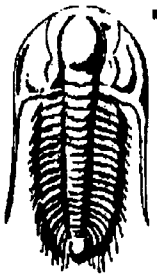
15-007-22724

24-31s-13w



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Prairie Res. Inc.**

1016 Pines Dr
Parker Co 80138

ATTN: Gordon W. Kean

24 31s 13w

Packard 1-24

Start Date: 2002.11.18 @ 01:13:46

End Date: 2002.11.18 @ 10:23:16

Job Ticket #: 16583 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Prairie Res. Inc. Packard 1-24 24 31s 13w DST # 1 Douglas 2002.11.18

DRILL STEM TEST REPORT

Prairie Res. Inc.

1016 Pines Dr
Parker Co 80138

ATTN: Gordon W. Kean

Packard 1-24

24 31s 13w

Job Ticket: 16583 **DST#: 1**

Test Start: 2002.11.18 @ 01:13:46

GENERAL INFORMATION:

Formation: **Douglas**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:23:16
Time Test Ended: 10:23:16

Test Type: Conventional Bottom Hole
Tester: Wenrich
Unit No: 14

Interval: 3586.00 ft (KB) To 3610.00 ft (KB) (TVD)
Total Depth: 3610.00 ft (KB) (TVD)
Hole Diameter: 7.79 inches Hole Condition:

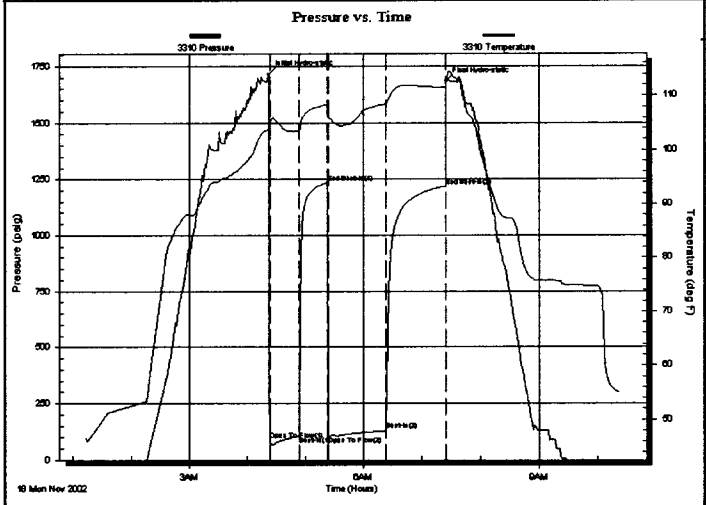
Reference Elevations: 1641.00 ft (KB)
1630.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 3310 **Inside**

Press@RunDepth: 130.73 psig @ 3587.00 ft (KB)
Start Date: 2002.11.18 End Date: 2002.11.18
Start Time: 01:13:51 End Time: 10:23:16

Capacity: 7000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2002.11.18 @ 04:22:16
Time Off Btm: 2002.11.18 @ 07:24:16

TEST COMMENT: IF:Strong blow .BOB in 15 secs.GTS in 6 mins.(see gas report)
ISI:No blow .
FF:Strong blow .BOB inmmediately.(see gas report)
FSI:Weak blow .1 1/2" in bucket.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1713.94	103.99	Initial Hydro-static
1	88.89	104.62	Open To Flow (1)
31	106.84	103.51	Shut-In(1)
61	1235.47	108.36	End Shut-In(1)
62	104.63	105.89	Open To Flow (2)
121	130.73	108.50	Shut-In(2)
182	1218.85	111.54	End Shut-In(2)
182	1682.78	111.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	wwoscum 1%o 99%w	0.55
60.00	gocw 30%g 30%o 40%w	0.55
60.00	gomcw 20%g 20%o 40%w 20%m	0.55
85.00	gowcm 5%g 5%o 15%w 75%m	0.78

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	12.00	41.88
Last Gas Rate	0.25	9.00	37.12
Max. Gas Rate	0.25	30.00	70.44

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Prairie Res. Inc.

1016 Pines Dr
Parker Co 80138

ATTN: Gordon W. Kean

Packard 1-24

24 31s 13w

Job Ticket: 16583 **DST#: 1**

Test Start: 2002.11.18 @ 01:13:46

Tool Information

Drill Pipe:	Length:	3575.00 ft	Diameter:	3.08 inches	Volume:	32.94 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	40000.00 lb
					Total Volume:	32.94 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		16.00 ft					String Weight: Initial	36000.00 lb
Depth to Top Packer:		3586.00 ft					Final	38000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		25.00 ft						
Tool Length:		52.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3560.00		
S.I. Tool	5.00			3565.00		
HMV	5.00			3570.00		
Jars	5.00			3575.00		
Safety Joint	2.00			3577.00		
Packer	4.00			3581.00	27.00	Bottom Of Top Packer
Packer	5.00			3586.00		
Stubb	1.00			3587.00		
Recorder	0.00	3310	Inside	3587.00		
Perforations	22.00			3609.00		
Recorder	0.00	10242	Outside	3609.00		
Bullnose	2.00			3611.00	25.00	Bottom Packers & Anchor
Total Tool Length:	**52.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Prairie Res. Inc.

1016 Pines Dr
Parker Co 80138

ATTN: Gordon W. Kean

Packard 1-24

24 31s 13w

Job Ticket: 16583 **DST#: 1**

Test Start: 2002.11.18 @ 01:13:46

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	44.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.18 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3300.00 ppm				
Filter Cake:	0.20 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	w w oscum 1%o 99%w	0.553
60.00	gocw 30%g 30%o 40%w	0.553
60.00	gomcw 20%g 20%o 40%w 20%m	0.553
85.00	gow cm 5%g 5%o 15%w 75%m	0.783

Total Length: 265.00 ft Total Volume: 2.442 bbl

Num Fluid Samples: 1 Num Gas Bombs: 0 Serial #: Wenrich

Laboratory Name: Caraw ay Laboratory Location: Liberal, Ks

Recovery Comments:

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Prairie Res. Inc.

1016 Pines Dr
Parker Co 80138

ATTN: Gordon W. Kean

Packard 1-24

24 31s 13w

Job Ticket: 16583 **DST#: 1**

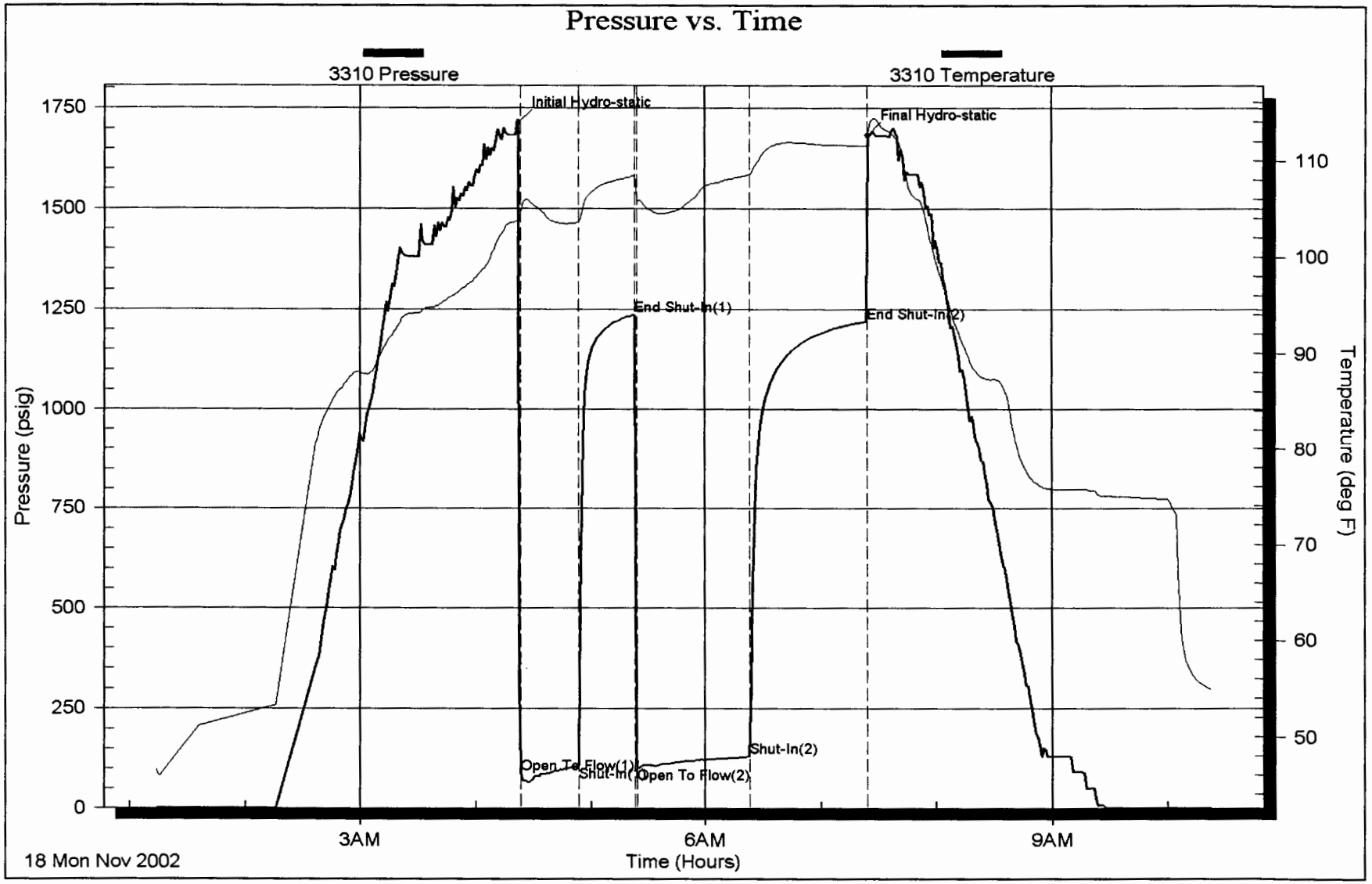
Test Start: 2002.11.18 @ 01:13:46

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m^3/d)
1	10	0.25	12.00	41.88
1	20	0.25	25.00	62.50
1	30	0.25	30.00	70.44
2	10	0.38	20.00	126.02
2	20	0.25	18.00	51.40
2	30	0.25	18.00	51.40
2	40	0.25	14.00	45.05
2	50	0.25	10.00	38.71
2	60	0.25	9.00	37.12


Pressure vs. Time
3310 Pressure
3310 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
110
100
90
80
70
60
50
3AM
6AM
9AM
18 Mon Nov 2002
Time (Hours)

TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

TW # 5243 // # 1235

№ 16583

Test Ticket

Well Name & No. Packard 1-24 Test No. 1 Date 10/18/02

Company Prairie Resources Inc. Zone Tested Douglas Sand

Address 1016 Pines Dr. Parker, Co 80138 Elevation 1641 KB 1630 GL

Co. Rep / Geo. Gordon W. Keen Cont. Duke Drlg Rig #1 Est. Ft. of Pay ___ Por. ___ %

Location: Sec. 24 Twp. 31s Rge. 13w Co. Barber State Ks

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

Interval Tested 3586 3610 Initial Str Wt./Lbs. 36,000 Unseated Str Wt./Lbs. 38,000

Anchor Length 24 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 40,000

Top Packer Depth 3581 Tool Weight 2100

Bottom Packer Depth 3586 Hole Size — 7 7/8" ~ Rubber Size — 6 3/4" ~

Total Depth 3610 Wt. Pipe Run 0 Drill Collar Run 0

Mud Wt. 9.1 LCM 0 Vis. 44 WL 11.2 Drill Pipe Size 4½ Ft. Run 3575

Blow Description IF: Strong blow. BOB in 15 secs. GTS in 6 mins. (see gas report)
ISI: No blow. FF: Strong blow. B.O.B. immediately. (see gas report)
FSI: Weak blow. 1½" in bucket.

Recovery — Total Feet 265 GIP GTS Ft. in DC 0 Ft. in DP 265

Rec. 85	Feet Of GOWCM	5 %gas	5 %oil	15 %water	75 %mud
Rec. 60	Feet Of GOMCW	20 %gas	20 %oil	40 %water	20 %mud
Rec. 60	Feet Of GOCW	30 %gas	30 %oil	40 %water	%mud
Rec. 40	Feet Of WWOscum	%gas	1 %oil	99 %water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 112 °F Gravity ___ °API D@ ___ °F Corrected Gravity ___ °API

RW ___ @ ___ °F Chlorides ___ ppm Recovery Chlorides 3300 ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud		1714	PSI	Recorder No.	3310	T-On Location	0000
(B) First Initial Flow Pressure		89	PSI	(depth)	3587	T-Started	0114
(C) First Final Flow Pressure		107	PSI	Recorder No.	10242	T-Open	0423
(D) Initial Shut-In Pressure		1735	PSI	(depth)	3608	T-Pulled	0724
(E) Second Initial Flow Pressure		105	PSI	Recorder No.		T-Out	1030
(F) Second Final Flow Pressure		131	PSI	(depth)		T-Off Location	
(G) Final Shut-in Pressure		1219	PSI	Initial Opening	30	Test ✓100	700
(Q) Final Hydrostatic Mud		1683	PSI	Initial Shut-in	30	Jars ✓200	200
				Final Flow	60	Safety Joint ✓50	50
				Final Shut-in	60	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elec. Rec. ✓150	150
						Mileage ✓30	30
						Other Stand By 3.5 hrs @ 105	1130
						TOTAL PRICE $	$1235

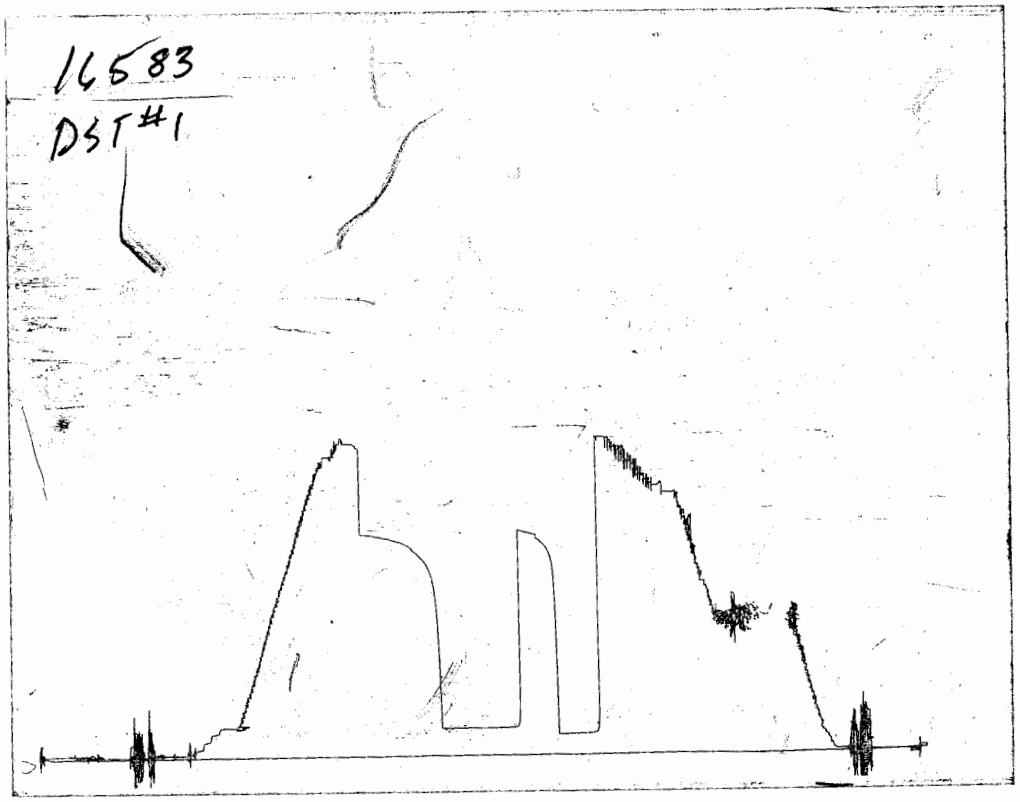
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Gordon W. Keen

Our Representative Jim Weinrich

CHART PAGE

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



NATURAL GAS ANALYSIS REPORT

Sampled by:	Analyzed by:
Trilobite Testing, Inc.	Caraway Analytical, Inc
Hays, Kansas	P. O. Box 2137
Scott City, Kansas	Liberal, Kansas 67905
Phone: 800-728-5369	Phone: 620-624-5389
Fax: 785-625-5620	Fax: 620-626-7108

Lab Number:	20025746	Analyzed:	11/21/02
Sample From:	Packard 1-24 DST 1	Pressure:	
Producer:	Prairie Resources, Inc.	Temperature:	
Date:		Location:	24-31-13
Time:		County:	Barber
Sampler:		State:	Kansas
Source:		Formation:	Douglas

		Mole %	GPM
Helium	He:	0.118	0.000
Hydrogen	H2:	0.001	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	2.267	0.000
Carbon Dioxide	CO2:	0.273	0.000
Methane	C1:	88.857	0.000
Ethane	C2:	4.035	1.079
Propane	C3:	1.685	0.464
Iso Butane	iC4:	0.278	0.091
Normal Butane	nC4:	0.670	0.211
Iso Pentane	iC5:	0.246	0.090
Normal Pentane	nC5:	0.305	0.110
Hexanes Plus	C6+:	1.265	0.552
	TOTAL:	100.000	2.598
	Z Fact:	0.9973	
	SP.GR.:	0.6615	
	BTU (SAT):	1115.0 @ 14.73 psia	
	BTU (DRY):	1134.7 @ 14.73 psia	
	OCTANE RATING:	122.8	

COMMENTS: 0.000



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

4:14

GAS VOLUME REPORT

Prairie Resources Inc. — OPERATOR
Packard 1-24 — WELL NAME AND NO.
1 — DST NO.

GTS in 6 min

1st Open				2nd Open			
Min.	Ins. of Water PSIG	Orifice Size	CF/D	Min.	Ins. of Water PSIG	Orifice Size	CF/D
10	12#	1/4"	39.2	10	20#	3/8"	117.8
20	25#	1/4"	58.3	20	18#	1/4"	48.0
30	30#	1/4"	65.6	30	18#	1/4"	48.0
				40	14#	1/4"	42.1
				50	10#	1/4"	36.2
				60	9#	1/4"	34.8

Remarks: