SIDE TWO

Operator Name Mull Drilling Co., Inc. Lease Name Henry Well # 1-10

Sec. 10 Twp. 4S Rge. 23 ☐ East ☒ West County Norton

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.

Drill Stem Tests Taken (Attach Additional Sheets.) ☒ Yes ☐ No

Samples Sent to Geological Survey ☒ Yes ☐ No

Cores Taken ☐ Yes ☒ No

Electric Log Run (Submit Copy.) ☒ Yes ☐ No

List All E.Logs Run:
ELI WIRELINE SERVICES:
Dual Induction Log
Compensated Density Neutron Log

☒ Log Formation (Top), Depth and Datums ☐ Sample

Name	Top	Datum
Anhydrite	1932	+ 429
Topeka	3211	- 850
Heebner	3413	- 1052
Toronto	3441	- 1080
Lansing	3456	- 1095
Base Kansas City	3640	- 1279
Reagan	3680	- 1319
Granite Wash	3700	- 1339
TD	3750	- 1389

CASING RECORD ☒ New ☐ 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	# Sacks Used	Type and Percent Additives
Surface		8 5/8"	20#	219'	60/40 Poz	150	2% gel, 3% cc

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose: P&A	Depth Top	Depth Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
___ Perforate					
___ Protect Casing			60/40 Poz	190	6% gel, 1/4# floseal
___ Plug Back TD					
___ 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
	N/A		

TUBING RECORD Size N/A Set At Packer At Liner Run ☐ Yes ☒ No

Date of First, Resumed Production, SWD or Inj. N/A Producing Method ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water	Gas-Oil Ratio	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

ORIGINAL

WILLIAM M. STOUT
101 SOUTH STAR STREET
EL DORADO, KANSAS 67042
(316) 321-1270

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GEOLOGICAL REPORT

Henry #1-10
NW NE Sec. 10-T4S-R23W
Norton County, Kansas
2356 G.L. 2361 K.B. 15-137-20406

OPERATOR:	Mull Drilling Company
CONTRACTOR:	Pickrell Drilling Company
COMMENCED:	November 17, 1997
COMPLETED:	November 24, 1997
SURFACE CASING:	8 5/8" casing @ 222' with 150 sacks cement.
PRODUCTION CASING:	None
SAMPLE DEPTHS:	10' samples were examined from 3000' to 3750' R.T.D.
DRILLING TIME:	1' drilling time kept from 3000' to 3750' R.T.D.

FORMATION LOG TOPS
(Kelly Bushing Elevation)

Anhydrite	1932 +429
Topeka	3211 -850
Heebner	3413 -1052
Toronto	3441 -1080
Lansing	3456 -1095
Base Kansas City	3640 -1279
Reagan	3680 -1319
Granite Wash	3700 -1339
Total Depth	3750 -1389

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SAMPLE DESCRIPTIONS

(Depths are drilling time measurements)

Toronto 3441' (-1080)

3442' - 3444' Limestone, light brown to white, fine crystalline, fossiliferous, oolitic in part, some dense, chalky, no odor, scattered dark stain, slight show free oil - dark brown, dull fluorescence, scattered interoolitic porosity with few vugs. Covered by DST #1.

Lansing 3456' (-1095)

3457' - 3460' Limestone, light brown to light gray, fine crystalline, chalky, fossiliferous, some oolitic, dense in part, faint odor, scattered brown stain, show free oil - brown, dull fluorescence, scattered vugular and oolitic porosity. Covered by DST #1.

DST #1 3410' - 3465'

Open tool 30 min. with weak blow died in 20 min. Close tool 45 min. Open tool 10 min. with no blow. Close tool 45 min. Recovered 2' drilling mud.

IFP 0 - 3#	FFP 3 - 4#
ISIP 288#	FSIP 199#
HP 1072 - 1020#	Temperature 92 degrees

3478' - 3480' Limestone, light brown, fine crystalline, fossiliferous, some oolitic, chalky, dense, no odor, slight show free oil - dark brown, poor intercrystalline porosity, trace vugular porosity, with chert, clear to white, translucent to opaque, some with dark brown stain.

3501' - 3504' Limestone, light brown to white, fine crystalline, fossiliferous, dense, chalky, no odor, slight show free oil - dark brown, dull fluorescence, scattered poor intercrystalline porosity and pin point porosity with dark brown stain.

3522' - 3524' Limestone, light brown, fine crystalline, fossiliferous, dense, chalky some pure white, no odor, very slight show free oil - dark brown, no fluorescence, trace vugular porosity with dark stain.

3567' - 3572' Limestone, white to light brown, fine crystalline, fossiliferous, chalky, dense, no odor, slight show free oil - dark brown, scattered vugular porosity with dark brown stain, dull fluorescence.

3594' - 3595' Limestone, light brown to white, fine crystalline, fossiliferous, chalky, dense in part, no odor, very slight show free oil - dark brown, dull fluorescence, scattered poor intercrystalline and pin point porosity with dark brown stain.

Reagan 3680' (-1339)

3679' - 3690' Limestone, white, very fine to fine crystalline, sandy, chalky, strong odor, fair shoe free oil - dark brown, fair to good dark brown stain, no fluorescence, poor intercrystalline porosity. Grading to sandstone, clear, fine to medium grained quartz, few clusters, friable, some with calcite cement, sub-rounded, fair sorting, strong odor, good show free oil - dark brown, no fluorescence, good intergranular porosity. Covered by DST #2.

DST #2 3635' - 3690'.

Open tool 15 min. with strong blow off bottom of the bucket 1 min. Close tool 45 min. with blow back off bottom of the bucket 25 min. Open tool 15 min. with strong blow off bottom of the bucket 3 min. Close tool 60 min with weak 1/2 inch blow back. Recovered 180' watery mud, 1050' gassy water. Chlorides 50,000 ppm.

IFP 274 - 504#	FFP 535 - 603#
ISIP 611#	FSIP 621#
HP 1802 - 1777#	Temperature 102 degrees.

SUMMARY

Upon the conclusion of drilling an open hole log suite was ran from 3750' RTD to 3000'. All zones indicating oil shows that were not drill stem tested were indicated to be tight or wet and not capable of commercial production. The hole was plugged as dry and abandoned.

Respectfully Submitted,

Bill Stout

William M. Stout
Geologist

ALLIED CEMENTING CO., INC. 8504

Federal Tax I.D.# [redacted]

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

ORIGINAL CONFIDENTIAL

SERVICE POINT: OAKLEY

DATE 11-17-97	SEC. 10	TWP. 4S	RANGE 23W	CALLED OUT	ON LOCATION 7:45PM	JOB START 4:00AM	JOB FINISH 4:30 AM
LEASE HENRY	WELL # 1-10	LOCATION NORTON 9S-3/4W				COUNTY NORTON	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR PICKRELL DRLG. CO
TYPE OF JOB SURFACE
HOLE SIZE 12¼" T.D. 222'
CASING SIZE 8 5/8" DEPTH 219'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 12 3/4 BBL.

OWNER SAME

CEMENT
AMOUNT ORDERED 150 SKS 60/40 POZ 3% CC 2% GEL

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EQUIPMENT

PUMP TRUCK CEMENTER TERRY
300 HELPER WAYNE
BULK TRUCK
212 DRIVER ROBERT
BULK TRUCK
DRIVER

COMMON	90 SKS	@ 7.55	679.50
POZMIX	60 SKS	@ 3.25	195.00
GEL	3 SKS	@ 9.50	28.50
CHLORIDE	5 SKS	@ 28.00	140.00
		@	
		@	
		@	
		@	
		@	
HANDLING	150 SKS	@ 1.05	157.50
MILEAGE	4¢ per SK/mile		480.00
		TOTAL	1,680.50

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REMARKS:

CEMENT DID CIRC.

THANK YOU

SERVICE

DEPTH OF JOB	219'		
PUMP TRUCK CHARGE			470.00
EXTRA FOOTAGE		@	
MILEAGE	80 miles	@ 2.85	228.00
PLUG	8 5/8 SURFACE	@	45.00
		@	
		@	
		TOTAL	743.00

CHARGE TO: MULL DRLG. CO.
STREET Box 423
CITY Ness City STATE Kansas ZIP 67560

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
DISCOUNT IF PAID IN 30 DAYS

SIGNATURE Lloyd Pickrell

PRINTED NAME

STATE CORPORATION COMMISSION
JAN 21 1998

ALLIED CEMENTING CO., INC. 8662

CONFIDENTIAL ORIGINAL

Federal Tax I.D.# [redacted]

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

SERVICE POINT: OAKLEY

DATE 11-24-97	SEC. 10	TWP. 7S	RANGE 23W	CALLED OUT	ON LOCATION 12:15 AM	JOB START 3:15 AM	JOB FINISH 6:15 AM
LEASE HENRY	WELL # 1-10		LOCATION NORTON 9S-3/4 W			COUNTY NORTON	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR PICKRELL DRLG.
TYPE OF JOB PTA
HOLE SIZE 7 7/8" T.D. 3750'
CASING SIZE DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4½" DEPTH 1945'
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT

OWNER SAME

CEMENT

AMOUNT ORDERED 190 SKS 60/40 POZ 6% GEL ¼# FLO-SEAL

EQUIPMENT

PUMP TRUCK # 300 CEMENTER TERRY
HELPER WAYNE
BULK TRUCK # 218 DRIVER ANDREW
BULK TRUCK # DRIVER

COMMON	114 SKS	@ 7.55	860.70
POZMIX	76 SKS	@ 3.25	247.00
GEL	10 SKS	@ 9.50	95.00
CHLORIDE		@	
Flo-Seal	48#	@ 1.15	55.20
		@	
		@	
		@	
		@	
HANDLING	190 SKS	@ 1.05	199.50
MILEAGE	4¢ per SK/mile		608.00

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TOTAL 2,065.40

REMARKS:

25 SKS AT 1945'
100 SKS AT 1250'
40 SKS AT 270'
10 SKS AT 40'
15 SKS RAT HOLE

THANK YOU

SERVICE

DEPTH OF JOB 1945'

PUMP TRUCK CHARGE			470.00
EXTRA FOOTAGE		@	
MILEAGE	80 miles	@ 2.85	228.00
PLUG	8⅝ DRY HOLE	@	23.00
		@	
		@	

TOTAL 721.00

CHARGE TO: Mull DRLG. CO.
STREET P.O. Box 421
CITY Ness City STATE Kan ZIP 67560

FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	

TOTAL

TAX
TOTAL CHARGE
DISCOUNT IF PAID IN 30 DAYS

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 Ron Tauscher

Ron Tauscher
PRINTED NAME

ORIGINAL

15-137-20406

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WELL NAME:	Henry 1-10
COMPANY:	Mull Drilling Co. Inc
LOCATION:	10-04S-34W Norton County, Kansas
DATE:	11/24/97

CONFIDENTIAL

CONFIDENTIAL

RELEASED

JAN 29 1999

FROM CONFIDENTIAL

TRILOBITE TESTING L.L.C.

OPERATOR : Mull Drilling Co. Inc. DATE 11/22/97
WELL NAME: Henry #1-10 KB 2356.00 ft TICKET NO: 10556 DST #1
LOCATION : 10-04s-23w Norton Co. KS GR 2351.00 ft FORMATION: Toronto /A
INTERVAL : 3410.00 To 3465.00 ft TD 3465.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	11084	11084	Alpine		
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 10	Clock(hrs)	12hr	12hr	Elec		
FS 45	Depth(ft)	3428.0	3428.0	3411.0	0.0	0.0

TIME DATA----------
PF Fr. 0520 to 0550 hr
IS Fr. 0550 to 0635 hr
SF Fr. 0635 to 0645 hr
FS Fr. 0645 to 0730 hr

	Field	1	2	3	4
A. Init Hydro	1800.0	1694.0	1672.0	0.0	0.0
B. First Flow	77.0	39.0	0.0	0.0	0.0
B1. Final Flow	77.0	39.0	3.0	0.0	0.0
C. In Shut-in	340.0	283.0	288.0	0.0	0.0
D. Init Flow	77.0	31.0	3.0	0.0	0.0
E. Final Flow	77.0	31.0	4.0	0.0	0.0
F. Fl Shut-in	241.0	188.0	199.0	0.0	0.0
G. Final Hydro	1789.0	1654.0	1619.0	0.0	0.0
Inside/Outside	O	O	I	B	

T STARTED 0300 hr
T ON BOTM 0518 hr
T OPEN 0520 hr
T PULLED 0730 hr
T OUT 0847 hr

RECOVERY
Tot Fluid 2.00 ft of 2.00 ft in DC and 0.00 ft in DP
2.00 ft of mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	2900.00 lbs
Wt Set On Packer	25000.00 lbs
Wt Pulled Loose	60000.00 lbs
Initial Str Wt	56000.00 lbs
Unseated Str Wt	56000.00 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	175.00 ft
D.P. Length	3226.00 ft
H.W. I.D	2.70 in

BLOW DESCRIPTION
Initial Flow-
weak surface blow died in 20 minutes

Initial Shutin-

Final Flow-
no blow

Final Shutin-

SAMPLES:
SENT TO:

MUD DATA----------

Mud Type	Chemical
Weight	9.50 lb/cf
Vis.	42.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	92.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Paul Simpson
Co. Rep.	Bill Stout
Contr.	Pickrell
Rig #	10
Unit #	
Pump T.	

Test Successful: Y

GAS RECOVERY

COMPANY: Mull Drilling Co. Inc. DATE: 11/22/97
WELL NAME: Henry #1-10 KB Elev: 2356.00 ft TICKET #10556 DST #1
WELL LOCATION: 10-04s-23w Norton Co. KS GR Elev: 2351.00 ft FORMATION: Toronto /A
INTERVAL Fr.: 3410.00 To 3465.00 T.D.: 3465.00 ft TEST TYPE: CONV

GAS RECOVERY MEASURED WITH Merla

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	0	36	418000.0
10	1.50	0	48	482000.0
15	1.50	0	50	493000.0
25	1.50	0	50	493000.0
30	1.50	0	50	493000.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	0	70	583000.0
10	1.50	0	68	575000.0
20	1.50	0	58	530000.0
30	1.50	0	54	511000.0
40	1.50	0	52	502000.0
50	1.50	0	52	502000.0
60	1.50	0	50	493000.0

*** TOOL DIAGRAM *** CONV

WELL NAME: Henry #1-10

LOCATION : 10-04s-23w Norton Co. KS

TICKET No. 10556 D.S.T. No. 1 DATE 11/22/97

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

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 25 perf

TOTAL TOOL 48

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 30

TOTAL ASSEMBLY 78

D.C. ABOVE TOOLS.Stands3 Single Total 175

D.P. ABOVE TOOLS.Stands Single Total 3226

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3479

TOTAL DEPTH 3465

TOTAL DRILL PIPE ABOVE K.B. 14

REMARKS:

Sampler Data

P.O. SUB	
C.O. SUB Top of tool @	3388
S.I. TOOL Sterling	3394
HMV Sterling	3399
JARS Sterling	n/a
SAFETY JOINT Bowen	3401
PACKER Top	3405
PACKER Bottom	3410
DEPTH 3410	
STUBB 1'	3411
ANCHOR	
Alpine rec. @3411	
5' perf	3416
5' perf	3421
5' perf	3426
T.C.	
DEPTH	
1' perf	3427
AK-1 rec @3428	
1 joint of pipe & subs to	3460
BULLNOSE 5' bullplug	
T.D. to	3465

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10556 Mull Drilling Co. Inc. Henry #1-10 DST#1

DATE: 11/22/97 TIME: 01:58:55

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	201.00	1672.1	0.0	90.44		
****** Start Flow 1	0.00	0.0	0.0	90.44		
	0.50	0.0	0.0	90.44		
	1.00	0.0	0.0	90.45		
	1.50	0.0	0.0	90.45		
	2.00	0.2	0.2	90.46		
	2.50	0.2	0.2	90.46		
	3.00	0.3	0.3	90.46		
	3.50	0.5	0.5	90.45		
	4.00	0.6	0.6	90.45		
	4.50	0.7	0.7	90.45		
	5.00	0.6	0.6	90.44		
	5.50	0.8	0.8	90.44		
	6.00	0.8	0.8	90.44		
	6.50	0.8	0.8	90.43		
	7.00	0.9	0.9	90.43		
	7.50	1.0	1.0	90.43		
	8.00	1.0	1.0	90.43		
	8.50	1.0	1.0	90.43		
	9.00	1.2	1.2	90.43		
	9.50	1.2	1.2	90.43		
	10.00	1.1	1.1	90.43		
	10.50	1.3	1.3	90.44		
	11.00	1.3	1.3	90.44		
	11.50	1.3	1.3	90.44		
	12.00	1.4	1.4	90.44		
	12.50	1.4	1.4	90.45		
	13.00	1.4	1.4	90.46		
	13.50	1.5	1.5	90.46		
	14.00	1.5	1.5	90.46		
	14.50	1.6	1.6	90.47		
	15.00	1.6	1.6	90.47		
	15.50	1.7	1.7	90.48		
	16.00	1.7	1.7	90.48		
	16.50	1.8	1.8	90.49		
	17.00	1.8	1.8	90.49		
	17.50	1.8	1.8	90.50		
	18.00	1.8	1.8	90.51		
	18.50	1.8	1.8	90.51		
	19.00	1.9	1.9	90.52		
	19.50	1.9	1.9	90.52		
	20.00	1.9	1.9	90.53		
	20.50	2.0	2.0	90.54		
	21.00	2.0	2.0	90.54		
	21.50	2.0	2.0	90.55		
	22.00	2.0	2.0	90.55		
	22.50	2.0	2.0	90.56		
	23.00	2.1	2.1	90.57		
	23.50	2.1	2.1	90.57		
	24.00	2.1	2.1	90.58		
	24.50	2.1	2.1	90.59		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10556 Mull Drilling Co. Inc. Henry #1-10 DST#1

DATE: 11/22/97 TIME: 01:58:55

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	2.1	2.1	90.59		
	25.50	2.2	2.2	90.60		
	26.00	2.2	2.2	90.61		
	26.50	2.3	2.3	90.62		
	27.00	2.3	2.3	90.62		
	27.50	2.3	2.3	90.63		
	28.00	2.3	2.3	90.64		
	28.50	2.3	2.3	90.64		
	29.00	2.3	2.3	90.65		
	29.50	2.3	2.3	90.66		
	30.00	2.5	2.5	90.67		
	30.50	2.5	2.5	90.68		
	31.00	2.5	2.5	90.68		
	31.50	2.4	2.4	90.70		
	32.00	2.3	2.3	90.70		
****** End Flow 1	32.50	3.1	3.1	90.70		
****** Start Shutin 1	0.00	3.1	0.0	90.70	0.0000	0.000
	0.50	4.3	1.2	90.71	66.0000	0.000
	1.00	5.2	2.1	90.72	33.5000	0.000
	1.50	6.5	3.4	90.72	22.6667	0.000
	2.00	7.6	4.5	90.74	17.2500	0.000
	2.50	8.9	5.8	90.74	14.0000	0.000
	3.00	10.2	7.1	90.75	11.8333	0.000
	3.50	11.7	8.6	90.76	10.2857	0.000
	4.00	13.0	9.9	90.77	9.1250	0.000
	4.50	14.4	11.3	90.77	8.2222	0.000
	5.00	15.9	12.8	90.78	7.5000	0.000
	5.50	17.5	14.4	90.79	6.9091	0.000
	6.00	19.2	16.1	90.80	6.4167	0.000
	6.50	20.9	17.8	90.81	6.0000	0.000
	7.00	22.7	19.6	90.82	5.6429	0.001
	7.50	24.5	21.4	90.82	5.3333	0.001
	8.00	26.3	23.2	90.84	5.0625	0.001
	8.50	28.5	25.4	90.84	4.8235	0.001
	9.00	30.5	27.4	90.85	4.6111	0.001
	9.50	32.7	29.6	90.86	4.4211	0.001
	10.00	34.9	31.8	90.87	4.2500	0.001
	10.50	37.2	34.1	90.87	4.0952	0.001
	11.00	39.5	36.4	90.89	3.9545	0.002
	11.50	42.0	38.9	90.89	3.8261	0.002
	12.00	44.6	41.5	90.91	3.7083	0.002
	12.50	47.2	44.1	90.91	3.6000	0.002
	13.00	50.0	46.9	90.92	3.5000	0.003
	13.50	52.7	49.6	90.93	3.4074	0.003
	14.00	55.6	52.5	90.93	3.3214	0.003
	14.50	58.6	55.5	90.94	3.2414	0.003
	15.00	61.6	58.5	90.95	3.1667	0.004
	15.50	64.6	61.5	90.96	3.0968	0.004
	16.00	67.9	64.8	90.98	3.0312	0.005
	16.50	71.1	68.0	90.98	2.9697	0.005
	17.00	74.4	71.3	90.99	2.9118	0.006

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10556 Mull Drilling Co. Inc. Henry #1-10 DST#1

DATE: 11/22/97 TIME: 01:58:55

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
17.50	77.8	74.7	91.00	2.8571	0.006
18.00	81.1	78.1	91.01	2.8056	0.007
18.50	84.8	81.7	91.02	2.7568	0.007
19.00	88.3	85.2	91.03	2.7105	0.008
19.50	92.1	89.0	91.04	2.6667	0.008
20.00	95.7	92.6	91.04	2.6250	0.009
20.50	99.4	96.3	91.06	2.5854	0.01
21.00	103.2	100.1	91.06	2.5476	0.011
21.50	107.1	104.0	91.07	2.5116	0.011
22.00	110.8	107.7	91.08	2.4773	0.012
22.50	114.7	111.6	91.09	2.4444	0.013
23.00	118.7	115.6	91.10	2.4130	0.014
23.50	122.7	119.6	91.11	2.3830	0.015
24.00	126.6	123.5	91.12	2.3542	0.016
24.50	130.8	127.7	91.13	2.3265	0.017
25.00	134.9	131.8	91.14	2.3000	0.018
25.50	139.1	136.0	91.15	2.2745	0.019
26.00	143.1	140.0	91.15	2.2500	0.020
26.50	147.3	144.2	91.16	2.2264	0.022
27.00	151.6	148.5	91.18	2.2037	0.023
27.50	155.7	152.6	91.18	2.1818	0.024
28.00	159.9	156.8	91.19	2.1607	0.026
28.50	164.2	161.1	91.20	2.1404	0.027
29.00	168.4	165.3	91.21	2.1207	0.028
29.50	172.6	169.5	91.22	2.1017	0.030
30.00	176.8	173.7	91.23	2.0833	0.031
30.50	181.0	177.9	91.24	2.0656	0.033
31.00	185.3	182.2	91.25	2.0484	0.034
31.50	189.5	186.4	91.25	2.0317	0.036
32.00	192.9	189.8	91.27	2.0156	0.037
32.50	197.4	194.3	91.27	2.0000	0.039
33.00	201.6	198.5	91.29	1.9848	0.041
33.50	205.9	202.8	91.29	1.9701	0.042
34.00	210.1	207.0	91.31	1.9559	0.044
34.50	214.3	211.2	91.32	1.9420	0.046
35.00	218.5	215.4	91.32	1.9286	0.048
35.50	222.8	219.7	91.33	1.9155	0.050
36.00	226.9	223.8	91.34	1.9028	0.051
36.50	231.0	227.9	91.35	1.8904	0.053
37.00	235.4	232.3	91.35	1.8784	0.055
37.50	239.4	236.3	91.37	1.8667	0.057
38.00	243.5	240.4	91.37	1.8553	0.059
38.50	247.6	244.5	91.39	1.8442	0.061
39.00	251.7	248.6	91.40	1.8333	0.063
39.50	255.7	252.6	91.41	1.8228	0.065
40.00	259.7	256.7	91.41	1.8125	0.067
40.50	263.7	260.6	91.43	1.8025	0.070
41.00	267.6	264.5	91.43	1.7927	0.072
41.50	271.7	268.7	91.44	1.7831	0.074
42.00	275.6	272.5	91.46	1.7738	0.076
42.50	279.6	276.5	91.47	1.7647	0.078

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10556 Mull Drilling Co. Inc. Henry #1-10 DST#1

DATE: 11/22/97 TIME: 01:58:55

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	43.00	283.3	280.2	91.47	1.7558	0.080
	43.50	286.6	283.5	91.47	1.7471	0.082
****** End Shut-in 1	44.00	288.5	285.4	91.49	1.7386	0.083
****** Start Flow 2	0.00	3.3	0.0	91.50		
	0.50	3.3	0.0	91.49		
	1.00	3.4	0.1	91.49		
	1.50	3.4	0.2	91.49		
	2.00	3.4	0.2	91.50		
	2.50	3.6	0.3	91.50		
	3.00	3.6	0.3	91.51		
	3.50	3.6	0.3	91.51		
	4.00	3.7	0.4	91.52		
	4.50	3.7	0.4	91.51		
	5.00	3.7	0.4	91.52		
	5.50	3.7	0.4	91.52		
	6.00	3.8	0.5	91.51		
	6.50	3.8	0.5	91.51		
	7.00	3.8	0.5	91.51		
	7.50	3.8	0.5	91.50		
****** End Flow 2	8.00	3.8	0.5	91.50		
****** Start Shutin 2	0.00	3.8	0.0	91.50	0.0000	0.000
	0.50	3.2	-0.6	91.50	82.0000	0.000
	1.00	4.3	0.5	91.50	41.5000	0.000
	1.50	5.4	1.7	91.51	28.0000	0.000
	2.00	6.5	2.7	91.51	21.2500	0.000
	2.50	7.5	3.8	91.51	17.2000	0.000
	3.00	8.7	4.9	91.51	14.5000	0.000
	3.50	9.8	6.0	91.52	12.5714	0.000
	4.00	10.8	7.0	91.52	11.1250	0.000
	4.50	12.1	8.3	91.52	10.0000	0.000
	5.00	13.2	9.4	91.54	9.1000	0.000
	5.50	14.3	10.5	91.54	8.3636	0.000
	6.00	15.6	11.8	91.55	7.7500	0.000
	6.50	16.7	12.9	91.55	7.2308	0.000
	7.00	18.0	14.3	91.56	6.7857	0.000
	7.50	19.2	15.4	91.57	6.4000	0.000
	8.00	20.6	16.8	91.58	6.0625	0.000
	8.50	21.7	18.0	91.59	5.7647	0.000
	9.00	23.2	19.5	91.60	5.5000	0.001
	9.50	24.6	20.8	91.60	5.2632	0.001
	10.00	25.9	22.1	91.62	5.0500	0.001
	10.50	27.4	23.7	91.63	4.8571	0.001
	11.00	28.8	25.0	91.63	4.6818	0.001
	11.50	30.4	26.6	91.64	4.5217	0.001
	12.00	31.8	28.0	91.65	4.3750	0.001
	12.50	33.4	29.6	91.66	4.2400	0.001
	13.00	34.9	31.1	91.67	4.1154	0.001
	13.50	36.5	32.7	91.68	4.0000	0.001
	14.00	38.2	34.4	91.69	3.8929	0.001
	14.50	39.9	36.1	91.70	3.7931	0.002
	15.00	41.4	37.6	91.70	3.7000	0.002

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10556 Mull Drilling Co. Inc. Henry #1-10 DST#1

DATE: 11/22/97 TIME: 01:58:55

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
15.50	43.1	39.4	91.72	3.6129	0.002
16.00	44.9	41.1	91.72	3.5312	0.002
16.50	46.7	42.9	91.73	3.4545	0.002
17.00	48.2	44.5	91.74	3.3824	0.002
17.50	50.0	46.2	91.76	3.3143	0.003
18.00	52.0	48.3	91.76	3.2500	0.003
18.50	53.9	50.1	91.77	3.1892	0.003
19.00	55.7	51.9	91.79	3.1316	0.003
19.50	57.8	54.0	91.79	3.0769	0.003
20.00	59.7	56.0	91.80	3.0250	0.004
20.50	61.8	58.1	91.81	2.9756	0.004
21.00	64.0	60.3	91.82	2.9286	0.004
21.50	66.0	62.3	91.83	2.8837	0.004
22.00	68.1	64.4	91.84	2.8409	0.005
22.50	70.3	66.5	91.85	2.8000	0.005
23.00	72.4	68.6	91.85	2.7609	0.005
23.50	74.8	71.0	91.86	2.7234	0.006
24.00	77.0	73.3	91.87	2.6875	0.006
24.50	79.3	75.5	91.88	2.6531	0.006
25.00	81.5	77.7	91.89	2.6200	0.007
25.50	83.8	80.1	91.90	2.5882	0.007
26.00	86.3	82.5	91.91	2.5577	0.007
26.50	88.7	84.9	91.92	2.5283	0.008
27.00	91.1	87.4	91.93	2.5000	0.008
27.50	93.6	89.8	91.93	2.4727	0.009
28.00	96.1	92.3	91.95	2.4464	0.009
28.50	98.6	94.8	91.96	2.4211	0.01
29.00	101.2	97.4	91.96	2.3966	0.010
29.50	103.7	100	91.97	2.3729	0.011
30.00	106.2	102.5	91.99	2.3500	0.011
30.50	108.8	105.0	91.99	2.3279	0.012
31.00	111.4	107.7	92.00	2.3065	0.012
31.50	114.0	110.2	92.00	2.2857	0.013
32.00	116.7	112.9	92.01	2.2656	0.014
32.50	119.4	115.6	92.02	2.2462	0.014
33.00	122.0	118.2	92.03	2.2273	0.015
33.50	124.8	121.0	92.04	2.2090	0.016
34.00	127.4	123.6	92.05	2.1912	0.016
34.50	130.2	126.5	92.05	2.1739	0.017
35.00	132.8	129.1	92.06	2.1571	0.018
35.50	135.6	131.8	92.07	2.1408	0.018
36.00	138.4	134.6	92.08	2.1250	0.019
36.50	141.2	137.4	92.09	2.1096	0.020
37.00	144.0	140.2	92.10	2.0946	0.021
37.50	146.8	143.0	92.10	2.0800	0.022
38.00	149.6	145.9	92.11	2.0658	0.022
38.50	152.5	148.7	92.12	2.0519	0.023
39.00	155.3	151.5	92.13	2.0385	0.024
39.50	158.2	154.4	92.13	2.0253	0.025
40.00	161.0	157.2	92.14	2.0125	0.026
40.50	163.8	160.0	92.15	2.0000	0.027

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10556 Mull Drilling Co. Inc. Henry #1-10 DST#1

DATE: 11/22/97 TIME: 01:58:55

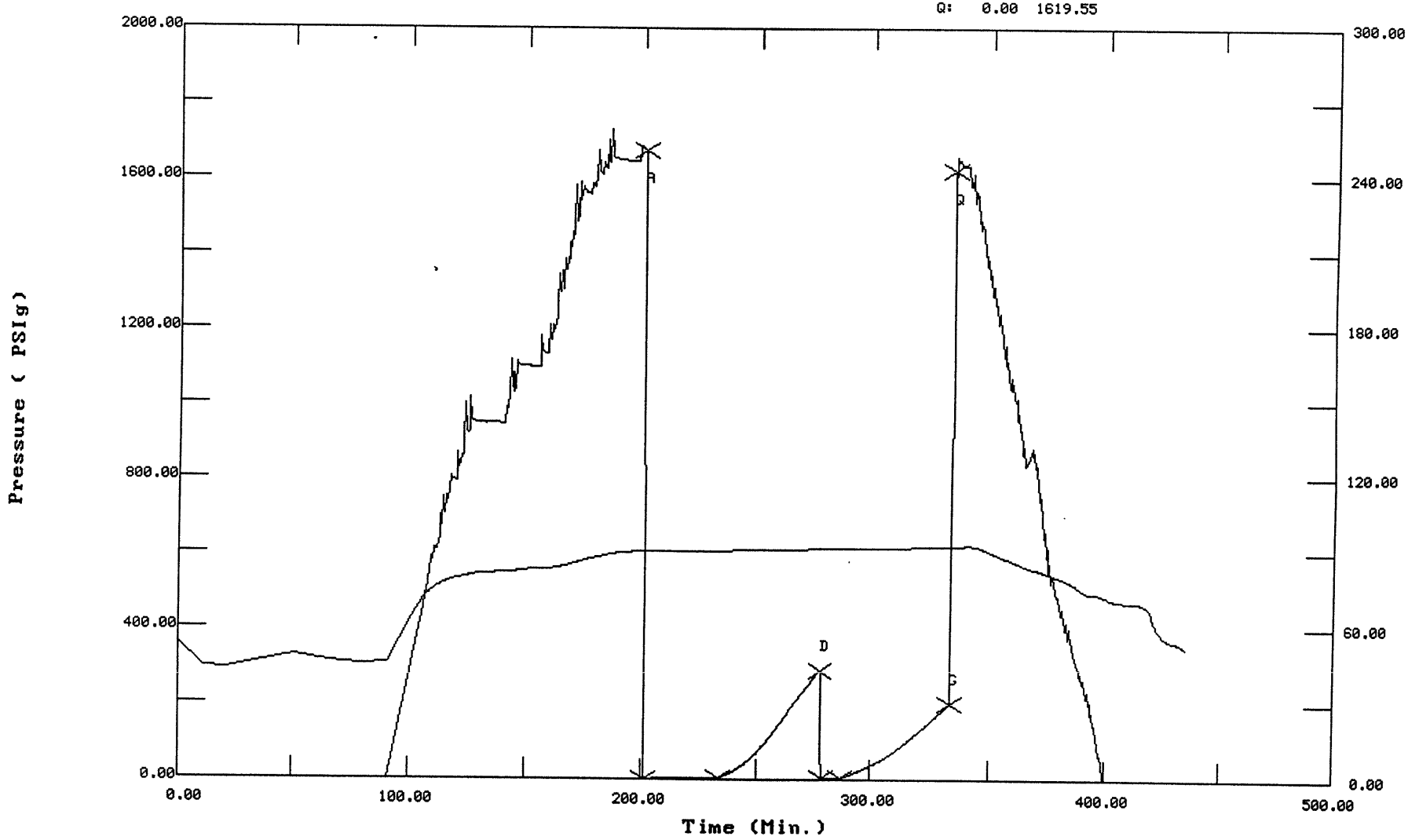
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	41.00	166.8	163.0	92.16	1.9878	0.028
	41.50	169.7	165.9	92.17	1.9759	0.029
	42.00	172.7	168.9	92.17	1.9643	0.030
	42.50	175.5	171.7	92.18	1.9529	0.031
	43.00	178.4	174.6	92.19	1.9419	0.032
	43.50	181.3	177.5	92.20	1.9310	0.033
	44.00	184.3	180.5	92.21	1.9205	0.034
	44.50	187.1	183.3	92.22	1.9101	0.035
	45.00	190.2	186.4	92.22	1.9000	0.036
	45.50	193.1	189.3	92.22	1.8901	0.037
	46.00	196.0	192.3	92.23	1.8804	0.038
****** End Shut-in 2	46.50	199.0	195.2	92.24	1.8710	0.040
****** Final Hydro.	334.00	1619.5	0.0	92.28		

TEST HISTORY

10556 Mull Drilling Co. Inc. Henry #1-10 DST#1

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1672.09
B:	0.00	0.00
C:	32.50	3.10
D:	44.00	288.54
E:	0.00	3.27
F:	8.00	3.78
G:	46.50	198.98
Q:	0.00	1619.55



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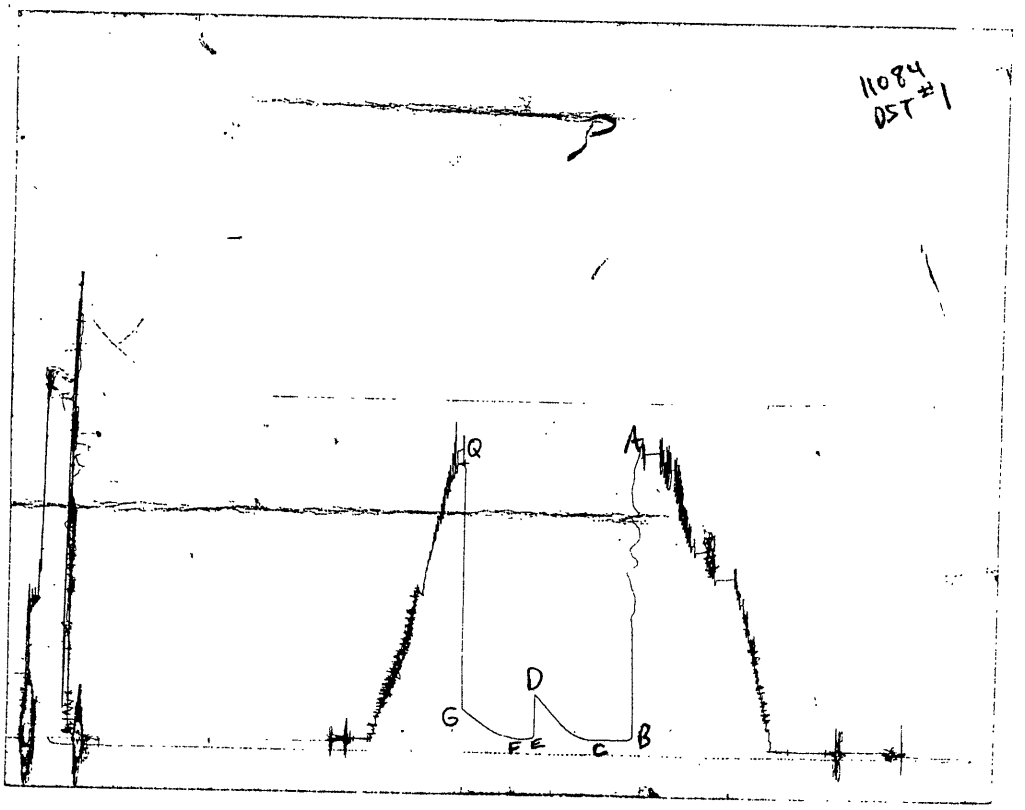


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10556

Well Name & No. Henry #1-10 Test No. 1 Date 11-22-97

Company Mull Drilling Co, Inc Zone Tested Toronto - A

Address PO Box 2758 Wichita Elevation 2356 KB 2351 GL

Co. Rep / Geo. Bill Stout Cont. Pickrell #10 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 10 Twp. 4s Rge. 23w Co. Norton State Ks

No. of Copies 5 Distribution Sheet (Y, N) ____ Turnkey (Y, N) ____ Evaluation (Y, N) ____

Interval Tested 3410 - 3465 Initial Str Wt./Lbs. 56,000 Unseated Str Wt./Lbs. 56,000

Anchor Length 55 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000

Top Packer Depth 3405 Tool Weight 2900

Bottom Packer Depth 3410 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 3465 Wt. Pipe Run ____ Drill Collar Run 175

Mud Wt. 9.5 LCM ____ Vis. 42 WL ____ Drill Pipe Size 4½ XH Ft. Run 3226

Blow Description Weak surface blow died in 20 minutes

SS - no blow

Recovery — Total Feet 2 GIP ____ Ft. in DC 2 Ft. in DP ____

Rec. 2	Feet Of Mud	%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
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT ____ °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides ____ ppm System

(A) Initial Hydrostatic Mud	1800	1672	PSI	Recorder No.	2341	T-Started 0300
(B) First Initial Flow Pressure	77	0	PSI	(depth)	3411	T-Open 0520
(C) First Final Flow Pressure	77	3	PSI	Recorder No.	11084	T-Pulled 0730
(D) Initial Shut-in Pressure	340	288	PSI	(depth)	3428	T-Out 0845
(E) Second Initial Flow Pressure	77	3	PSI	Recorder No.	____	
(F) Second Final Flow Pressure	77	4	PSI	(depth)	____	
(G) Final Shut-in Pressure	241	199	PSI	Initial Opening	30	Test ____
(H) Final Hydrostatic Mud	1789	1620	PSI	Initial Shut-in	45	Jars ____
	AK-1	Alpine		Final Flow	10	Safety Joint X
				Final Shut-in	45	Straddle ____
					51.5 steady	Circ. Sub ____
					____	Sampler ____
						Extra Packer ____
						Elect. Rec. X
						Other ____

TRILOBIITE 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 Bill Stout

Our Representative Paul Simpson

TRILOBITE TESTING L.L.C.

OPERATOR : Mull Drilling Co. Inc. DATE 11/23/97
WELL NAME: Henry #1-10 KB 2356.00 ft TICKET NO: 10557 DST #2
LOCATION : 10-04s-23w Norton Co. KS GR 2351.00 ft FORMATION: Reagan Sand
INTERVAL : 3635.00 To 3690.00 ft TD 3690.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 15	Rec.	11084	11084	Alpine		
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 0	Clock(hrs)	12hr	12hr	Elec		
FS 45	Depth(ft)	3670.0	3670.0	3637.0	0.0	0.0

TIME DATA----------
PF Fr. 0328 to 0343 hr
IS Fr. 0343 to 0428 hr
SF Fr. 0428 to 0443 hr
FS Fr. 0443 to 0543 hr

	Field	1	2	3	4
A. Init Hydro	1875.0	1847.0	1802.0	0.0	0.0
B. First Flow	241.0	268.0	274.0	0.0	0.0
B1. Final Flow	504.0	502.0	504.0	0.0	0.0
C. In Shut-in	623.0	618.0	611.0	0.0	0.0
D. Init Flow	580.0	572.0	535.0	0.0	0.0
E. Final Flow	623.0	610.0	603.0	0.0	0.0
F. Fl Shut-in	623.0	628.0	621.0	0.0	0.0
G. Final Hydro	1832.0	1772.0	1777.0	0.0	0.0
Inside/Outside	O	O	I	B	

T STARTED 0155 hr
T ON BOTM 0326 hr
T OPEN 0328 hr
T PULLED 0543 hr
T OUT 0805 hr

RECOVERY
Tot Fluid 1230.00 ft of 175.00 ft in DC and 1055.00 ft in DP
180.00 ft of watery mud
0.00 ft of
1050.00 ft of gassy water
0.00 ft of
0.00 ft of reversed into pits
0.00 ft of
0.00 ft of
0.00 ft of Rw .18 @60
SALINITY 50000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	2900.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	72000.00 lbs
Initial Str Wt	58000.00 lbs
Unseated Str Wt	68000.00 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	175.00 ft
D.P. Length	3445.00 ft
H.W. I.D	2.70 in

BLOW DESCRIPTION
Initial Flow-
strong blow building to bottom of bucket in minute

Initial Shutin-
blow built to bottom of bucket in 25 minutes
Final Flow-
strong blow building to bottom of bucket in 3 minutes

Final Shutin-
weak 1/2" blow

SAMPLES:
SENT TO:

MUD DATA----------

Mud Type	Chemical
Weight	9.40 lb/ci
Vis.	42.00 S/L
W.L.	10.60 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	102.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Paul Simpson
Co. Rep.	Bill Stout
Contr.	Pickrell
Rig #	10
Unit #	
Pump T.	

Test Successful: Y

GAS RECOVERY

COMPANY: Mull Drilling Co. Inc. DATE: 11/23/97
WELL NAME: Henry #1-10 KB Elev: 2356.00 ft TICKET #10557 DST #2
WELL LOCATION: 10-04s-23w Norton Co. KS GR Elev: 2351.00 ft FORMATION: Reagan Sand
INTERVAL Fr.: 3635.00 To 3690.00 T.D.: 3690.00 ft TEST TYPE: CONV

GAS RECOVERY MEASURED WITH Merla

**** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	0	36	418000.0
10	1.50	0	48	482000.0
15	1.50	0	50	493000.0
25	1.50	0	50	493000.0
30	1.50	0	50	493000.0

**** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	0	70	583000.0
10	1.50	0	68	575000.0
20	1.50	0	58	530000.0
30	1.50	0	54	511000.0
40	1.50	0	52	502000.0
50	1.50	0	52	502000.0
60	1.50	0	50	493000.0

*** TOOL DIAGRAM *** CONV

WELL NAME: Henry #1-10

LOCATION : 10-04s-23w Norton Co. KS

TICKET No. 10557 D.S.T. No. 2 DATE 11/23/97

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

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 24 perf

TOTAL TOOL 47

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 31

TOTAL ASSEMBLY 78

D.C. ABOVE TOOLS.Stands3 Single Total 175

D.P. ABOVE TOOLS.Stands Single Total 3445

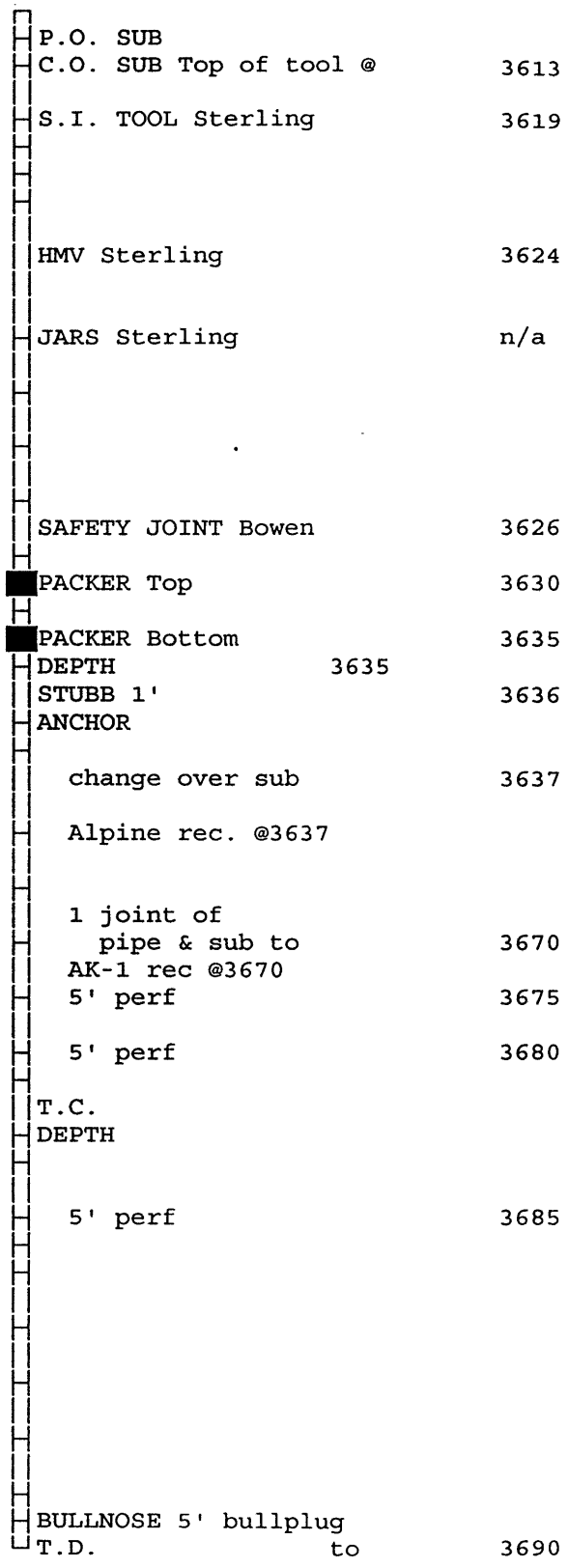
TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3698

TOTAL DEPTH 3690

TOTAL DRILL PIPE ABOVE K.B. 9

REMARKS:

Sampler Data



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10557 Mull Drilling Co. Inc. Henry #1-10 DST#2

DATE: 11/23/97 TIME: 00:46:26

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	162.50	1802.3	0.0	91.27		
***** Start Flow 1	0.00	273.9	0.0	91.27		
	0.50	315.6	41.7	91.36		
	1.00	316.0	42.0	91.61		
	1.50	323.9	49.9	92.12		
	2.00	325.7	51.8	92.84		
	2.50	332.6	58.7	93.67		
	3.00	335.8	61.9	94.52		
	3.50	343.0	69.1	95.33		
	4.00	353.2	79.2	96.07		
	4.50	363.7	89.7	96.73		
	5.00	374.9	101.0	97.32		
	5.50	381.2	107.3	97.82		
	6.00	401.2	127.2	98.27		
	6.50	410.6	136.6	98.66		
	7.00	415.9	141.9	99.00		
	7.50	421.6	147.7	99.30		
	8.00	427.8	153.8	99.57		
	8.50	451.1	177.2	99.80		
	9.00	457.5	183.6	100.01		
	9.50	463.4	189.5	100.20		
	10.00	468.1	194.1	100.37		
	10.50	472.3	198.3	100.50		
	11.00	476.2	202.3	100.64		
	11.50	479.8	205.9	100.77		
	12.00	483.8	209.9	100.88		
	12.50	487.5	213.6	100.98		
	13.00	491.3	217.4	101.07		
	13.50	494.5	220.6	101.17		
	14.00	497.3	223.4	101.29		
**** End Flow 1	14.50	504.0	230.0	101.31		
**** Start Shutin 1	0.00	504.0	0.0	101.31	0.0000	0.254
	0.50	580.7	76.7	101.32	30.0000	0.337
	1.00	585.7	81.7	101.41	15.5000	0.343
	1.50	588.9	84.9	101.48	10.6667	0.347
	2.00	590.8	86.9	101.53	8.2500	0.349
	2.50	592.6	88.6	101.59	6.8000	0.351
	3.00	593.8	89.8	101.63	5.8333	0.353
	3.50	594.9	90.9	101.66	5.1429	0.354
	4.00	595.8	91.8	101.69	4.6250	0.355
	4.50	596.6	92.6	101.72	4.2222	0.356
	5.00	597.3	93.3	101.74	3.9000	0.357
	5.50	598.0	94.0	101.76	3.6364	0.358
	6.00	598.5	94.5	101.78	3.4167	0.358
	6.50	598.9	94.9	101.77	3.2308	0.359
	7.00	599.3	95.3	101.78	3.0714	0.359
	7.50	599.8	95.8	101.79	2.9333	0.360
	8.00	600.2	96.2	101.77	2.8125	0.360
	8.50	600.6	96.6	101.76	2.7059	0.361
	9.00	601.0	97.0	101.75	2.6111	0.361
	9.50	601.3	97.3	101.74	2.5263	0.362

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10557 Mull Drilling Co. Inc. Henry #1-10 DST#2

DATE: 11/23/97 TIME: 00:46:26

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
10.00	601.6	97.6	101.72	2.4500	0.362
10.50	601.9	97.9	101.70	2.3810	0.362
11.00	602.2	98.2	101.68	2.3182	0.363
11.50	602.5	98.5	101.65	2.2609	0.363
12.00	602.7	98.7	101.64	2.2083	0.363
12.50	603.1	99.1	101.61	2.1600	0.364
13.00	603.3	99.3	101.59	2.1154	0.364
13.50	603.4	99.5	101.58	2.0741	0.364
14.00	603.8	99.8	101.55	2.0357	0.365
14.50	603.9	100	101.53	2.0000	0.365
15.00	604.1	100.1	101.50	1.9667	0.365
15.50	604.4	100.4	101.48	1.9355	0.365
16.00	604.5	100.5	101.43	1.9062	0.365
16.50	604.9	100.9	101.39	1.8788	0.366
17.00	604.9	101.0	101.35	1.8529	0.366
17.50	605.2	101.2	101.32	1.8286	0.366
18.00	605.4	101.5	101.32	1.8056	0.367
18.50	605.7	101.7	101.31	1.7838	0.367
19.00	605.8	101.8	101.31	1.7632	0.367
19.50	606.1	102.1	101.31	1.7436	0.367
20.00	606.2	102.2	101.31	1.7250	0.367
20.50	606.3	102.3	101.30	1.7073	0.368
21.00	606.5	102.6	101.30	1.6905	0.368
21.50	606.6	102.6	101.28	1.6744	0.368
22.00	606.8	102.8	101.29	1.6591	0.368
22.50	607.0	103.0	101.24	1.6444	0.368
23.00	607.0	103.1	101.20	1.6304	0.368
23.50	607.2	103.2	101.19	1.6170	0.369
24.00	607.4	103.4	101.16	1.6042	0.369
24.50	607.5	103.5	101.16	1.5918	0.369
25.00	607.5	103.6	101.15	1.5800	0.369
25.50	607.8	103.8	101.14	1.5686	0.369
26.00	607.9	103.9	101.13	1.5577	0.370
26.50	608.0	104.1	101.11	1.5472	0.370
27.00	608.1	104.2	101.11	1.5370	0.370
27.50	608.3	104.3	101.10	1.5273	0.370
28.00	608.3	104.3	101.09	1.5179	0.370
28.50	608.6	104.6	101.08	1.5088	0.370
29.00	608.6	104.6	101.07	1.5000	0.370
29.50	608.8	104.8	101.06	1.4915	0.371
30.00	608.9	104.9	101.06	1.4833	0.371
30.50	608.9	104.9	101.06	1.4754	0.371
31.00	609.1	105.1	101.04	1.4677	0.371
31.50	609.2	105.2	101.03	1.4603	0.371
32.00	609.2	105.2	101.03	1.4531	0.371
32.50	609.4	105.5	101.02	1.4462	0.371
33.00	609.5	105.6	101.02	1.4394	0.372
33.50	609.5	105.6	101.01	1.4328	0.372
34.00	609.6	105.7	101.01	1.4265	0.372
34.50	609.7	105.7	101.00	1.4203	0.372
35.00	609.9	105.9	101.01	1.4143	0.372

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10557 Mull Drilling Co. Inc. Henry #1-10 DST#2

DATE: 11/23/97 TIME: 00:46:26

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	35.50	609.9	105.9	101.01	1.4085	0.372
	36.00	610.1	106.2	101.01	1.4028	0.372
	36.50	610.1	106.2	101.02	1.3973	0.372
	37.00	610.3	106.3	101.02	1.3919	0.372
	37.50	610.3	106.3	101.02	1.3867	0.372
	38.00	610.5	106.6	101.02	1.3816	0.373
	38.50	610.5	106.6	101.02	1.3766	0.373
	39.00	610.6	106.6	101.01	1.3718	0.373
	39.50	610.7	106.7	101.00	1.3671	0.373
	40.00	610.7	106.7	101.00	1.3625	0.373
	40.50	610.8	106.8	100.98	1.3580	0.373
	41.00	610.9	106.9	100.97	1.3537	0.373
	41.50	610.9	106.9	100.96	1.3494	0.373
	42.00	611.0	107.0	100.95	1.3452	0.373
	42.50	611.0	107.0	100.95	1.3412	0.373
	43.00	611.1	107.1	100.94	1.3372	0.373
	43.50	611.1	107.1	100.94	1.3333	0.373
	44.00	611.2	107.2	100.93	1.3295	0.374
****** End Shut-in 1	44.50	611.2	107.2	100.94	1.3258	0.374
****** Start Flow 2	0.00	535.4	0.0	100.93		
	0.50	539.7	4.4	100.95		
	1.00	544.2	8.8	100.99		
	1.50	548.1	12.8	101.06		
	2.00	551.9	16.5	101.16		
	2.50	555.8	20.4	101.30		
	3.00	559.2	23.8	101.32		
	3.50	562.5	27.1	101.38		
	4.00	565.6	30.2	101.49		
	4.50	568.5	33.2	101.56		
	5.00	571.2	35.8	101.63		
	5.50	573.8	38.4	101.69		
	6.00	576.3	41.0	101.75		
	6.50	578.8	43.5	101.79		
	7.00	581.1	45.7	101.84		
	7.50	583.1	47.8	101.87		
	8.00	585.1	49.8	101.90		
	8.50	587.0	51.6	101.93		
	9.00	588.7	53.4	101.96		
	9.50	590.3	55.0	101.97		
	10.00	592.0	56.7	101.99		
	10.50	593.7	58.3	102.00		
	11.00	595.0	59.7	102.02		
	11.50	596.3	60.9	102.03		
	12.00	597.6	62.2	102.04		
	12.50	598.7	63.4	102.05		
	13.00	599.7	64.4	102.06		
	13.50	600.8	65.5	102.06		
	14.00	601.8	66.5	102.05		
	14.50	602.7	67.3	102.07		
***** End Flow 2	15.00	603.3	67.9	102.07		
***** Start Shutin 2	0.00	603.3	0.0	102.07	0.0000	0.364

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10557 Mull Drilling Co. Inc. Henry #1-10 DST#2

DATE: 11/23/97 TIME: 00:46:26

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
0.50	614.8	11.5	102.07	60.0000	0.378
1.00	615.8	12.5	102.08	30.5000	0.379
1.50	616.4	13.1	102.08	20.6667	0.380
2.00	616.9	13.6	102.08	15.7500	0.381
2.50	617.1	13.8	102.08	12.8000	0.381
3.00	617.4	14.2	102.06	10.8333	0.381
3.50	617.6	14.4	102.06	9.4286	0.381
4.00	617.8	14.5	102.05	8.3750	0.382
4.50	618.0	14.8	102.05	7.5556	0.382
5.00	618.1	14.9	102.04	6.9000	0.382
5.50	618.3	15.0	102.02	6.3636	0.382
6.00	618.5	15.2	102.01	5.9167	0.382
6.50	618.5	15.3	101.99	5.5385	0.383
7.00	618.7	15.4	101.96	5.2143	0.383
7.50	618.8	15.5	101.95	4.9333	0.383
8.00	618.9	15.6	101.92	4.6875	0.383
8.50	619.0	15.7	101.91	4.4706	0.383
9.00	619.0	15.8	101.88	4.2778	0.383
9.50	619.1	15.9	101.86	4.1053	0.383
10.00	619.3	16.0	101.84	3.9500	0.383
10.50	619.3	16.1	101.82	3.8095	0.384
11.00	619.3	16.1	101.81	3.6818	0.384
11.50	619.3	16.1	101.78	3.5652	0.384
12.00	619.5	16.3	101.75	3.4583	0.384
12.50	619.5	16.3	101.73	3.3600	0.384
13.00	619.6	16.3	101.71	3.2692	0.384
13.50	619.6	16.3	101.69	3.1852	0.384
14.00	619.6	16.3	101.66	3.1071	0.384
14.50	619.8	16.5	101.65	3.0345	0.384
15.00	619.9	16.6	101.62	2.9667	0.384
15.50	619.9	16.6	101.60	2.9032	0.384
16.00	619.9	16.6	101.58	2.8438	0.384
16.50	619.9	16.7	101.56	2.7879	0.384
17.00	619.9	16.7	101.53	2.7353	0.384
17.50	619.9	16.7	101.51	2.6857	0.384
18.00	620.1	16.8	101.48	2.6389	0.385
18.50	620.1	16.8	101.46	2.5946	0.385
19.00	620.1	16.8	101.43	2.5526	0.385
19.50	620.0	16.8	101.40	2.5128	0.384
20.00	620.2	16.9	101.37	2.4750	0.385
20.50	620.2	16.9	101.33	2.4390	0.385
21.00	620.2	16.9	101.32	2.4048	0.385
21.50	620.1	16.8	101.32	2.3721	0.385
22.00	620.4	17.1	101.32	2.3409	0.385
22.50	620.4	17.1	101.31	2.3111	0.385
23.00	620.4	17.1	101.30	2.2826	0.385
23.50	620.4	17.1	101.30	2.2553	0.385
24.00	620.4	17.1	101.30	2.2292	0.385
24.50	620.4	17.1	101.30	2.2041	0.385
25.00	620.4	17.2	101.24	2.1800	0.385
25.50	620.4	17.2	101.21	2.1569	0.385

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10557 Mull Drilling Co. Inc. Henry #1-10 DST#2

DATE: 11/23/97 TIME: 00:46:26

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
26.00	620.5	17.3	101.18	2.1346	0.385
26.50	620.5	17.3	101.15	2.1132	0.385
27.00	620.5	17.3	101.14	2.0926	0.385
27.50	620.6	17.3	101.11	2.0727	0.385
28.00	620.6	17.3	101.10	2.0536	0.385
28.50	620.6	17.3	101.07	2.0351	0.385
29.00	620.6	17.3	101.06	2.0172	0.385
29.50	620.6	17.3	101.03	2.0000	0.385
30.00	620.7	17.4	101.02	1.9833	0.385
30.50	620.7	17.4	101.00	1.9672	0.385
31.00	620.7	17.4	100.99	1.9516	0.385
31.50	620.7	17.4	100.98	1.9365	0.385
32.00	620.7	17.4	100.96	1.9219	0.385
32.50	620.8	17.5	100.93	1.9077	0.385
33.00	620.8	17.5	100.93	1.8939	0.385
33.50	620.8	17.5	100.91	1.8806	0.385
34.00	620.7	17.4	100.89	1.8676	0.385
34.50	620.9	17.6	100.89	1.8551	0.385
35.00	620.9	17.6	100.87	1.8429	0.385
35.50	620.9	17.6	100.84	1.8310	0.385
36.00	620.9	17.6	100.84	1.8194	0.385
36.50	620.9	17.7	100.82	1.8082	0.386
37.00	620.9	17.7	100.81	1.7973	0.386
37.50	620.9	17.7	100.80	1.7867	0.386
38.00	620.9	17.7	100.78	1.7763	0.386
38.50	621.0	17.8	100.77	1.7662	0.386
39.00	621.0	17.8	100.75	1.7564	0.386
39.50	621.0	17.8	100.74	1.7468	0.386
40.00	620.9	17.7	100.72	1.7375	0.386
40.50	621.1	17.8	100.71	1.7284	0.386
41.00	621.1	17.8	100.70	1.7195	0.386
41.50	621.1	17.8	100.69	1.7108	0.386
42.00	621.1	17.8	100.68	1.7024	0.386
42.50	621.1	17.8	100.66	1.6941	0.386
43.00	621.1	17.8	100.65	1.6860	0.386
43.50	621.0	17.8	100.63	1.6782	0.386
44.00	621.0	17.8	100.62	1.6705	0.386
44.50	621.0	17.8	100.61	1.6629	0.386
45.00	621.0	17.8	100.60	1.6556	0.386
45.50	621.0	17.8	100.58	1.6484	0.386
46.00	621.2	17.9	100.57	1.6413	0.386
46.50	621.2	17.9	100.56	1.6344	0.386
47.00	621.2	17.9	100.55	1.6277	0.386
47.50	621.2	17.9	100.54	1.6211	0.386
48.00	621.2	17.9	100.52	1.6146	0.386
48.50	621.2	17.9	100.52	1.6082	0.386
49.00	621.2	17.9	100.50	1.6020	0.386
49.50	621.2	17.9	100.49	1.5960	0.386
50.00	621.3	18.0	100.48	1.5900	0.386
50.50	621.3	18.0	100.47	1.5842	0.386
51.00	621.3	18.0	100.46	1.5784	0.386

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10557 Mull Drilling Co. Inc. Henry #1-10 DST#2

DATE: 11/23/97 TIME: 00:46:26

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	51.50	621.4	18.1	100.45	1.5728	0.386
	52.00	621.3	18.0	100.44	1.5673	0.386
	52.50	621.3	18.0	100.43	1.5619	0.386
	53.00	621.3	18.0	100.42	1.5566	0.386
	53.50	621.2	17.9	100.41	1.5514	0.386
	54.00	621.2	17.9	100.40	1.5463	0.386
	54.50	621.3	18.0	100.39	1.5413	0.386
	55.00	621.3	18.0	100.37	1.5364	0.386
	55.50	621.3	18.0	100.36	1.5315	0.386
	56.00	621.3	18.0	100.35	1.5268	0.386
	56.50	621.3	18.0	100.35	1.5221	0.386
	57.00	621.4	18.1	100.33	1.5175	0.386
	57.50	621.4	18.1	100.32	1.5130	0.386
	58.00	621.4	18.1	100.31	1.5086	0.386
	58.50	621.3	18.0	100.31	1.5043	0.386
****** End Shut-in 2	59.00	621.3	18.0	100.30	1.5000	0.386
****** Final Hydro.	298.00	1777.4	0.0	100.32		

TEST HISTORY

10557 Mull Drilling Co. Inc. Henry #1-10 DST#2

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1802.26
B:	0.00	273.93
C:	14.50	503.98
D:	44.50	611.21
E:	0.00	535.37
F:	15.00	603.26
G:	59.00	621.28
Q:	0.00	1777.41

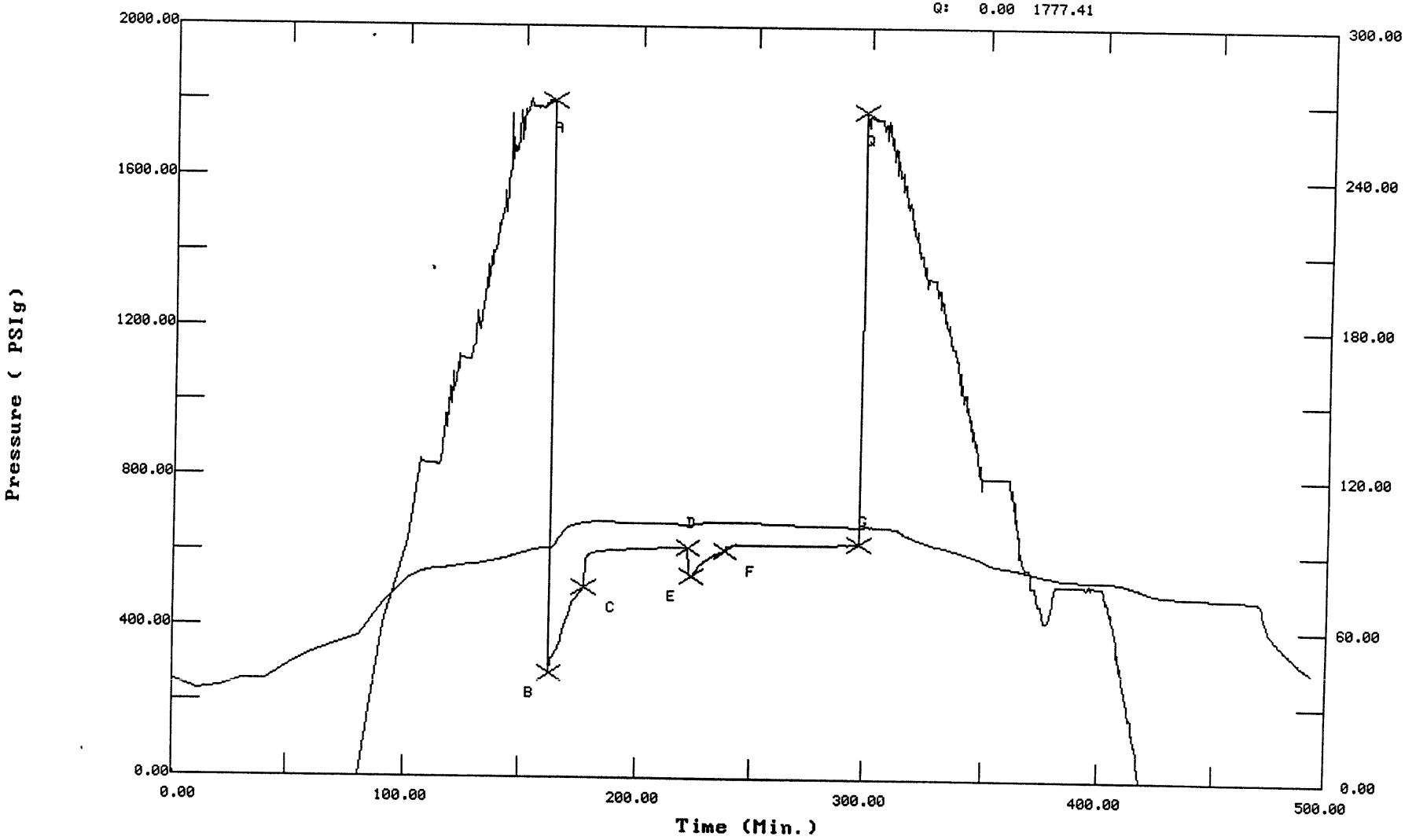
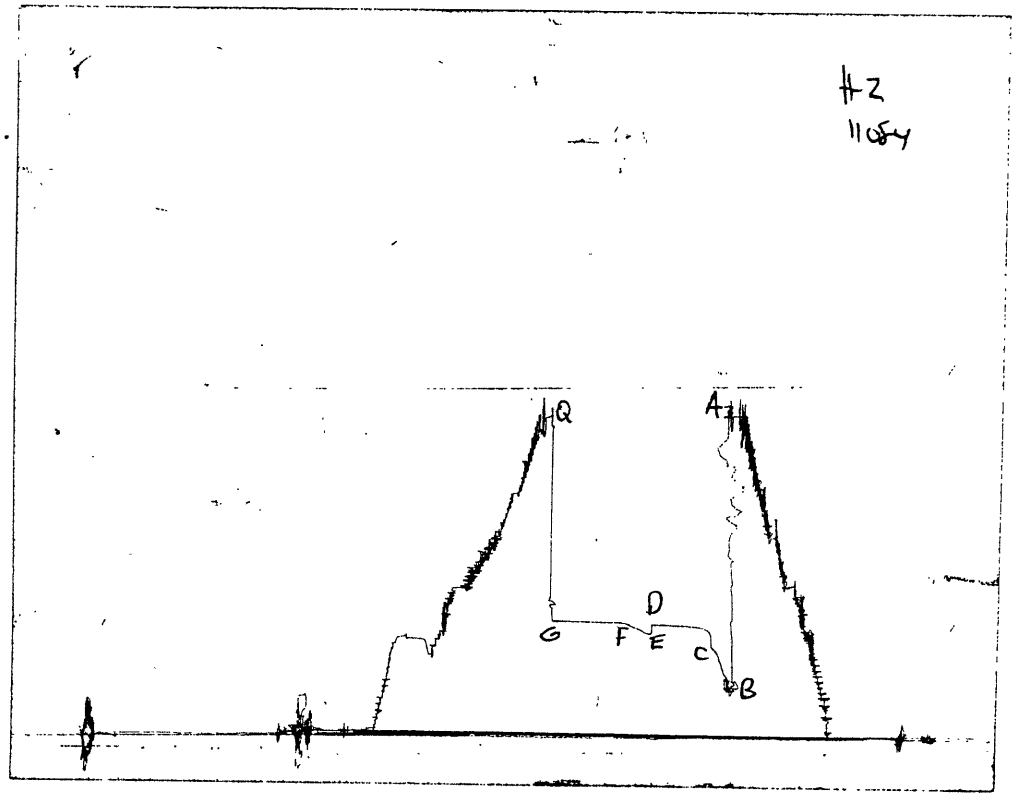


CHART PAGE



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

№ 10557

Well Name & No. Henry 1-10 Test No. 2 Date 11-23-97

Company Mull Drlg Co Inc Zone Tested Kansas Sand

Address _____ Elevation 2356 KB 2361 GL

Co. Rep / Geo. Bill Stout Cont. Pickrell #10 Est. Ft. of Pay _____ Por. _____ %

Location: Sec. 10 Twp. 4s Rge. 23w Co. Norton State Ks

No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3635 -3690

Anchor Length 55

Top Packer Depth 3630

Bottom Packer Depth 3635

Total Depth 3690

Mud Wt. 9.4 LCM _____ Vis. 42 WL 10.6

Blow Description strong blow - bottom of bucket in 1 minute
ISI - blowback built to bottom of bucket in 25 minutes
FF - strong blow built to bottom of bucket in 3 minutes
FSI - surface blow building to 4"

Initial Str Wt./Lbs. 58,000 Unseated Str Wt./Lbs. 68,000

Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 72,000

Tool Weight 2900

Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____

Wt. Pipe Run _____ Drill Collar Run 175

Drill Pipe Size 4½ XH Ft. Run 3445

Recovery — Total Feet 1230 GIP ? Ft. in DC 175 Ft. in DP 1055

Rec. 180	Feet Of watery mud	%gas	%oil	%water	%mud
Rec. 1050.	Feet Of ~~Sat~~ gassy water	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of reversed to pits	%gas	%oil	%water	%mud

BHT 102 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW .18 @ 60 °F Chlorides 50,000 ppm Recovery Chlorides 500 ppm System

(A) Initial Hydrostatic Mud	1875	1802	PSI	Recorder No.	2341	T-Started	0155
(B) First Initial Flow Pressure	241	274	PSI	(depth)	3637	T-Open	0328
(C) First Final Flow Pressure	504	504	PSI	Recorder No.	11084	T-Pulled	0543
(D) Initial Shut-in Pressure	623	611	PSI	(depth)	3670	T-Out	0805
(E) Second Initial Flow Pressure	580	535	PSI	Recorder No.	_____		
(F) Second Final Flow Pressure	623	603	PSI	(depth)	_____		
(G) Final Shut-in Pressure	623	621	PSI	Initial Opening	15	Test	_____
(H) Final Hydrostatic Mud	1832	1777	PSI	Initial Shut-in	45	Jars	_____
	Ak-1			Final Flow	15	Safety Joint	X
				Final Shut-in	60	Straddle	_____
					SS steady	Circ. Sub	X
					_____	Sampler	_____
						Extra Packer	_____
						Elect. Rec.	X
						Other	

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Approved By Bill Stout