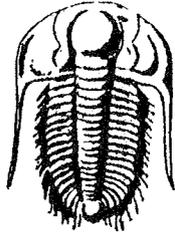


15-135-24167

27-20s-23w



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

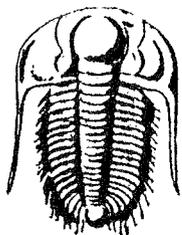
Prepared for:

Norstar Petroleum, Inc.
5 Inverness Dr. E. Ste 120
Englewood, CO 80112

Brand #1
27 20s 23w
Ness co KS

DST 1

Trilobite Testing, Inc
PO Box 362 - Hays, Kansas - 67601
ph: 785-625-4778 fax: 785-625-5620
e-mail: trilobite@eaglecom.net



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Well name#:	Brand #1	Date:	10/29/2001
Location#:	27 20s 23w	Ticket #:	15566
		DST#	1

General Informaion:

Formation:	Fort Scott	Test Type:	Conventional
Interval:	4228-4270	Tester:	Dan Bangle
Total Depth:	4270	Elevation:	2221 ft(KB)
Hole Diameter:	7 7/8"		2216 ft(CF)
Start Date:	10/29/2001	Tool Weight:	1200
Start Time:	11:30	Weight Set on Packers:	30000
Time tool opened:	13:25	Weight to Pull Loose:	45000
Time Off Btm:	17:10	Initial String Weight:	40000
End Date:	10/29/2001	Final String Weight:	44000
End Time:	19:45	Drill Pipe Length:	4145
		Drill Collar Length:	116

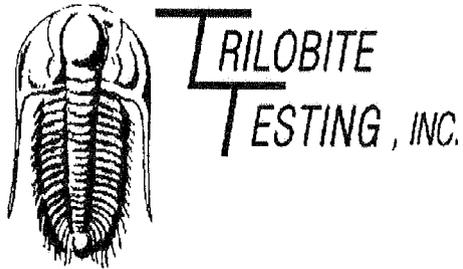
Test Comment:

IF: Strong bob in 6 min
 FF: Strong bob in 2 min

Recovery	285ft	GIP 2602	116ft DC	169ft DP
Length(ft):	Description:			
	105 HMCOSYO 20%gas 40%oil 40%mud			
	60 Frothy o			
	120 CGSYO 20%gas 80%oil			

Recorder #:	13248		
Pressure Summary:		Time:(min)	
Initial Hydro-static:	2197		
Open to Flow (1):	74		30
Shut-in (1):	96		
End Shut-in (1):	1293		60
Open to Flow (2):	125		45
Shut-in (2):	133		
End Shut-in (2);	1276		90
Final Hydro-static:	2163		

BHT:	115
OIL API:	34
H2O Salinity:	
Mud Type:	Chemical
Mud Weight:	9.4
Viscosity:	52
Water Loss:	9.8
Resistivity;	
Salinity:	3000



DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum, Inc.**

5 Inverness Dr.E. ste 120
Englewood, CO 80112

ATTN: John Rose

27-20s-23w-Ness-Ks

Brand #1

Start Date: 2001.10.30 @ 09:16:07

End Date: 2001.10.30 @ 18:38:36

Job Ticket #: 15567 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

Norstar Petroleum, Inc.
5 Inverness Dr.E. ste 120
Englewood, CO 80112
ATTN: John Rose

Brand #1
27-20s-23w-Ness-Ks
Job Ticket: 15567 **DST#: 2**
Test Start: 2001.10.30 @ 09:16:07

GENERAL INFORMATION:

Formation: **Cher Sd**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:15:36
Time Test Ended: 18:38:36
Interval: **4276.00 ft (KB) To 4355.00 ft (KB) (TVD)**
Total Depth: 4355.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 21
Reference Elevations: 2221.00 ft (KB)
2216.00 ft (CF)
KB to GR/CF: 5.00 ft

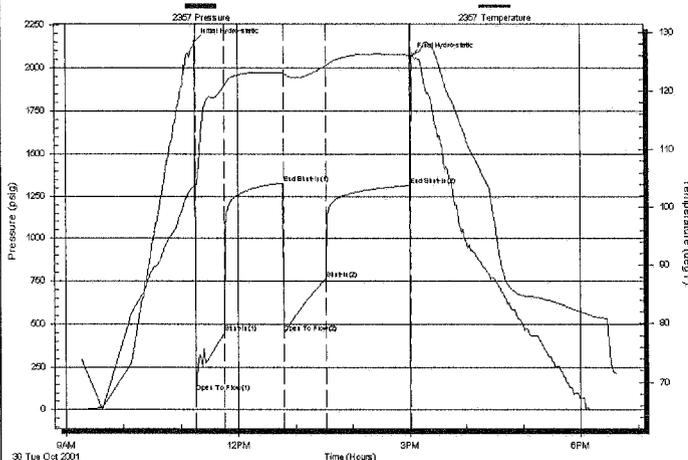
Serial #: 2357

Inside

Press@RunDepth: 763.02 psig @ 4279.01 ft (KB) Capacity: 7000.00 psig
Start Date: 2001.10.30 End Date: 2001.10.30 Last Callb.: 1899.12.30
Start Time: 09:16:07 End Time: 18:38:36 Time On Btm: 2001.10.30 @ 11:15:06
Time Off Btm: 2001.10.30 @ 15:02:06

TEST COMMENT: IF-Strong BOB in 3 min
FF-Strong BOB in 5 min
Times-30-60-45-90

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2152.99	103.75	Initial Hydro-static
1	103.54	103.81	Open To Flow (1)
31	451.38	120.93	Shut-In(1)
92	1327.53	123.11	End Shut-In(1)
93	448.35	123.09	Open To Flow (2)
137	763.02	124.28	Shut-In(2)
227	1312.69	126.09	End Shut-In(2)
227	2065.55	126.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1680.00	CGO 10%g 90%o	22.51
240.00	MCO 80%o 20%m	3.37
120.00	OCM 30%o 70%m	1.68
5.00	Slitly OCM 5%o 95%m	0.07

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum, Inc.
5 Inverness Dr.E. ste 120
Englewood, CO 80112
ATTN: John Rose

Brand #1
27-20s-23w-Ness-Ks
Job Ticket: 15567 **DST#: 2**
Test Start: 2001.10.30 @ 09:16:07

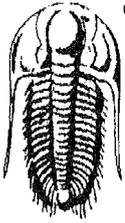
Tool Information

Drill Pipe:	Length: 4156.00 ft	Diameter: 3.80 inches	Volume: 58.30 bbl	Tool Weight: 1300.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 116.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 58.87 bbl</u>	Tool Chased 0.01 ft
Drill Pipe Above KB:	19.01 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	4276.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	79.02 ft			
Tool Length:	102.02 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			4254.00	
S.I. Tool	5.00			4259.00	
HMV	5.00			4264.00	
Safety Joint	2.00			4266.00	
Packer	5.00			4271.00	23.00 Bottom Of Top Packer
Packer	5.00			4276.00	
Stubb	1.00			4277.00	
Perforations	1.00			4278.00	
C.O. Sub	1.00			4279.00	
Recorder	0.01	2357	Inside	4279.01	
Blank Spacing	63.00			4342.01	
C.O. Sub	1.00			4343.01	
Recorder	0.01	213254	Outside	4343.02	
Perforations	9.00			4352.02	
Bullnose	3.00			4355.02	79.02 Bottom Packers & Anchor

Total Tool Length: 102.02



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum, Inc.
5 Inverness Dr.E. ste 120
Englewood, CO 80112
ATTN: John Rose

Brand #1
27-20s-23w-Ness-Ks
Job Ticket: 15567 **DST#: 2**
Test Start: 2001.10.30 @ 09:16:07

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 37 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 9.79 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4700.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1680.00	CGO 10%g 90%o	22.509
240.00	MCO 80%o 20%m	3.367
120.00	OCM 30%o 70%m	1.683
5.00	Slitly OCM 5%o 95%m	0.070

Total Length: 2045.00 ft Total Volume: 27.629 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

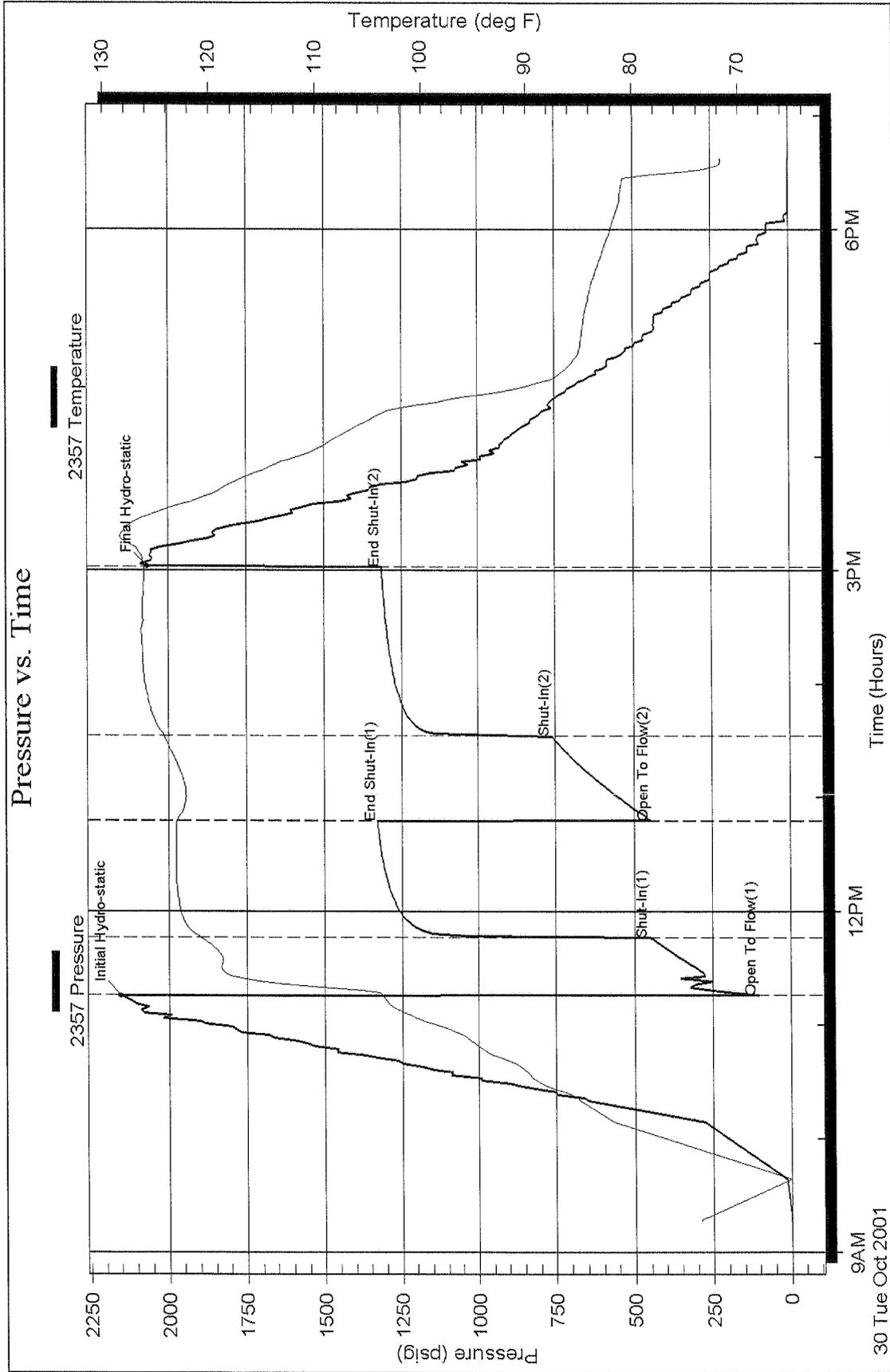
Serial #: 2357

Inside

Norstar Petroleum, Inc.

27-20s-23w - Ness-Ks

DST Test Number: 2



CALCULATED RECOVERY ANALYSIS

DST 2

TICKET 15567

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	5	0	0	5	0.25	0	0	95	4.75
PIPE 2	120	0	0	30	36	0	0	70	84
3	240	0	0	80	192	0	0	20	48
4	1564	10	156.4	90	1407.6	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
WEIGHT 1	0	0	0	0	0	0	0	0	0
PIPE 2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
DRILL 1	116	10	11.6	90	104.4	0	0	0	0
COLLARS 2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
TOTAL	2045	0	168	0	1740.25	0	0	0	136.75

BBL OIL = 23.7723 * HRS OPEN = 1.25 BBL/DAY = 456.4282
 BBL WATER = 0 * = 0
 BBL MUD = 1.944585
 BBL GAS = 2.280732

