

JUN 11 2002

CONSERVATION DIVISION
WICHITA, KS

15-033-21315



TRILOBITE
TESTING, INC.

Release
NOV 04 2003
From
Confidential

Pickrell Drilling Company Inc

Bird "N" #2

4-32S-19W

DST # 1

Altamont

2001.05.10

DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Company Inc**

CONFIDENTIAL 400 S Main Suite 505
Wichita, KS 67202-3738
KCC

ATTN: Kevin Davis JUL 07 2002

4-32S-19W **CONFIDENTIAL**

Bird "N" #2

(Start Date: 2001.05.10 @ 22:04:51

End Date: 2001.05.11 @ 07:13:51

Job Ticket #: 13712 DST #: 1

ORIGINAL
Date probably 2002

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

CONFIDENTIAL**ORIGINAL**
**TRILOBITE
TESTING, INC.**
DRILL STEM TEST REPORT

Pickrell Drilling Company Inc

 100 S.Main Suite 505
Wichita, KS 67202-3738

ATTN: Kevin Davis

Bird "N"#2

4-32S-19W

Job Ticket: 15713

DST#: 1

Test Start: 2001.05.10 @ 22:04:51

GENERAL INFORMATION:

 Formation: **Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:04:36

Time Test Ended: 07:13:51

 Interval: **5008.00 ft (KB) To 5022.00 ft (KB) (TVD)**

Total Depth: 5022.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

KCC
JUL 07 2002
CONFIDENTIAL

Test Type: Conventional Bottom Hole

Tester: Darren L.Amerine

Unit No: 19

Reference Elevations: 2078.00 ft (KB)

2073.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 3302
Inside

Press@RunDepth: 578.81 psig @ 5009.00 ft (KB)

Start Date: 2001.05.10

End Date:

2001.05.11

Start Time: 22:04:53

End Time:

07:13:51

Capacity: 7000.00 psig

Last Calib.: 2002.05.09

Time On Btm: 2001.05.11 @ 01:03:06

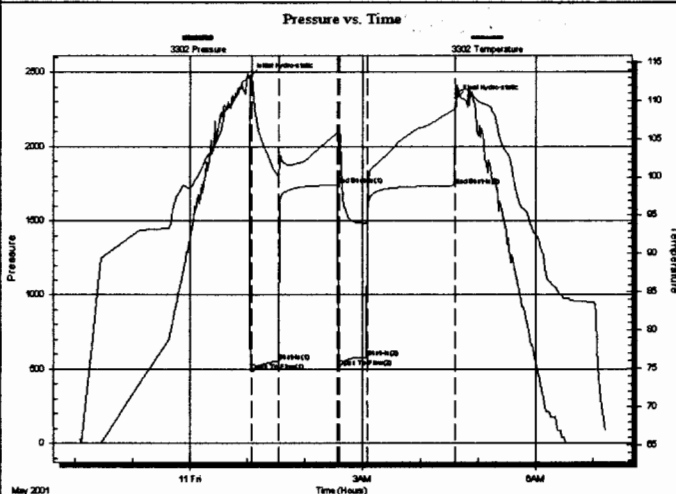
Time Off Btm: 2001.05.11 @ 04:36:36

TEST COMMENT: IF: Strong blow b.o.b in 10 sec. GTS in 2 min. gauge gas.

IS: Bled down n for 30 min. No blow back.

FF: Strong blow b.o.b in 10 sec. gauge gas.

FS: Bled down n for 30 min. built back to 1/2" in H2O bucket.


PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2467.50	113.08	Initial Hydro-static
2	485.80	113.47	Open To Flow (1)
31	552.46	100.07	Shut-In (1)
92	1739.49	105.75	End Shut-In (1)
93	514.14	105.23	Open To Flow (2)
122	578.81	93.93	Shut-In (2)
213	1735.84	108.83	End Shut-In (2)
214	2321.28	109.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
4714.00	01 - Gas	63.93
60.00	302 - Oil and Gas cut Salt Water	0.84
120.00	502 - Mud and Oil and Gas cut Salt Water	1.68
95.00	110 - Gas and Oil and Water cut Mud	1.33

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	75.00	2570.14
Last Gas Rate	1.00	110.00	3576.35
Max. Gas Rate	1.00	110.00	3576.35



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pickrell Drilling Company Inc

Bird "N"#2

100 S.Main Suite 505
Wichita,KS 67202-3738

4-32S-19W

Job Ticket: 15713

DST#: 1

ATTN: Kevin Davis

Test Start: 2001.05.10 @ 22:04:51

Tool Information

Drill Pipe:	Length: 4750.00 ft	Diameter: 3.80 inches	Volume: 66.63 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: 241.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 67.82 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	76000.00 lb
Depth to Top Packer:	5008.00 ft			Final	76000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	14.00 ft				
Tool Length:	42.00 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			4981.00	
S.I. Tool	5.00			4986.00	
HMV	5.00			4991.00	
Jars	5.00			4996.00	
Safety Joint	2.00			4998.00	
Packer	5.00			5003.00	28.00 Bottom Of Top Packer
Packer	5.00			5008.00	
Stubb	1.00			5009.00	
Recorder	0.00	3302	Inside	5009.00	
Anchor	10.00			5019.00	
Recorder	0.00	10991	Outside	5019.00	
Bullnose	3.00			5022.00	14.00 Bottom Packers & Anchor

Total Tool Length: 42.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pickrell Drilling Company Inc

Bird "N"#2

100 S.Main Suite 505
Wichita,KS 67202-3738

4-32S-19W

Job Ticket: 15713

DST#: 1

ATTN: Kevin Davis

Test Start: 2001.05.10 @ 22:04:51

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: 48000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.97 in³

Gas Cushion Type:

Resistivity: 1.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4714.00	01 - Gas	63.930
60.00	302 - Oil and Gas cut Salt Water	0.842
120.00	502 - Mud and Oil and Gas cut Salt Water	1.683
95.00	110 - Gas and Oil and Water cut Mud	1.333

Total Length: 4989.00 ft

Total Volume: 67.788 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Pickrell Drilling Company Inc

Bird "N"#2

100 S.Main Suite 505
Wichita,KS 67202-3738

4-32S-19W

Job Ticket: 15713

DST#: 1

ATTN: Kevin Davis

Test Start: 2001.05.10 @ 22:04:51

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	7	1.00	75.00	2570.14
1	7	1.00	75.00	2570.14
1	12	1.00	95.00	3145.12
1	17	1.00	100.00	3288.86
1	22	1.00	100.00	3288.86
1	27	1.00	110.00	3576.35
1	30	1.00	110.00	3576.35
2	10	1.00	100.00	3288.86
2	20	1.00	110.00	3576.35

DST Test Number: 1

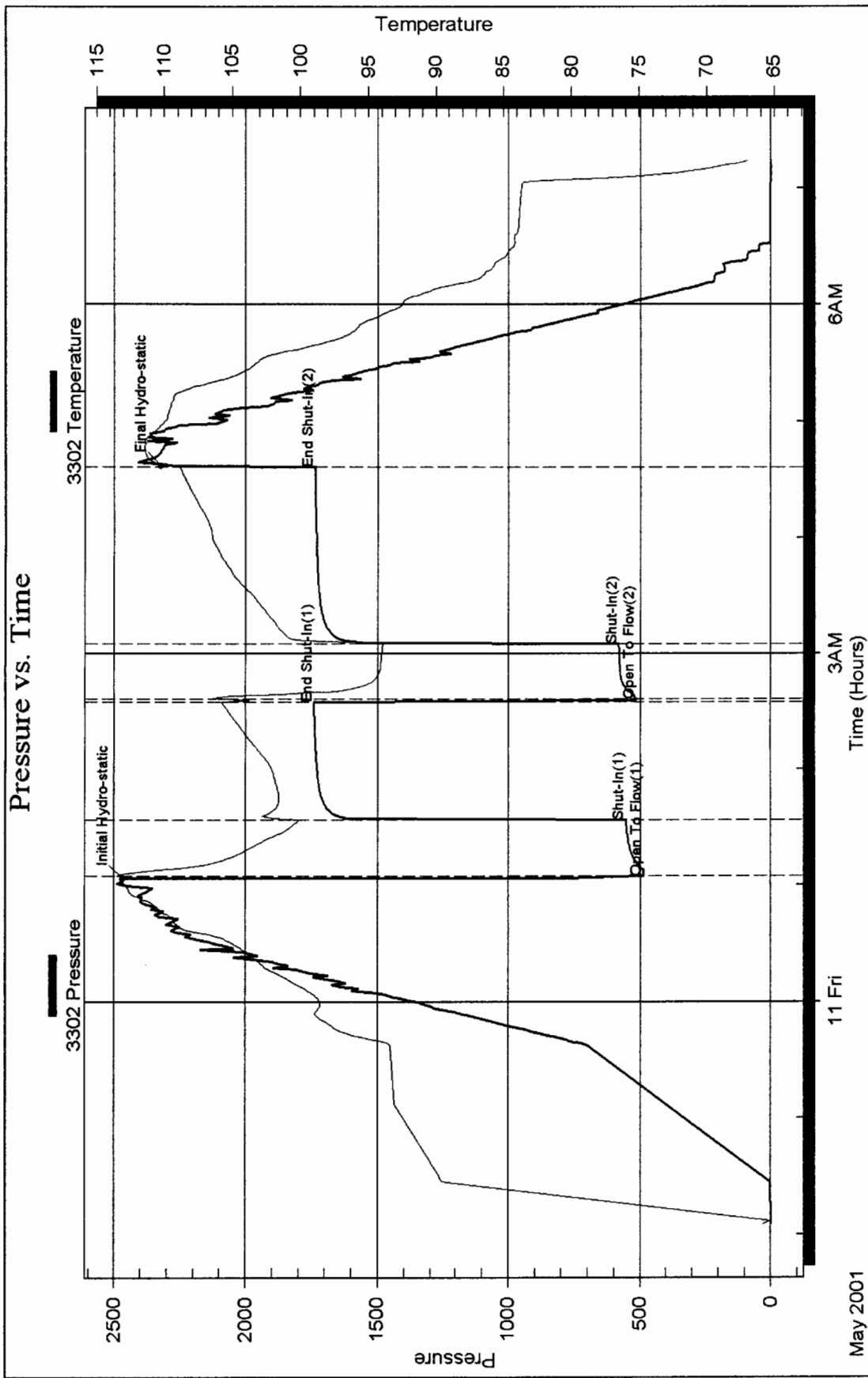
4-32S-19W

Rockwell Drilling Company Inc

Inside

Serial #: 3302

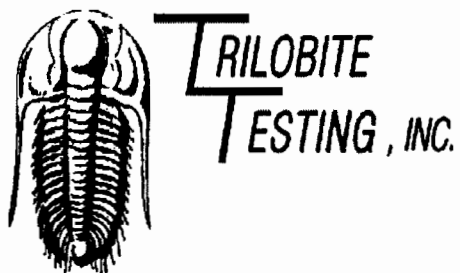
Pressure vs. Time



Ref. No: 15713

Trilobite Testing, Inc

Printed: 2002.05.13 @ 14:12:42 Page 6



DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Company Inc**

100 S.Main Suite 505
Wichita,KS 67202-3738

ATTN: Kevin Davis

4-32S-19W

Bird "N"#2

Start Date: 2001.05.10 @ 02:51:43

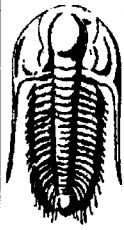
End Date: 2001.05.10 @ 12:39:43

Job Ticket #: 15714 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Pickrell Drilling Company Inc

100 S.Main Suite 505
Wichita,KS 67202-3738

ATTN: Kevin Davis

Bird "N"#2

4-32S-19W

Job Ticket: 15714

DST#: 2

Test Start: 2001.05.10 @ 02:51:43

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 06:14:43

Time Test Ended: 12:39:43

Test Type: **Conventional Bottom Hole**

Tester: **Darren L.Amerine**

Unit No: **19**

Interval: **5130.00 ft (KB) To 5230.00 ft (KB) (TVD)**

Total Depth: **5230.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2078.00 ft (KB)**

2073.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: **3302**

Outside

Press@RunDepth: **151.15 psig @ 5161.00 ft (KB)**

Start Date: **2001.05.10**

End Date:

2001.05.10

Start Time: **02:51:45**

End Time:

12:39:43

Capacity: **7000.00 psig**

Last Calib.: **2002.05.10**

Time On Btrr: **2001.05.10 @ 06:13:13**

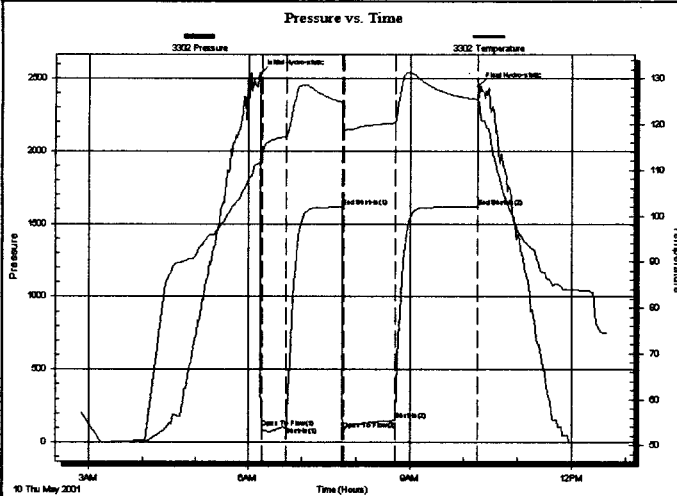
Time Off Btrr: **2001.05.10 @ 10:15:28**

TEST COMMENT: **IF: Strong blow b.o.b in 30 sec. GTS in 7 min. Gauge gas.**

IS: Bled down n for 15 min. no blow back.

FF: Strong blow b.o.b in 15 sec. gauge gas.

FS: Bled down n for 25 min. no blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2528.96	111.45	Initial Hydro-static
2	101.50	113.11	Open To Flow (1)
30	106.77	117.43	Shut-In(1)
92	1613.32	124.83	End Shut-In(1)
93	84.94	118.50	Open To Flow (2)
151	151.15	120.32	Shut-In(2)
242	1614.62	125.50	End Shut-In(2)
243	2444.19	125.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
4761.00	01 - Gas	64.59
241.00	GCM	3.38
90.00	VSGCM	1.26

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	4.00	29.19
Last Gas Rate	0.25	41.00	87.89
Max. Gas Rate	0.25	41.00	87.89



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pickrell Drilling Company Inc

100 S.Main Suite 505
Wichita, KS 67202-3738

ATTN: Kevin Davis

Bird "N"#2

4-32S-19W

Job Ticket: 15714

DST#: 2

Test Start: 2001.05.10 @ 02:51:43

Tool Information

Drill Pipe:	Length: 4871.00 ft	Diameter: 3.80 inches	Volume: 68.33 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: 241.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose:	110000.0 lb
			<u>Total Volume: 69.52 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	76000.00 lb
Depth to Top Packer:	5130.00 ft			Final	76000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	97.00 ft				
Tool Length:	125.00 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			5103.00	
S.I. Tool	5.00			5108.00	
HMV	5.00			5113.00	
Jars	5.00			5118.00	
Safety Joint	2.00			5120.00	
Packer	5.00			5125.00	28.00 Bottom Of Top Packer
Packer	5.00			5130.00	
Stubb	1.00			5131.00	
Recorder	0.00	3302	Inside	5131.00	
Anchor	30.00			5161.00	
Recorder	0.00	3302	Outside	5161.00	
Blank Spacing	63.00			5224.00	
Bullhose	3.00			5227.00	97.00 Bottom Packers & Anchor

Total Tool Length: 125.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Pickrell Drilling Company Inc

Bird "N"#2

100 S.Main Suite 505
Wichita,KS 67202-3738

4-32S-19W

Job Ticket: 15714

DST#: 2

ATTN: Kevin Davis

Test Start: 2001.05.10 @ 02:51:43

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 1.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4761.00	01 - Gas	64.589
241.00	GCM	3.381
90.00	VSGCM	1.262

Total Length: 5092.00 ft

Total Volume: 69.232 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Pickrell Drilling Company Inc

Bird "N" #2

100 S.Main Suite 505
Wichita, KS 67202-3738

4-32S-19W

Job Ticket: 15714

DST#: 2

ATTN: Kevin Davis

Test Start: 2001.05.10 @ 02:51:43

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	12	0.25	4.00	29.19
1	12	0.25	4.00	29.19
1	12	0.25	4.00	29.19
1	12	0.25	4.00	29.19
1	17	0.25	9.00	37.12
1	22	0.25	15.00	46.64
1	27	0.25	19.00	52.99
1	30	0.25	20.00	54.57
2	10	0.25	39.00	84.71
2	20	0.25	39.00	84.71
2	30	0.25	41.00	87.89

Serial #: 3302

Outside Rickrell Drilling Company Inc

4-32S-19W

DST Test Number: 2

