



DRILL STEM TEST REPORT

Prepared For: **Landmark Resources**

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

33-34S-31W Seward

Long/Branstine 2-33

Start Date: 2006.01.03 @ 06:12:12

End Date: 2006.01.03 @ 17:00:40

Job Ticket #: 22368 DST #: 1

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Landmark Resources

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

Long/Branstine 2-33

33-34S-31W Seward

Job Ticket: 22368

DST#: 1

Test Start: 2006.01.03 @ 06:12:12

GENERAL INFORMATION:

Formation: **Novinger**

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

Time Tool Opened: 09:50:10

Time Test Ended: 17:00:40

Test Type: **Conventional Bottom Hole**

Tester: **Dustin Rash**

Unit No: **20**

Interval: **5310.00 ft (KB) To 5339.00 ft (KB) (TVD)**

Total Depth: **5339.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2715.00 ft (KB)**

2702.00 ft (CF)

KB to GRVCF: **13.00 ft**

Serial #: **6770**

Inside

Press@RunDepth: **298.25 psig @ 5312.00 ft (KB)**

Start Date: **2006.01.03**

End Date: **2006.01.03**

Start Time: **06:12:12**

End Time: **17:00:40**

Capacity: **7000.00 psig**

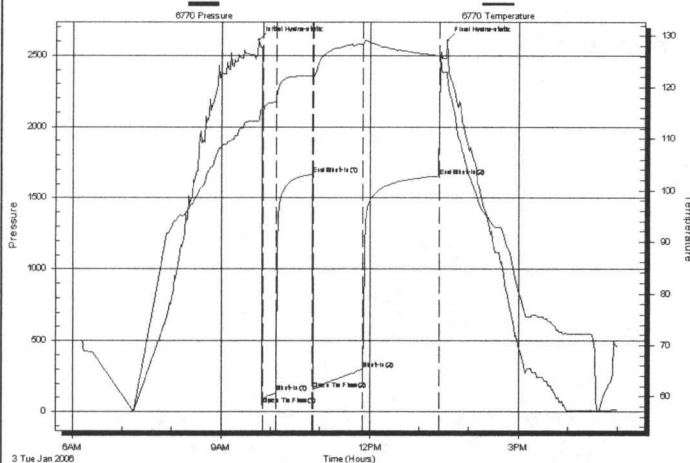
Last Calib.: **1899.12.30**

Time On Btm: **2006.01.03 @ 09:45:25**

Time Off Btm: **2006.01.03 @ 13:33:10**

TEST COMMENT: IF-Fair building blow . Built to 14 inches.
IS-Blow back in 8 min. Built to TOW. Died after 23 min.
FF-Fair building blow . BOB in 19 min.
FSI-Blow back in 5 min. Built to TOW. Died after 31 min.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2607.84	113.44	Initial Hydro-static
5	47.87	114.68	Open To Flow (1)
21	135.13	117.39	Shut-In(1)
66	1669.61	122.14	End Shut-In(1)
67	155.60	121.35	Open To Flow (2)
126	298.25	128.41	Shut-In(2)
219	1655.05	126.18	End Shut-In(2)
228	2605.90	122.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	40%Mud 60%Water	0.61
124.00	30%Mud 70%Water	1.18
372.00	5% Mud 95% Water	5.22

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Landmark Resources

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

Long/Branstine 2-33

33-34S-31W Seward

Job Ticket: 22368

DST#: 1

Test Start: 2006.01.03 @ 06:12:12

Tool Information

Drill Pipe:	Length: 5106.00 ft	Diameter: 3.80 inches	Volume: 71.62 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 12000.00 lb
			Total Volume: 72.53 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	5310.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	56.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			5284.00	
Shut In Tool	5.00			5289.00	
Hydraulic tool	5.00			5294.00	
Jars	5.00			5299.00	
Safety Joint	2.00			5301.00	
Packer	5.00			5306.00	27.00 Bottom Of Top Packer
Packer	4.00			5310.00	
Stubb	1.00			5311.00	
Perforations	1.00			5312.00	
Recorder	0.00	6770	Inside	5312.00	
Perforations	24.00			5336.00	
Recorder	0.00	10993	Inside	5336.00	
Bullnose	3.00			5339.00	29.00 Bottom Packers & Anchor

Total Tool Length: 56.00



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FLUID SUMMARY

Landmark Resources

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

Long/Branstine 2-33

33-34S-31W Seward

Job Ticket: 22368

DST#: 1

Test Start: 2006.01.03 @ 06:12:12

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 45.00 sec/qt

Water Loss: 7.17 in³

Resistivity: 0.09 ohm.m

Salinity: 1500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

deg API

Water Salinity: 92000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	40%Mud 60%Water	0.610
124.00	30%Mud 70%Water	1.184
372.00	5% Mud 95% Water	5.218

Total Length: 620.00 ft

Total Volume: 7.012 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

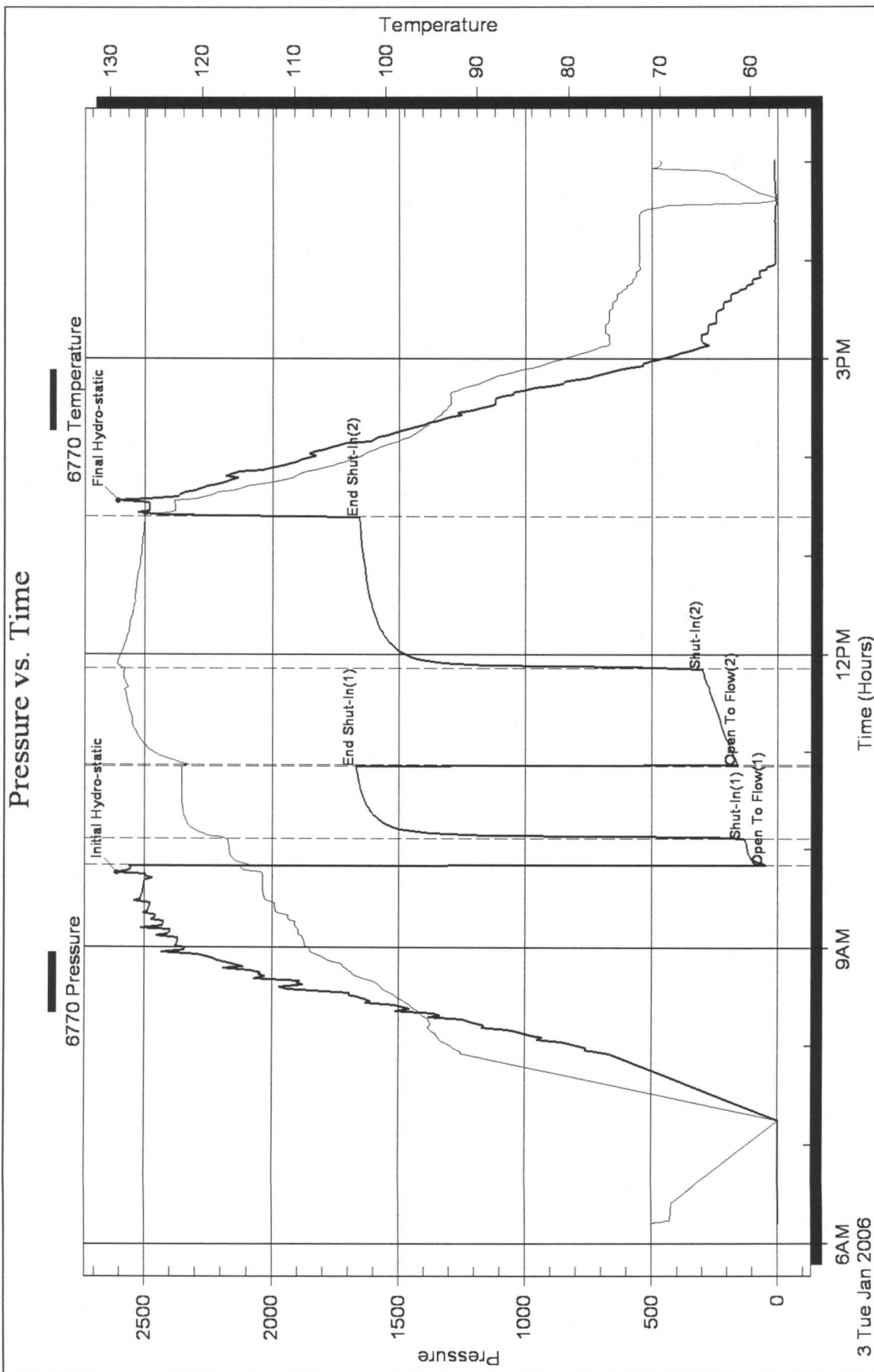
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Landmark Resources**

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

33-34S-31W Seward

Long/Branstine 2-33

Start Date: 2006.01.06 @ 16:35:55

End Date: 2006.01.06 @ 23:24:23

Job Ticket #: 22369 DST #: 2

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PO Box 362 Hays, KS 67601

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DRILL STEM TEST REPORT

TOOL DIAGRAM

Landmark Resources

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

Long/Branstine 2-33

33-34S-31W Seward

Job Ticket: 22369

DST#: 2

Test Start: 2006.01.06 @ 16:35:55

Tool Information

Drill Pipe:	Length: 5663.00 ft	Diameter: 3.80 inches	Volume: 79.44 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 23000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 10000.00 lb
		Total Volume:	80.35 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	5870.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	187.00 ft			
Tool Length:	214.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			5844.00	
Shut In Tool	5.00			5849.00	
Hydraulic tool	5.00			5854.00	
Jars	5.00			5859.00	
Safety Joint	2.00			5861.00	
Packer	5.00			5866.00	27.00 Bottom Of Top Packer
Packer	4.00			5870.00	
Stubb	1.00			5871.00	
Perforations	1.00			5872.00	
Recorder	0.00	6770	Inside	5872.00	
Perforations	20.00			5892.00	
Change Over Sub	1.00			5893.00	
Drill Pipe	155.00			6048.00	
Change Over Sub	1.00			6049.00	
Perforations	5.00			6054.00	
Recorder	0.00	10993	Inside	6054.00	
Bullnose	3.00			6057.00	187.00 Bottom Packers & Anchor
Total Tool Length:	214.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

Landmark Resources

Long/Branstine 2-33

1616 S. Voss #150
Houston TX 77057

33-34S-31W Seward

Job Ticket: 22369

DST#: 2

ATTN: Paul Gerlach

Test Start: 2006.01.06 @ 16:35:55

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:

9200 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: 1.33 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	5%Gas 95%Mud	0.885
120.00	20%Gas 80%Mud	1.638

Total Length: 300.00 ft

Total Volume: 2.523 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gas w as flammable.



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Landmark Resources

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

Long/Branstine 2-33

33-34S-31W Seward

Job Ticket: 22369

DST#: 2

Test Start: 2006.01.06 @ 16:35:55

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	1.00	32.00	1333.94
1	10	1.00	32.00	1333.94
1	10	1.00	32.00	1333.94
1	10	1.00	32.00	1333.94
1	15	1.00	38.00	1506.44
2	10	0.75	93.00	1677.57
2	20	0.75	93.00	1677.57
2	30	0.75	92.00	1661.95
2	40	0.75	92.00	1661.95
2	50	0.75	91.00	1646.33
2	0	-999999.00	-999999.00	-999999.00

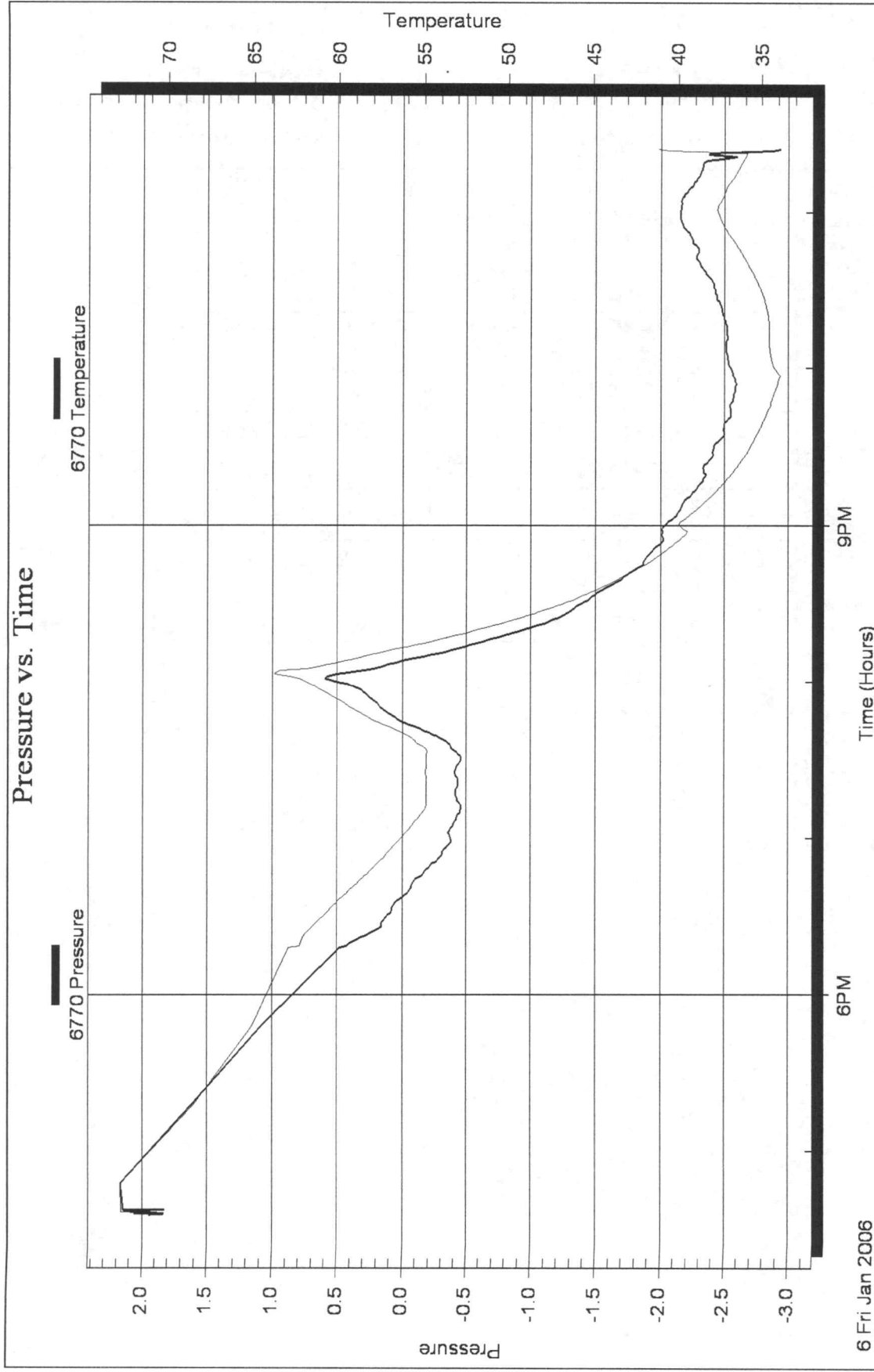
Serial #: 6770

Inside

Landmark Resources

33-34S-31W Sewer

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT
Landmark Resources
1616 S Voss #150
Houston TX 77057

Well name#:	Long Branstine #2-33	Date:	1/6/2006
Location#:	33-34S-31W Seward Co Kansas	Ticket #:	22369
		DST#	2

General Informaion:

Formation:	Morrow Sanc	Test Type:	Conventional	BHT:	
Interval:	5870-6057	Tester:	Dustin Rash	OIL API:	
Total Depth:	6057	Elevation:	2715 ft(KB)	H2O Salinity:	
Hole Diameter:	7 7/8"		2702 ft(CF)		

Start Data:		Tool Weight:	2000	Mud Type:	Chemical
Start Time:	17:15:00	Weight Set on Packers:	23000	Mud Weight:	9.2
Time tool opened:	19:58:00	Weight to Pull Loose:	10000	Viscosity:	53
Time Off Btm:	23:30:00	Initial String Weight:	78000	Water Loss:	8.8
End Date:	1/7/06	Final String Weight:	80000	Resistivity;	
End Time:	3:30:00	Drill Pipe Length:	5663	Salinity:	
		Drill Collar Length:	185		
		Wt. Pipe Length:	0		

Test Comment:

IF: Strong building blow, BOB in 30 sec, GTS in 4 min 30sec.
ISI: No blow back
FF: Strong Building blow, BOB ASAO, GTS ASAO, gauged gas.
FSI: Blowback in 3 min, built to 1/2", Died after 19 min.

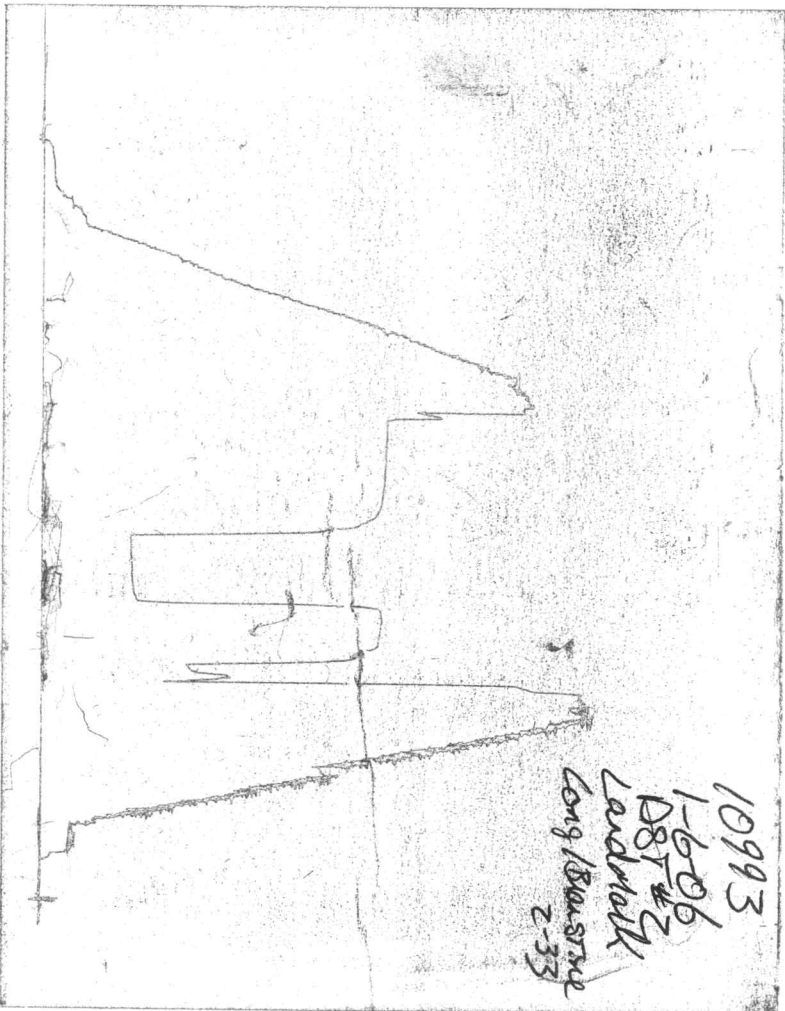
Recovery

Length(ft):	180 GM	5%gas 95% mud
	120 GM	20%gas 80% mud

Gas Volume Report

Recorder #:	10993	Min:	Ins. Of water	Orifice	MCF/D
Pressure Summary:	Time:(min)		PSIG	size	
Initial Hydro-static:	3002				
Open to Flow (1):	689 15	10	93	3/4"	1560.2
Shut-in (1):	816 45	20	93	3/4"	1560.2
End Shut-in (1):	1906	30	92	3/4"	1545.7
Open to Flow (2):	536 60	40	92	3/4"	1545.7
Shut-in (2):	505 90	50	91	3/4"	1531.2
End Shut-in (2):	1932	60	92	3/4"	1545.7
Final Hydro-static:	2685				

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





DRILL STEM TEST REPORT

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1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

33-34S-31W Seward

Long/Branstine 2-33

Start Date: 2006.01.08 @ 23:28:42

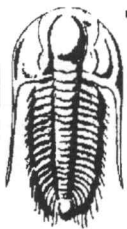
End Date: 2006.01.09 @ 10:29:25

Job Ticket #: 22370 DST #: 3

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DRILL STEM TEST REPORT

Landmark Resources

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

Long/Branstine 2-33

33-34S-31W Seward

Job Ticket: 22370

DST#: 3

Test Start: 2006.01.08 @ 23:28:42

GENERAL INFORMATION:

Formation: **Chester**

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

Time Tool Opened: 02:53:55

Time Test Ended: 10:29:25

Interval: **6150.00 ft (KB) To 6250.00 ft (KB) (TVD)**

Total Depth: **6250.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Test Type: **Conventional Bottom Hole**

Tester: **Dustin Rash**

Unit No: **20**

Reference Elevations: **2715.00 ft (KB)**

2702.00 ft (CF)

KB to GR/CF: **13.00 ft**

Serial #: **6770**

Inside

Press@RunDepth: **103.60 psig @ 6152.00 ft (KB)**

Start Date: **2006.01.08**

End Date:

2006.01.09

Start Time: **23:28:42**

End Time:

10:29:25

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2006.01.09 @ 02:53:25**

Time Off Btm: **2006.01.09 @ 07:05:25**

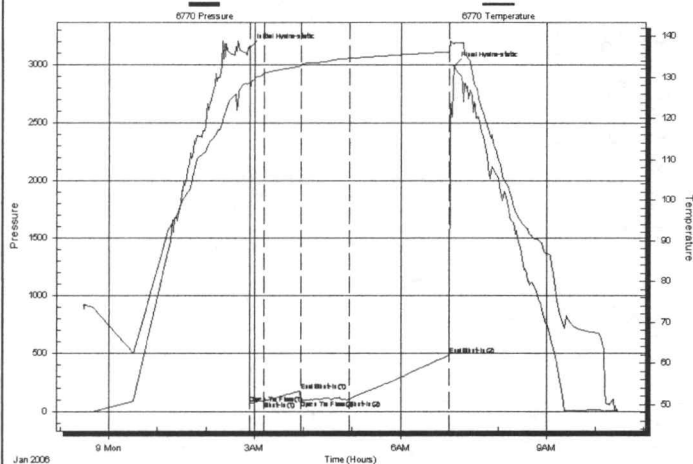
TEST COMMENT: IF- Weak blow . Built to 1/4 inch.

IS- No blow back.

FF- No blow .

FSI- No blow back.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3146.91	128.89	Initial Hydro-static
1	73.66	127.01	Open To Flow (1)
18	96.25	131.12	Shut-In (1)
63	178.45	132.71	End Shut-In (1)
64	103.92	132.82	Open To Flow (2)
123	103.60	134.67	Shut-In (2)
247	486.42	136.21	End Shut-In (2)
253	2986.58	138.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	100% Mud	0.59

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Landmark Resources

1616 S. Voss #150
Houston TX 77057

ATTN: Paul Gerlach

Long/Branstine 2-33

33-34S-31W Seward

Job Ticket: 22370

DST#: 3

Test Start: 2006.01.08 @ 23:28:42

Tool Information

Drill Pipe:	Length: 5943.00 ft	Diameter: 3.80 inches	Volume: 83.36 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 23000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 15000.00 lb
		Total Volume:	84.27 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	6150.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	100.00 ft			
Tool Length:	127.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			6124.00	
Shut In Tool	5.00			6129.00	
Hydraulic tool	5.00			6134.00	
Jars	5.00			6139.00	
Safety Joint	2.00			6141.00	
Packer	5.00			6146.00	27.00 Bottom Of Top Packer
Packer	4.00			6150.00	
Stubb	1.00			6151.00	
Perforations	1.00			6152.00	
Recorder	0.00	6770	Inside	6152.00	
Perforations	15.00			6167.00	
Change Over Sub	1.00			6168.00	
Drill Pipe	62.00			6230.00	
Perforations	16.00			6246.00	
Change Over Sub	1.00			6247.00	
Recorder	0.00	10993	Inside	6247.00	
Bullnose	3.00			6250.00	100.00 Bottom Packers & Anchor
Total Tool Length:	127.00				



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Houston TX 77057

33-34S-31W Seward

Job Ticket: 22370

DST#: 3

ATTN: Paul Gerlach

Test Start: 2006.01.08 @ 23:28:42

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:

10500 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 1.44 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	100% Mud	0.590

Total Length: 120.00 ft

Total Volume: 0.590 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

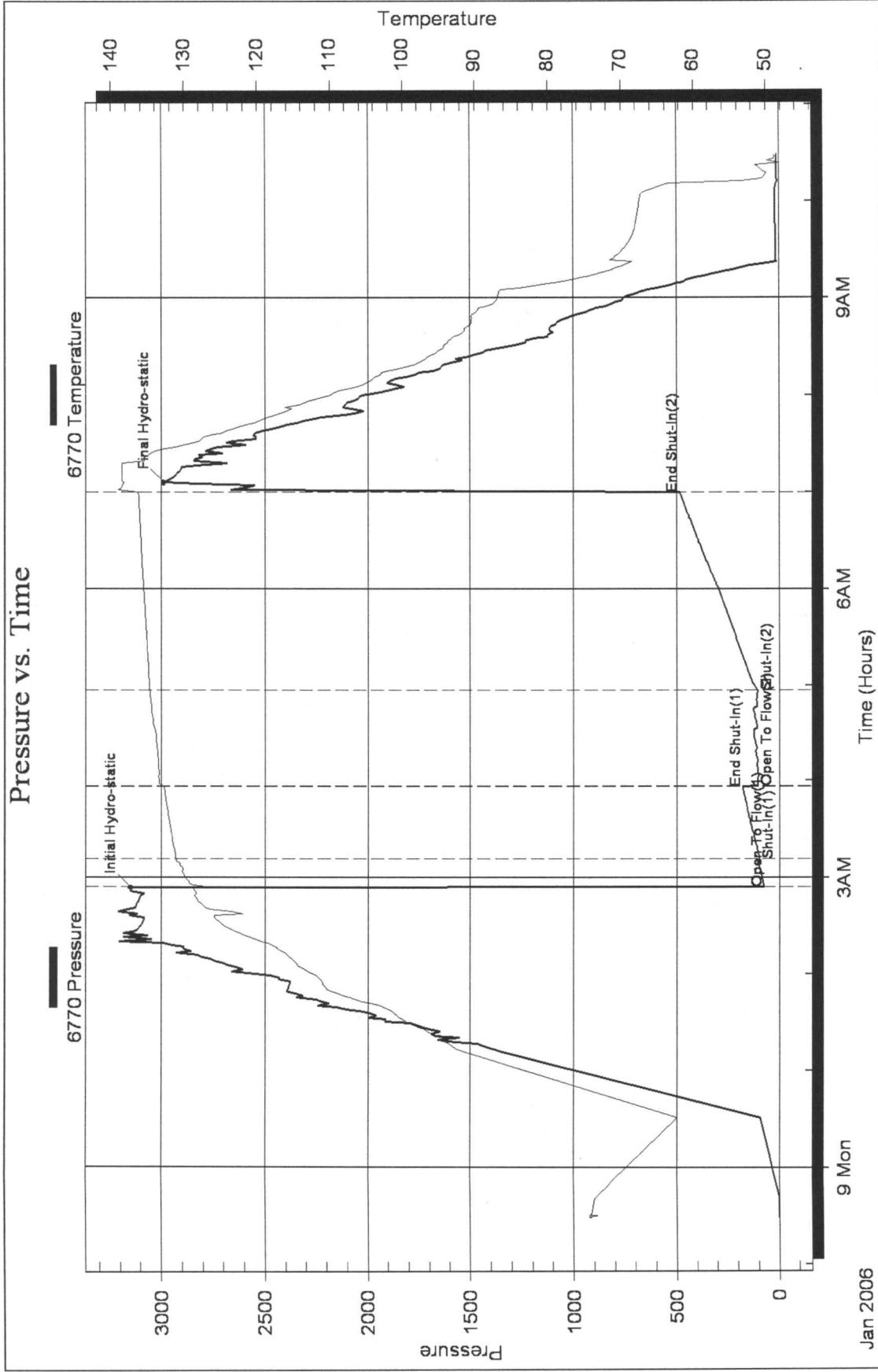


CHART PAGE

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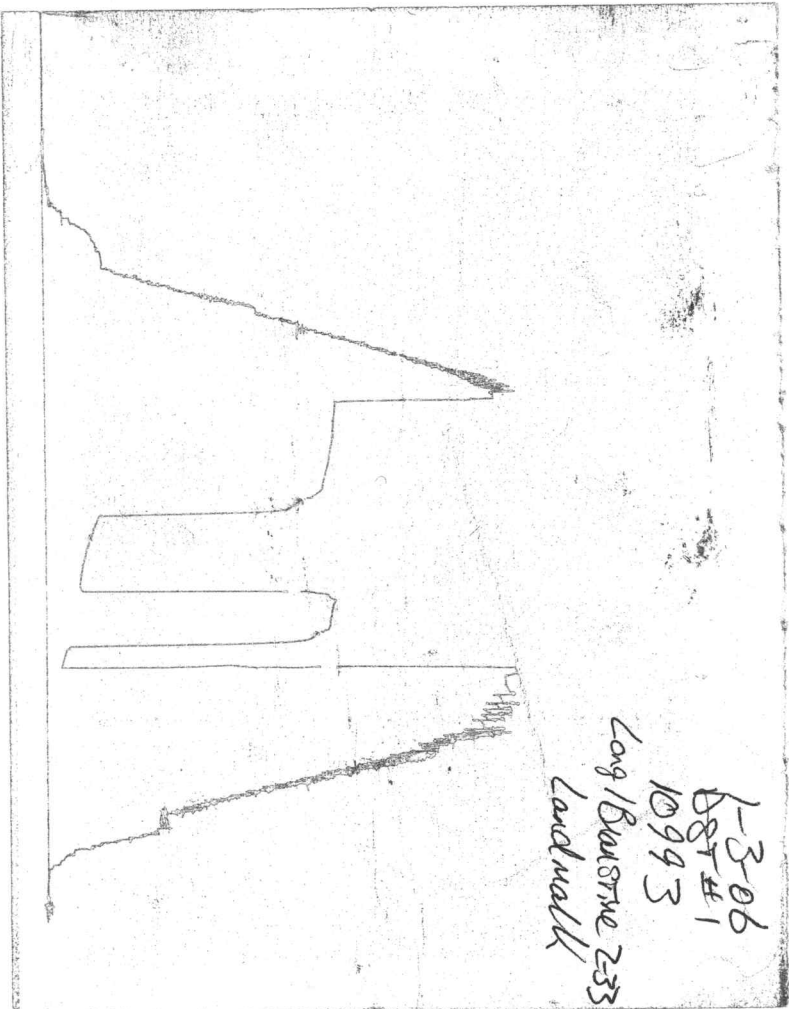


CHART PAGE

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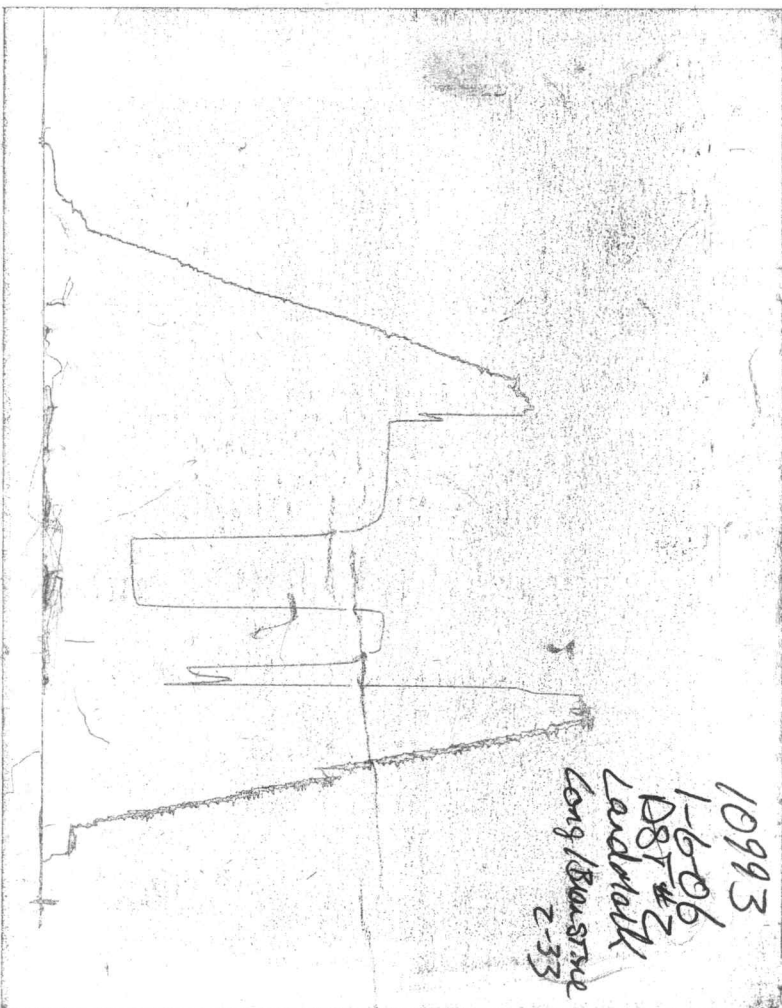


CHART PAGE

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