

15-063-21784

29-13s-3lw



DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.05 @ 07:30:02

End Date: 2009.07.05 @ 17:39:32

Job Ticket #: 16409 DST #: 1

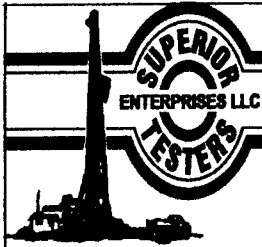
KCC
SEP 29 2009
CONFIDENTIAL

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.05 @ 07:53:03

RITICHIE EXPLORATION INC #1 HESS 29 CD UNIT 29-13-31 DST # 1 LKC D-E-F 2009.07.05

1



DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16409 DST#: 1

ATTN: BRAD RINE

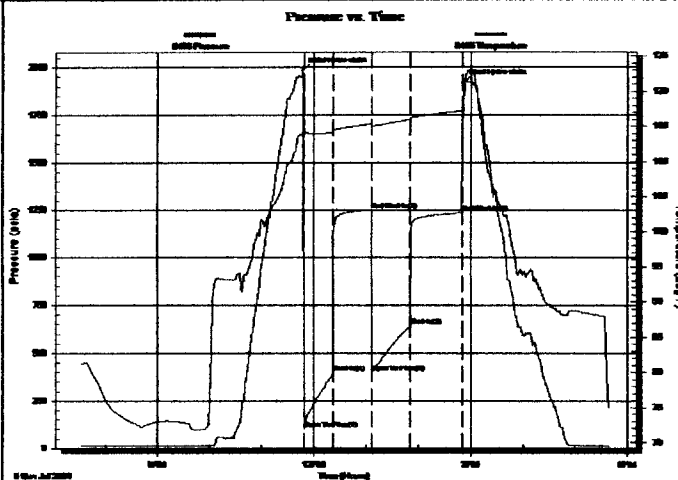
Test Start: 2009.07.05 @ 07:30:02

GENERAL INFORMATION:

Formation: LKC D-E-F
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:49:32
 Time Test Ended: 17:39:32
 Interval: 3959.00 ft (KB) To 4030.00 ft (KB) (TVD)
 Total Depth: 4030.00 ft (KB) (TVD)
 Hole Diameter: 7.78 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: DAVID NICHOLS
 Unit No: 3345 26 MGB
 Reference Elevations: 2881.00 ft (KB)
 2876.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8405 Inside
 Press@RunDepth: 643.04 psia @ 4025.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2009.07.05 End Date: 2009.07.05 Last Calib.: 2009.07.05
 Start Time: 07:30:02 End Time: 17:39:32 Time On Btm: 2009.07.05 @ 11:47:32
 Time Off Btm: 2009.07.05 @ 14:51:32

TEST COMMENT: 30-INITIAL OPENING GOOD BLOW BOTTOM OF THE BUCKET IN 3 MINS
 45-INITIAL SHUT IN WEAK BLOW BACK
 45-FINAL OPENING GOOD BLOW BOTTOM OF THE BUCKET IN 5 MINS
 60-FINAL SHUT IN VERY WEAK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1983.09	113.85	Initial Hydro-static
2	100.86	114.06	Open To Flow (1)
35	394.53	114.15	Shut-In(1)
80	1251.38	115.37	End Shut-In(1)
80	398.40	115.04	Open To Flow (2)
124	643.04	116.01	Shut-In(2)
183	1234.81	117.19	End Shut-In(2)
184	1916.32	117.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	MUDDY WATER S OF OIL 5%O40%M5	93.52
720.00	WATER WITH A TRACE OF OIL 99%W1	10.53
120.00	MUDDY WATER 60%M40%W	1.75

Gas Rates

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



DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16409

DST#: 1

ATTN: BRAD RINE

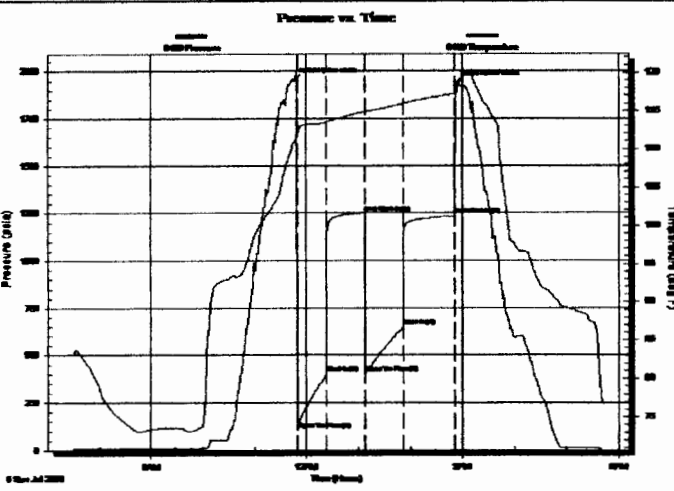
Test Start: 2009.07.05 @ 07:30:02

GENERAL INFORMATION:

Formation: LKC D-E-F
 Deviated: No Whipstock ft (KB)
 Time Tool Opened: 11:49:32
 Time Test Ended: 17:39:32
 Interval: 3959.00 ft (KB) To 4030.00 ft (KB) (TVD)
 Total Depth: 4030.00 ft (KB) (TVD)
 Hole Diameter: 7.78 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: DAVID NICHOLS
 Unit No: 3345 26 M GB
 Reference Elevations: 2881.00 ft (KB)
 2876.00 ft (CF)
 KB to GRVCF: 5.00 ft

Serial #: 6450 Outside
 Press@RunDepth: 1235.28 psia @ 4025.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2009.07.05 End Date: 2009.07.05 Last Calib.: 2009.07.05
 Start Time: 07:30:05 End Time: 17:41:45 Time On Btrrc: 2009.07.05 @ 11:45:16
 Time Off Btrrc: 2009.07.05 @ 14:52:46

TEST COMMENT: 30-INITIAL OPENING GOOD BLOW BOTTOM OF THE BUCKET IN 3 MINS
 45-INITIAL SHUT IN WEAK BLOW BACK
 45-FINAL OPENING GOOD BLOW BOTTOM OF THE BUCKET IN 5 MINS
 60-FINAL SHUT IN VERY WEAK



PRESSURE SUMMARY

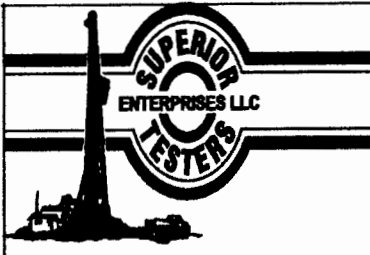
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1948.89	110.78	Initial Hydro-static
5	105.30	111.91	Open To Flow (1)
38	405.60	113.57	Shut-In(1)
82	1249.46	114.66	End Shut-In(1)
83	401.64	114.85	Open To Flow (2)
127	650.88	115.97	Shut-In(2)
186	1235.28	117.20	End Shut-In(2)
188	1933.83	117.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	MUDDY WATER S OF OIL 5%O40%MS\$93.52	
720.00	WATER WITH A TRACE OF OIL 99%W1%10.53	
120.00	MUDDY WATER 60%M40%W	1.75

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16409

DST#: 1

ATTN: BRAD RINE

Test Start: 2009.07.05 @ 07:30:02

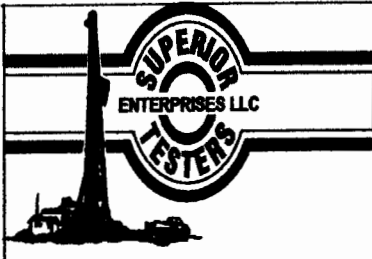
Tool Information

Drill Pipe:	Length: 3753.00 ft	Diameter: 3.88 inches	Volume: 54.88 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: 20000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 55.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3959.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	71.00 ft			
Tool Length:	100.00 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			3931.00	
Shut-In Tool	5.00			3936.00	
Hydraulic Tool	5.00			3941.00	
Jars	6.00			3947.00	
Safety Joint	2.00			3949.00	
Packer	5.00			3954.00	29.00 Bottom Of Top Packer
Packer	5.00			3959.00	
Change Over Sub	0.75			3959.75	
Drill Pipe	32.50			3992.25	
Change Over Sub	0.75			3993.00	
Perforations	32.00			4025.00	
Recorder	0.00	8405	Inside	4025.00	
Recorder	0.00	71986	Outside	4025.00	
Bullnose	5.00			4030.00	71.00 Bottom Packers & Anchor

Total Tool Length: 100.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHEE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16409

DST#: 1

ATTN: BRADRINE

Test Start: 2009.07.05 @ 07:30:02

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 2800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
360.00	MUDDY WATER S OF OIL 5%O40%M55%W	3.518
720.00	WATER WITH A TRACE OF OIL 99%W1%O	10.529
120.00	MUDDY WATER 60%M40%W	1.755

Total Length: 1200.00 ft Total Volume: 15.802 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8405

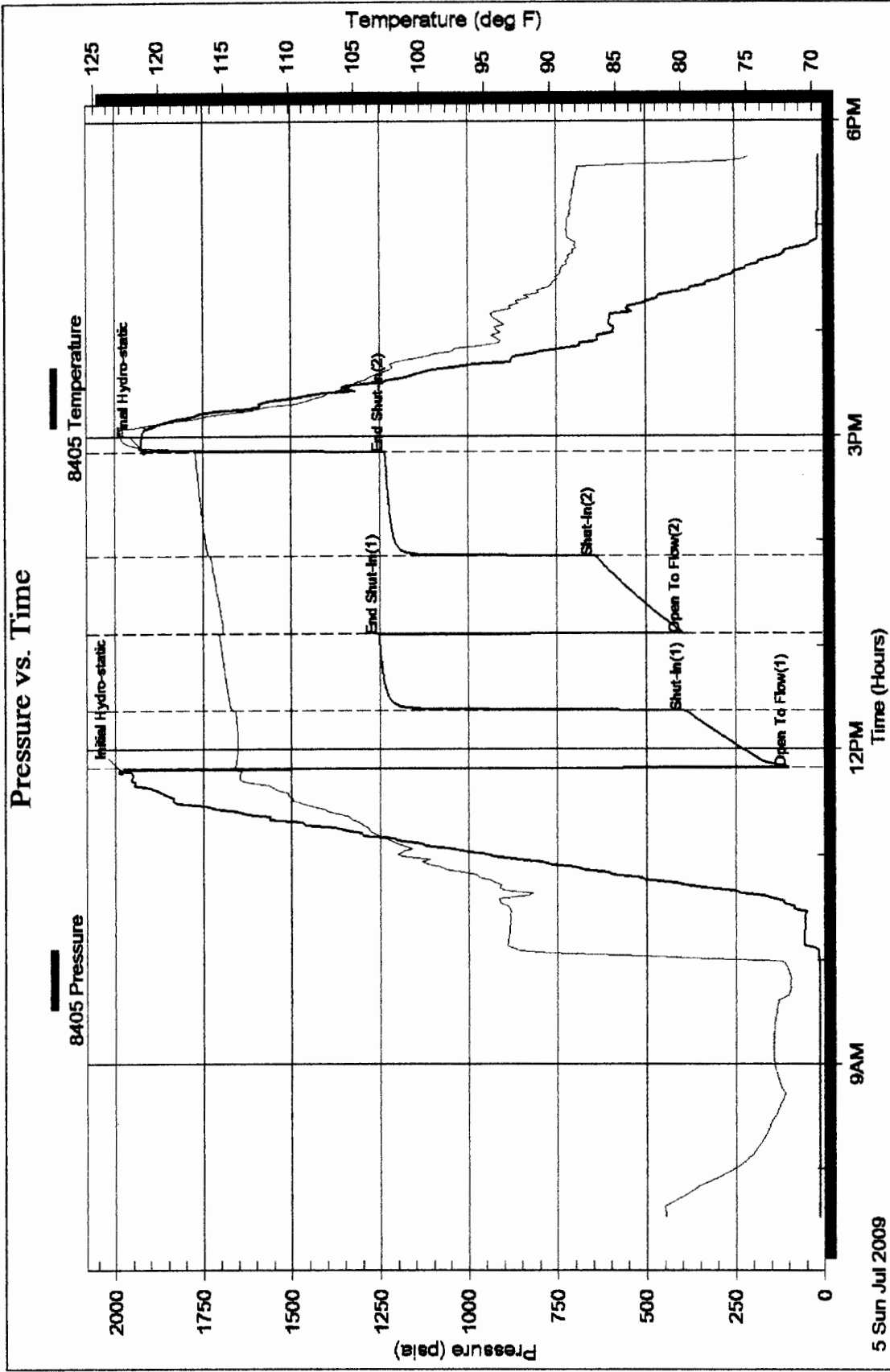
Inside

RITCHEX EXPLORATION INC

29-13-31

DST Test Number: 1

Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 16409

Printed: 2009.07.05 @ 07:53:05

Serial #: 6450

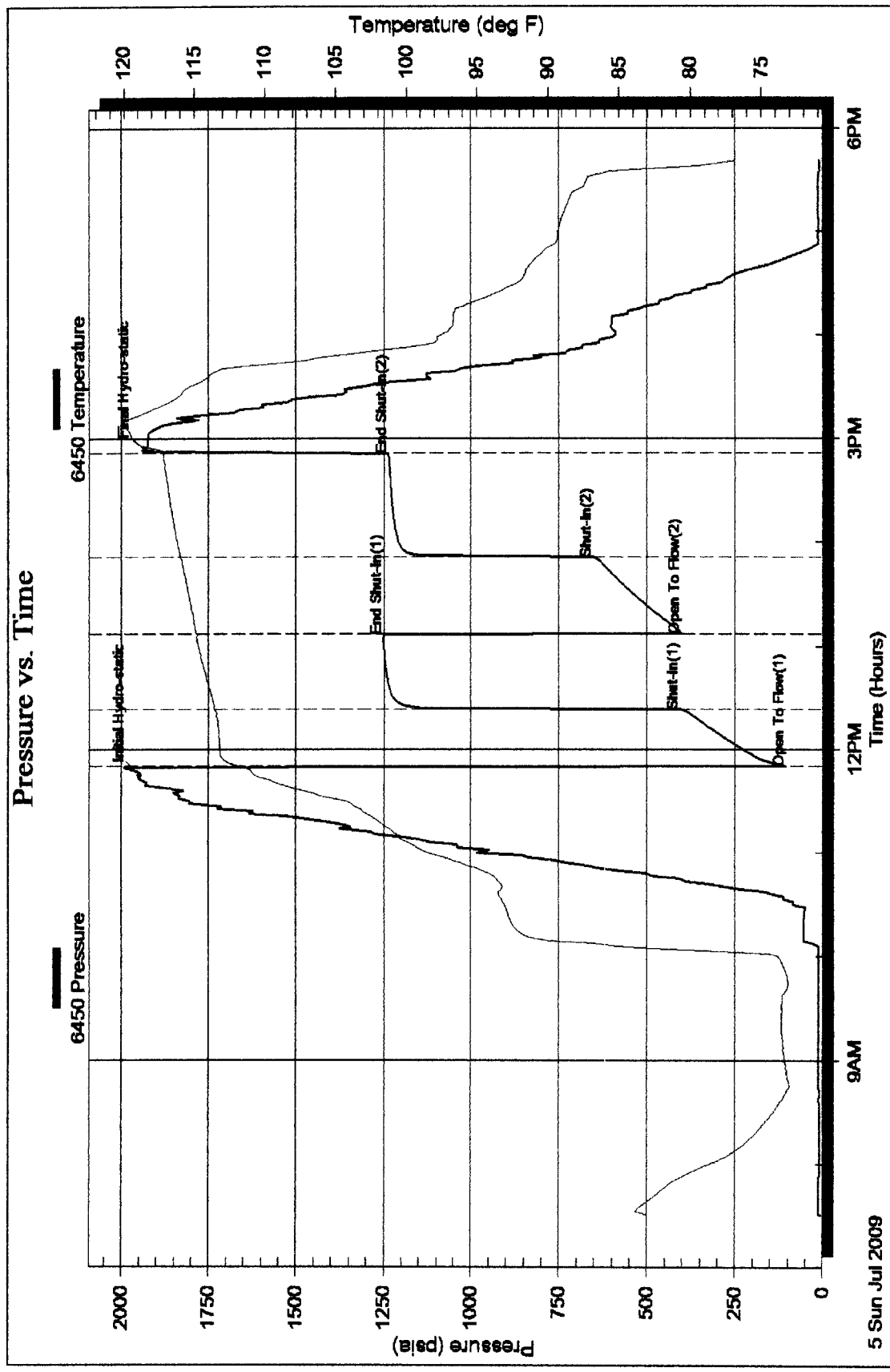
Outside

RITCHEX EXPLORATION INC

29-13-31

DST Test Number: 1

Pressure vs. Time



5 Sun Jul 2009

Printed: 2009.07.05 @ 07:53:06

Ref. No: 16409

Superior Testers Enterprises LLC



DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.06 @ 08:09:55

End Date: 2009.07.06 @ 15:02:25

Job Ticket #: 16410 DST #: 2

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.06 @ 08:23:58

RITICHIE EXPLORATION INC
#1 HESS 29 CD UNIT
29-13-31
DST # 2
LKC J
2009.07.06



DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16410

DST#: 2

ATTN: BRAD RINE

Test Start: 2009.07.06 @ 08:09:55

GENERAL INFORMATION:

Formation: LKC -J

Deviated: No Whipstock ft (KB)

Time Tool Opened: 10:13:55

Time Test Ended: 15:02:25

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 3345 50 M SCOTT CITY

Interval: 4121.00 ft (KB) To 4144.00 ft (KB) (TVD)

Total Depth: 4144.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 2881.00 ft (KB)

2876.00 ft (CF)

KB to GRVCF: 5.00 ft

Serial #: 8405

Inside

Press@RunDepth: 77.69 psia @ 4139.00 ft (KB)

Start Date: 2009.07.06

End Date:

2009.07.06

Start Time: 08:09:55

End Time:

15:02:25

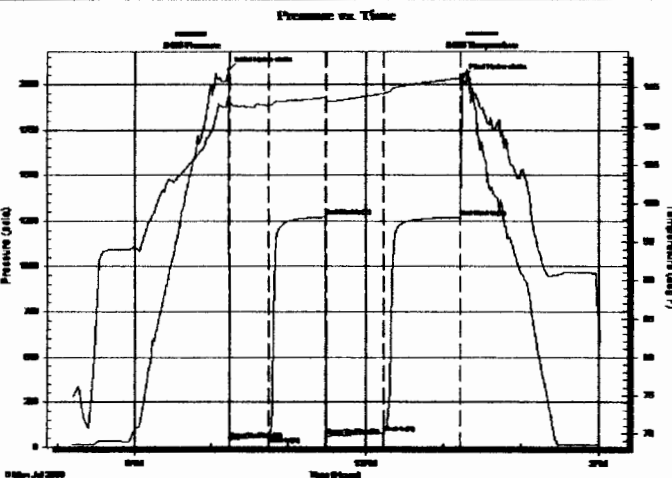
Capacity: 5000.00 psia

Last Calib.: 2009.07.06

Time On Btm: 2009.07.06 @ 10:13:25

Time Off Btm: 2009.07.06 @ 13:14:55

TEST COMMENT: 30-INITIAL OPENING WEAK BLOW BUILT TO 2 INCHES INTO WATER
45-INITIAL SHUT IN NO BLOW BACK
45-FINAL OPENING SURFACE BLOW
60-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2079.44	113.87	Initial Hydro-static
1	40.27	113.04	Open To Flow (1)
32	59.97	112.68	Shut-in(1)
75	1272.87	113.71	End Shut-in(1)
76	62.11	113.27	Open To Flow (2)
121	77.69	114.25	Shut-in(2)
180	1271.52	116.24	End Shut-in(2)
182	2036.37	116.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	DRILLING MUD WITH A TRACE OF OIL	00.441

Gas Rates

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



DRILL STEM TEST REPORT

RITCHIE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16410 DST#: 2

ATTN: BRAD RINE

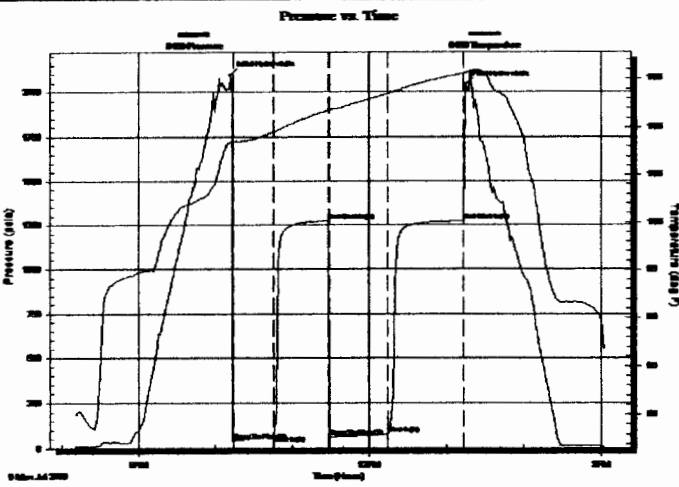
Test Start: 2009.07.06 @ 08:09:55

GENERAL INFORMATION:

Formation: LKC -J
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 10:13:55 Tester: DAVID NICHOLS
 Time Test Ended: 15:02:25 Unit No: 3345 50 M SCOTT CITY
 Interval: 4121.00 ft (KB) To 4144.00 ft (KB) (TVD) Reference Elevations: 2881.00 ft (KB)
 Total Depth: 4144.00 ft (KB) (TVD) 2876.00 ft (CF)
 Hole Diameter: 7.78 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 6450 Outside
 Press@RunDepth: 1271.73 psia @ 4139.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2009.07.06 End Date: 2009.07.06 Last Calib.: 2009.07.06
 Start Time: 08:10:47 End Time: 15:02:58 Time On Btm: 2009.07.06 @ 10:11:59
 Time Off Btm: 2009.07.06 @ 13:14:59

TEST COMMENT: 30-INITIAL OPENING WEAK BLOW BUILT TO 2 INCHES INTO WATER
 45-INITIAL SHUT IN NO BLOW BACK
 45-FINAL OPENING SURFACE BLOW
 60-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

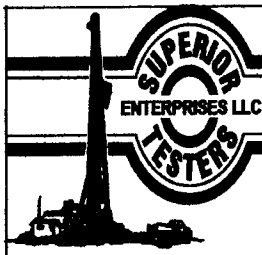
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2094.95	108.46	Initial Hydro-static
2	40.29	108.43	Open To Flow (1)
34	69.75	109.50	Shut-in(1)
77	1272.68	111.79	End Shut-in(1)
78	63.13	111.76	Open To Flow (2)
123	77.61	113.46	Shut-in(2)
182	1271.73	115.58	End Shut-in(2)
183	2038.59	115.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	DRILLING MUD WITH A TRACE OF OIL	00.441

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHEE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16410

DST#: 2

ATTN: BRAD RINE

Test Start: 2009.07.06 @ 08:09:55

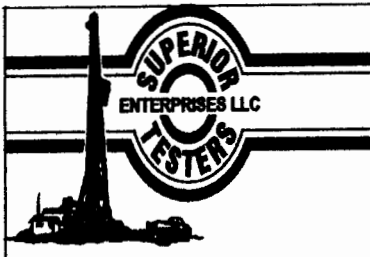
Tool Information

Drill Pipe:	Length: 3915.00 ft	Diameter: 3.88 inches	Volume: 57.25 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: 20000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 58.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4121.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 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
Change Over Sub	1.00			4093.00	
Shut-In Tool	5.00			4098.00	
Hydraulic Tool	5.00			4103.00	
Jars	6.00			4109.00	
Safety Joint	2.00			4111.00	
Packer	5.00			4116.00	29.00 Bottom Of Top Packer
Packer	5.00			4121.00	
Perforations	18.00			4139.00	
Recorder	0.00	8405	Inside	4139.00	
Recorder	0.00	71986	Outside	4139.00	
Bullnose	5.00			4144.00	23.00 Bottom Packers & Anchor

Total Tool Length: 52.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RITICHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16410

DST#: 2

ATTN: BRAD RINE

Test Start: 2009.07.06 @ 08:09:55

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 49.00 sec/qt
Water Loss: 8.80 in³
Resistivity: ohm.m
Salinity: 3000.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	DRILLING MUD WITH A TRACE OF OIL 100% A	0.443

Total Length: 90.00 ft Total Volume: 0.443 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8405

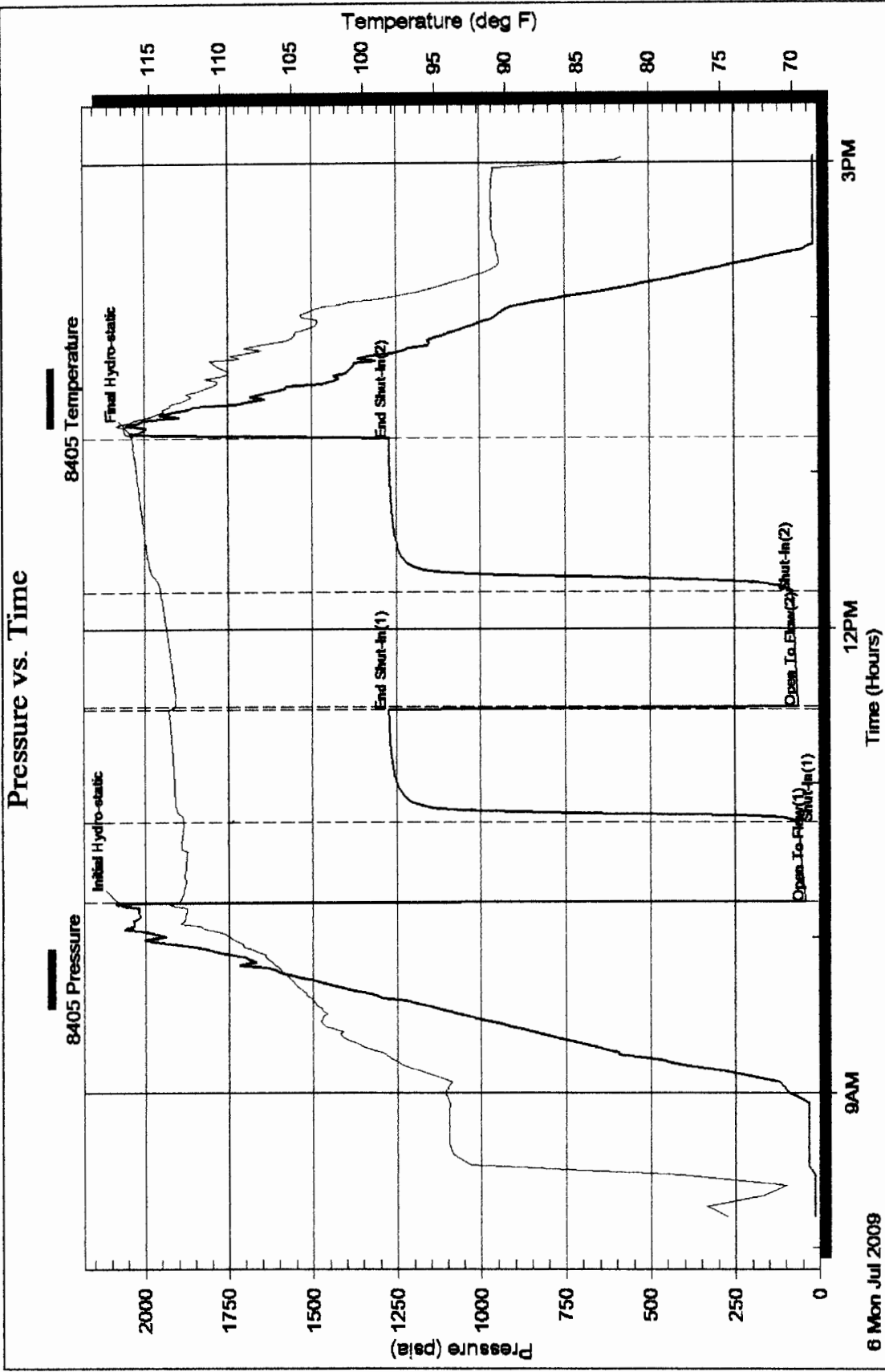
Inside

RITCHEX EXPLORATION INC

29-13-31

DST Test Number: 2

Pressure vs. Time



6 Mon Jul 2009

Printed: 2009.07.06 @ 08:24:00

Ref. No: 16410

Superior Testers Enterprises LLC

Serial #: 6450

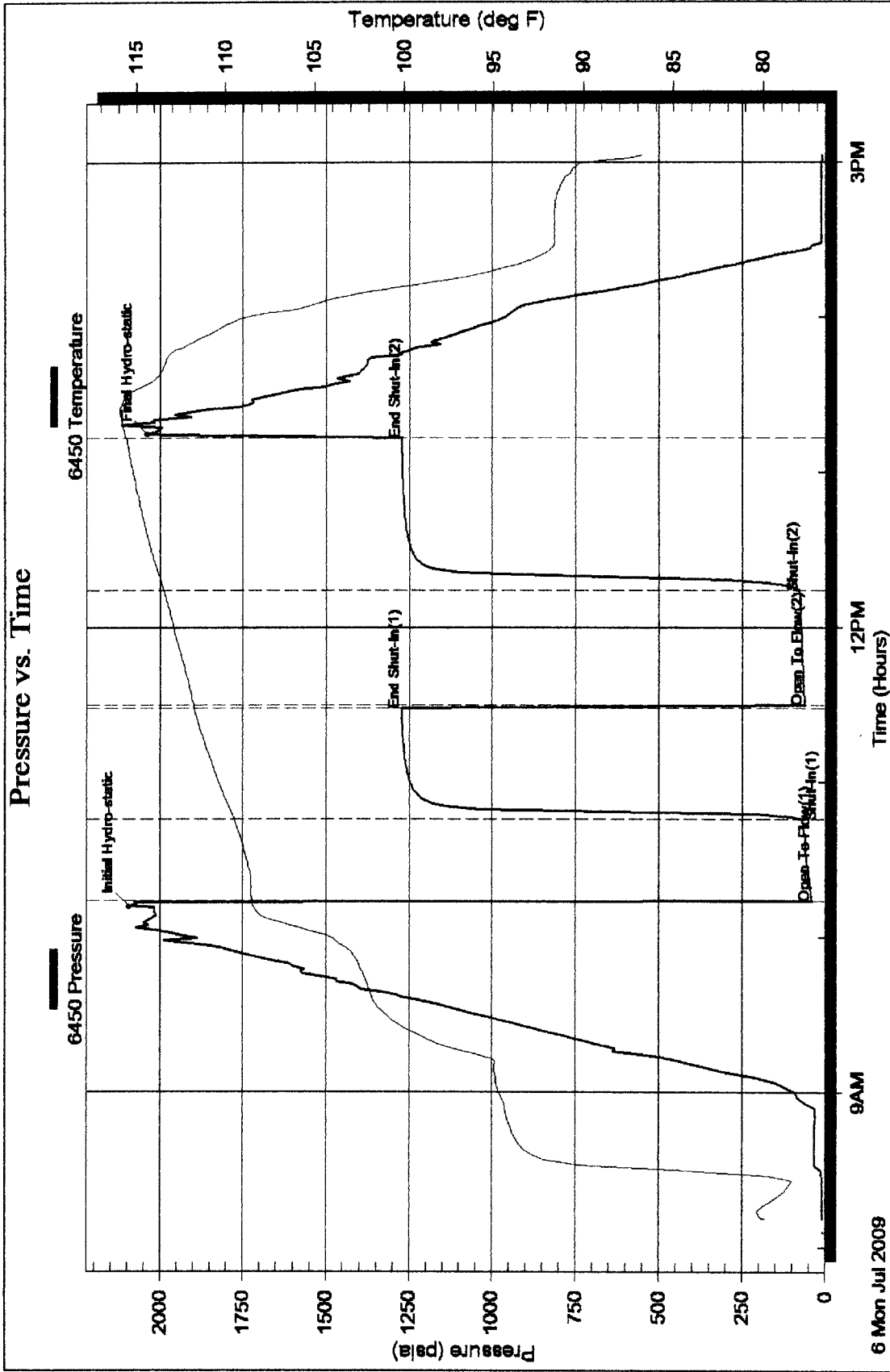
Outside

RITCHEE EXPLORATION INC

29-13-31

DST Test Number: 2

Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No. 16410

Printed: 2009.07.06 @ 08:24:01



DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.06 @ 22:03:52

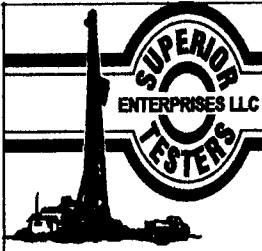
End Date: 2009.07.07 @ 04:55:22

Job Ticket #: 16411 DST #: 3

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.06 @ 22:25:05

RITICHIE EXPLORATION INC
#1 HESS 29 CD UNIT
29-13-31
DST # 3
LKC K
2009.07.06



DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16411

DST#: 3

ATTN: BRAD RINE

Test Start: 2009.07.06 @ 22:03:52

GENERAL INFORMATION:

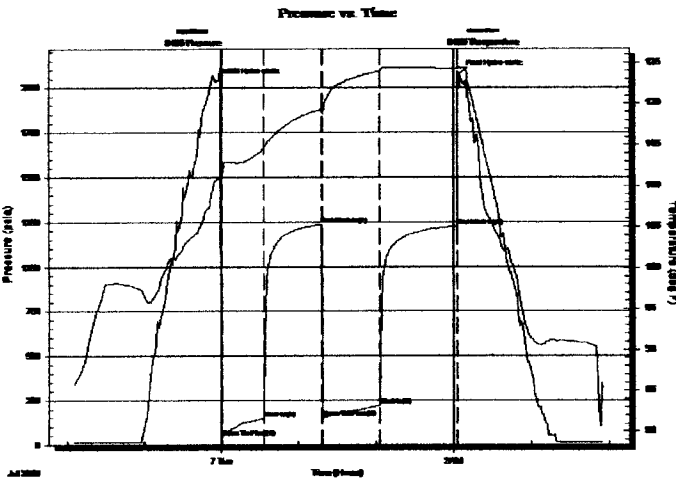
Formation: LKC K
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:22
 Time Test Ended: 04:55:22
 Interval: 4147.00 ft (KB) To 4168.00 ft (KB) (TVD)
 Total Depth: 4168.00 ft (KB) (TVD)
 Hole Diameter: 7.78 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: DAVID NICHOLS
 Unit No: 3345 50 M SCOTT CITY
 Reference Elevations: 2881.00 ft (KB)
 2876.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8405

Inside

Press@RunDepth: 221.30 psia @ 4163.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2009.07.06 End Date: 2009.07.07 Last Calib.: 2009.07.06
 Start Time: 22:03:52 End Time: 04:55:22 Time On Btrr: 2009.07.06 @ 23:56:22
 Time Off Btrr: 2009.07.07 @ 03:04:52

TEST COMMENT: 30-INITIAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 26 MINS
 45-INITIAL SHUT IN NO BLOW BACK
 45-FINAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 30 MINS
 60-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

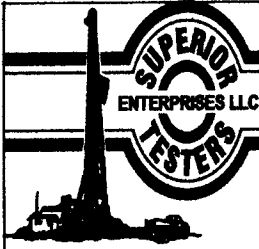
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2035.93	110.74	Initial Hydro-static
4	43.73	111.53	Open To Flow (1)
37	147.99	114.55	Shut-In(1)
82	1233.79	119.26	End Shut-In(1)
83	151.73	118.76	Open To Flow (2)
127	221.30	123.95	Shut-In(2)
187	1224.25	124.21	End Shut-In(2)
189	2076.01	124.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MUDDY WATER 40%M60%W	0.59
300.00	MUDDY WATER 10%M90%W	3.80

Gas Rates

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



DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16411

DST#: 3

ATTN: BRAD RINE

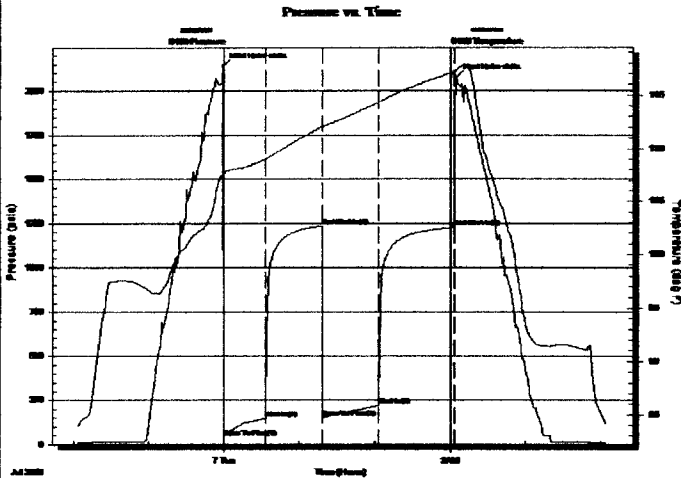
Test Start: 2009.07.06 @ 22:03:52

GENERAL INFORMATION:

Formation: LKC K
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:22
 Time Test Ended: 04:55:22
 Interval: 4147.00 ft (KB) To 4168.00 ft (KB) (TVD)
 Total Depth: 4168.00 ft (KB) (TVD)
 Hole Diameter: 7.78 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: DAVID NICHOLS
 Unit No: 3345 50 M SCOTT CITY
 Reference Elevations: 2881.00 ft (KB)
 2876.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6450 Outside
 Press@RunDepth: 1224.86 psia @ 4163.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2009.07.06 End Date: 2009.07.07 Last Calib.: 2009.07.06
 Start Time: 22:03:53 End Time: 05:04:04 Time On Btrn: 2009.07.06 @ 23:59:35
 Time Off Btrn: 2009.07.07 @ 03:05:05

TEST COMMENT: 30-INITIAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 26 MINS
 45-INITIAL SHUT IN NO BLOW BACK
 45-FINAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM BUCKET IN 30 MINS
 60-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

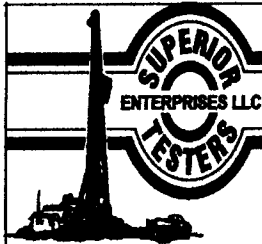
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2138.99	107.55	Initial Hydro-static
1	44.13	107.53	Open To Flow (1)
34	149.04	109.02	Shut-in(1)
79	1233.80	112.07	End Shut-in(1)
80	152.67	111.99	Open To Flow (2)
124	222.07	114.29	Shut-in(2)
184	1224.86	117.16	End Shut-in(2)
186	2075.31	117.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MUDDY WATER 40%M60%W	0.59
300.00	MUDDY WATER 10%M90%W	3.80

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHIE EXPLORATION INC
 PO BOX 783188
 WICHITA KS 67278
 ATTN: BRAD RINE

#1 HESS 29 CD UNIT
 29-13-31
 Job Ticket: 16411 DST#: 3
 Test Start: 2009.07.06 @ 22:03:52

Tool Information

Drill Pipe:	Length: 3941.00 ft	Diameter: 3.88 inches	Volume: 57.63 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: 20000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 58.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4147.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	50.00 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			4119.00	
Shut-In Tool	5.00			4124.00	
Hydraulic Tool	5.00			4129.00	
Jars	6.00			4135.00	
Safety Joint	2.00			4137.00	
Packer	5.00			4142.00	29.00 Bottom Of Top Packer
Packer	5.00			4147.00	
Perforations	16.00			4163.00	
Recorder	0.00	8405	Inside	4163.00	
Recorder	0.00	71986	Outside	4163.00	
Bullnose	5.00			4168.00	21.00 Bottom Packers & Anchor

Total Tool Length: 50.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RITICHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16411

DST#: 3

ATTN: BRAD RINE

Test Start: 2009.07.06 @ 22:03:52

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 10.00 lb/gal
Viscosity: 55.00 sec/qt
Water Loss: 9.60 in³
Resistivity: 0.10 ohm.m
Salinity: 6000.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MUDDY WATER 40%M60%W	0.590
300.00	MUDDY WATER 10%M90%W	3.805

Total Length: 420.00 ft Total Volume: 4.395 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8405

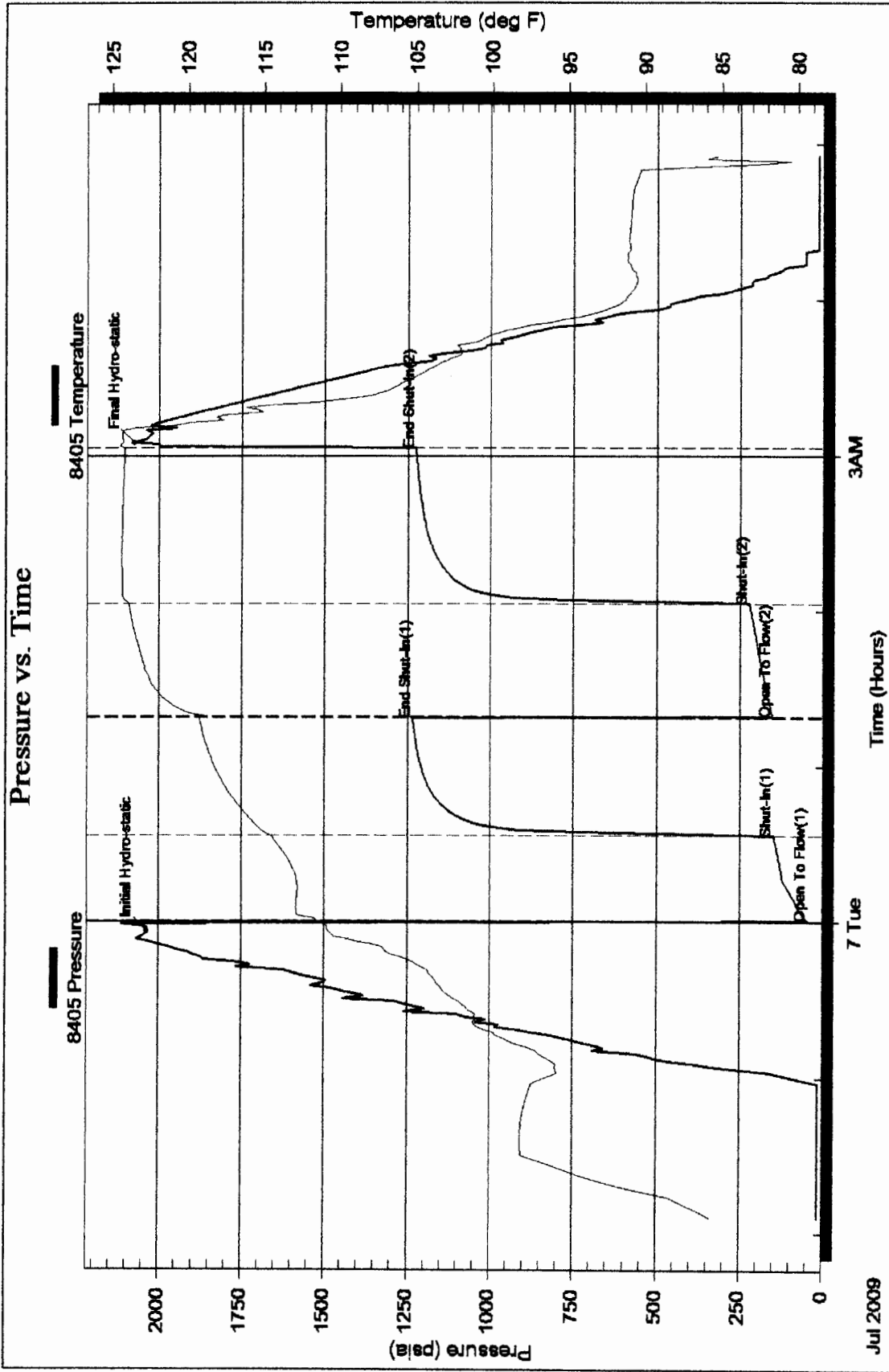
Inside

RITICHE EXPLORATION INC

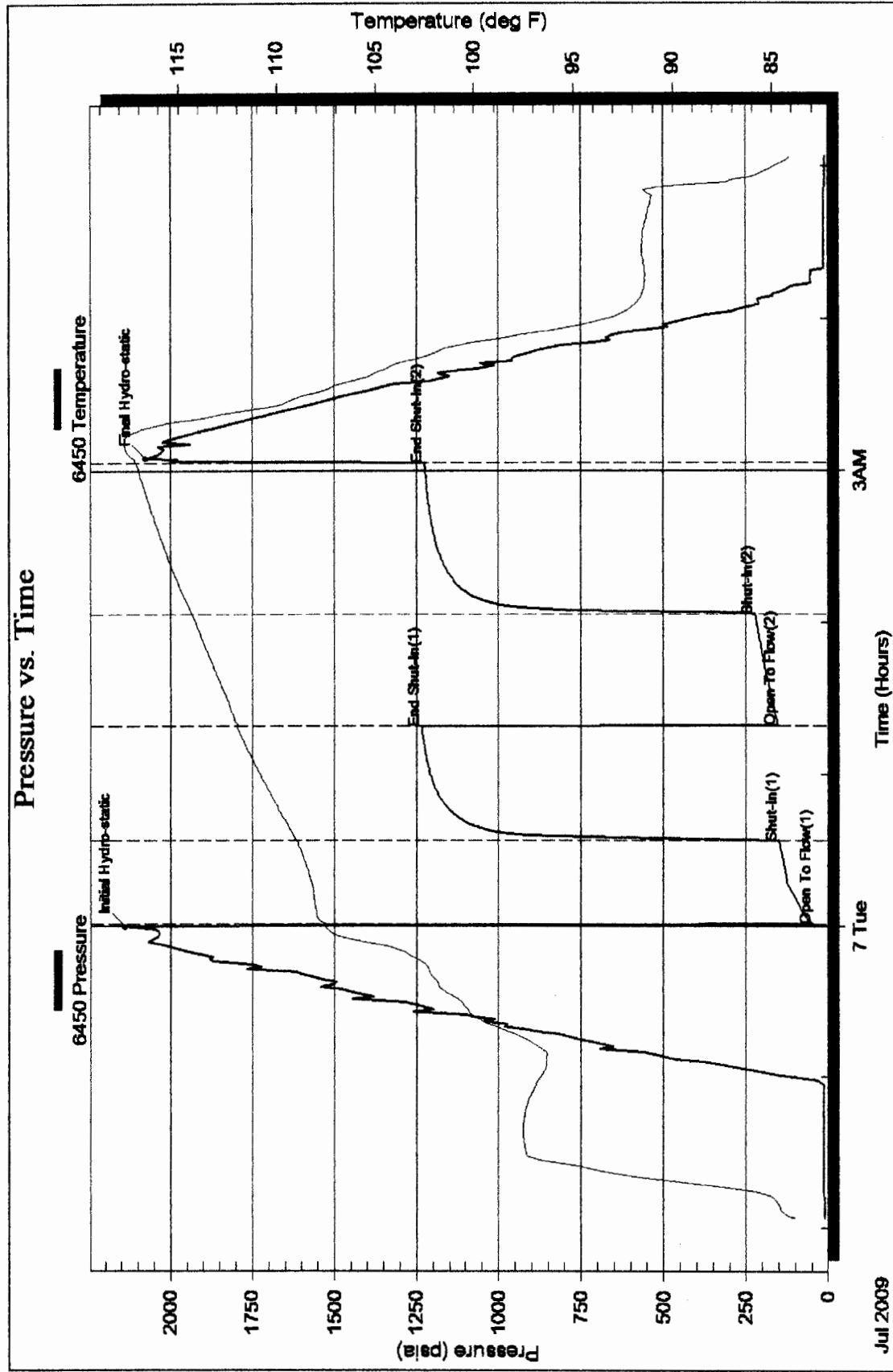
29-13-31

DST Test Number: 3

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.08 @ 02:33:52

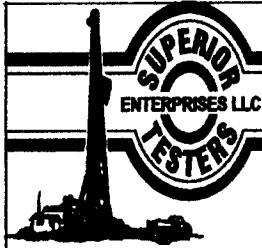
End Date: 2009.07.08 @ 08:00:22

Job Ticket #: 16412 DST #: 4

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.08 @ 04:19:33

RITICHIE EXPLORATION INC
#1 HESS 29 CD UNIT
29-13-31
DST # 4
ALTAMONT PAWNEE
2009.07.08



DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16412

DST#: 4

ATTN: BRAD RINE

Test Start: 2009.07.08 @ 02:33:52

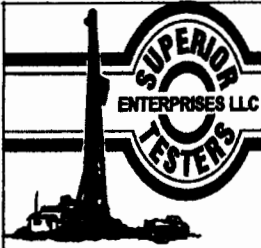
Tool Information

Drill Pipe:	Length: 4051.00 ft	Diameter: 3.88 inches	Volume: 59.24 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: 40000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 750000.0 lb
			<u>Total Volume: 60.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4260.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	109.00 ft			
Tool Length:	138.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4232.00	
Shut-In Tool	5.00			4237.00	
Hydraulic Tool	5.00			4242.00	
Jars	6.00			4248.00	
Safety Joint	2.00			4250.00	
Packer	5.00			4255.00	29.00 Bottom Of Top Packer
Packer	5.00			4260.00	
Change Over Sub	0.75			4260.75	
Drill Pipe	63.50			4324.25	
Change Over Sub	0.75			4325.00	
Perforations	39.00			4364.00	
Recorder	0.00	8405	Inside	4364.00	
Recorder	0.00	71986	Outside	4364.00	
Bullnose	5.00			4369.00	109.00 Bottom Packers & Anchor

Total Tool Length: 138.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16412

DST#: 4

ATTN: BRAD RINE

Test Start: 2009.07.08 @ 02:33:52

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:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.39 in ³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	6200.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

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

Serial #: 8405

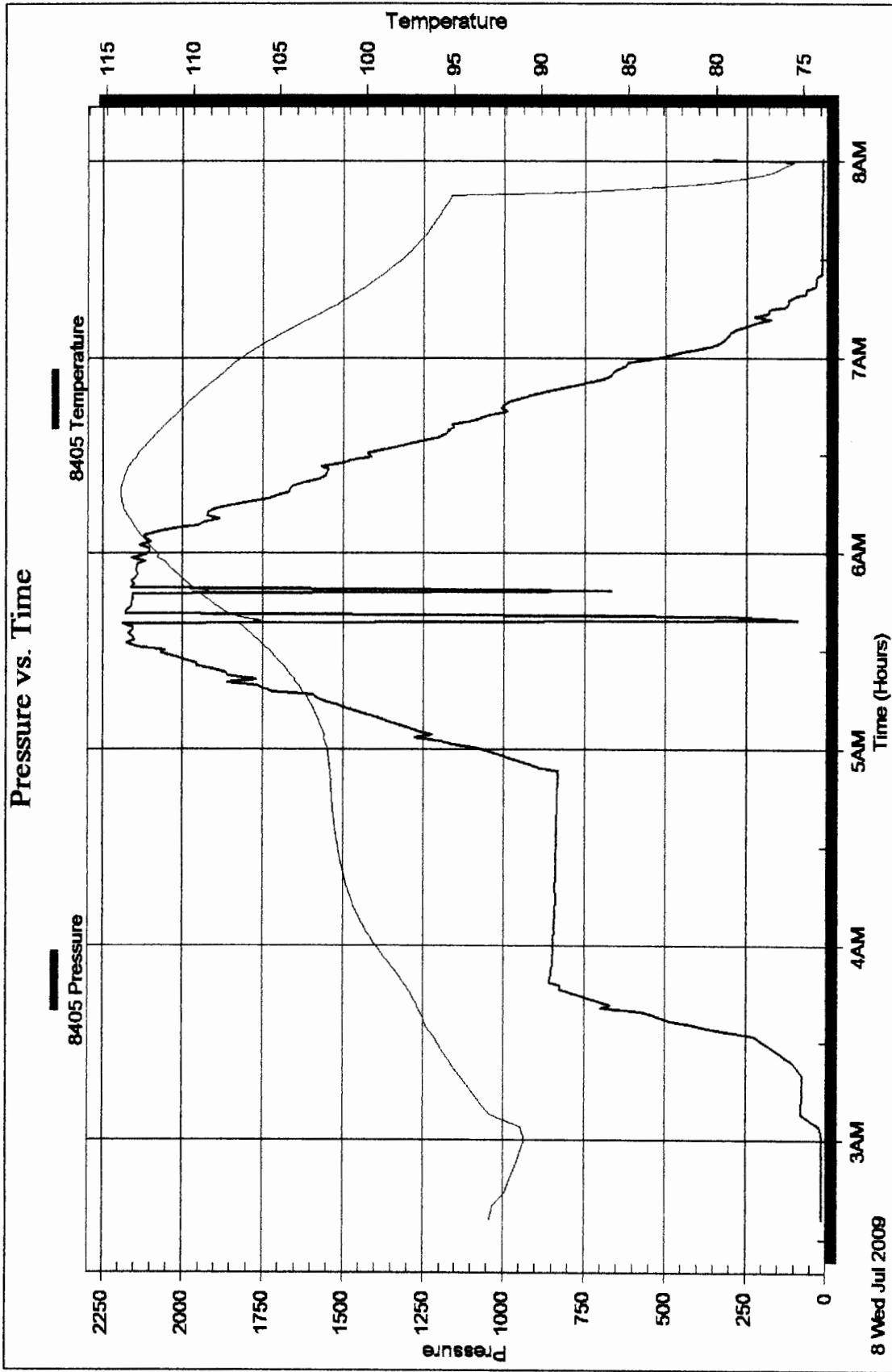
Inside

RITCHEX EXPLORATION INC

29-13-31

DST Test Number: 4

Pressure vs. Time



Serial #: 6450

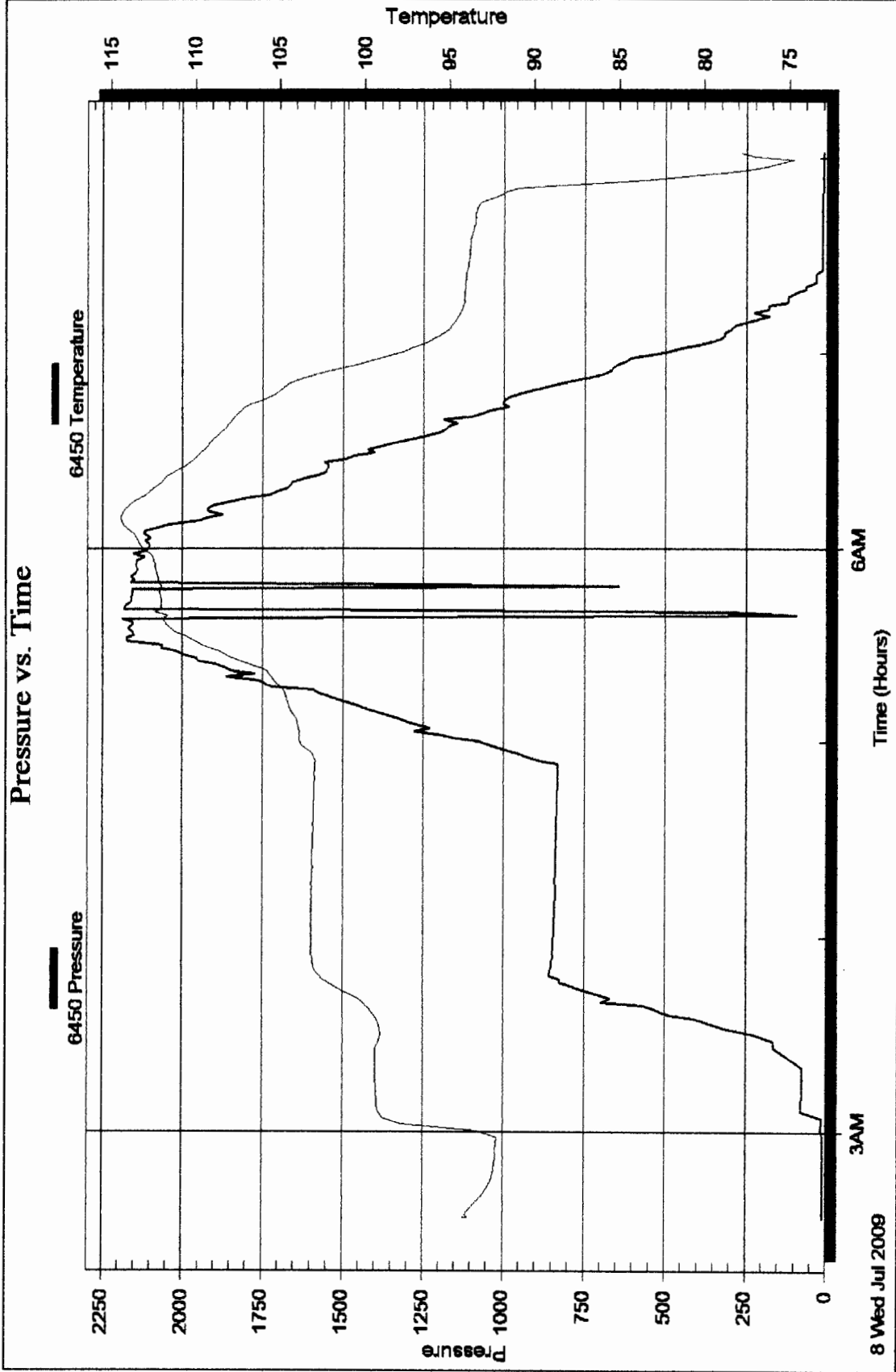
Outside

RITCHIE EXPLORATION INC

29-13-31

DST Test Number: 4

Pressure vs. Time



8 Wed Jul 2009

3AM

6AM

Time (Hours)

Ref. No: 16412

Superior Testers Enterprises LLC

Printed: 2009.07.08 @ 04:19:36



DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.08 @ 06:17:48

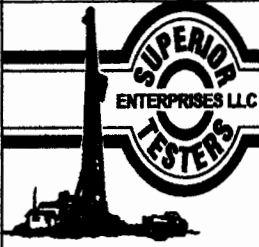
End Date: 2009.07.08 @ 10:36:48

Job Ticket #: 16413 DST #: 5

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.08 @ 06:29:23

RITICHIE EXPLORATION INC
#1 HESS 29 CD UNIT
29-13-31
DST # 5
PAWNEE
2009.07.08



DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16413

DST#: 5

ATTN: BRAD RINE

Test Start: 2009.07.08 @ 06:17:48

Tool Information

Drill Pipe:	Length: 4077.00 ft	Diameter: 3.88 inches	Volume: 59.62 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: 43000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume: 60.51 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4283.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	83.00 ft			
Tool Length:	112.00 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			4255.00	
Shut-In Tool	5.00			4260.00	
Hydraulic Tool	5.00			4265.00	
Jars	6.00			4271.00	
Safety Joint	2.00			4273.00	
Packer	5.00			4278.00	29.00 Bottom Of Top Packer
Packer	5.00			4283.00	
Change Over Sub	0.75			4283.75	
Drill Pipe	63.50			4347.25	
Change Over Sub	0.75			4348.00	
Perforations	13.00			4361.00	
Recorder	0.00	8405	Inside	4361.00	
Recorder	0.00	71986	Outside	4361.00	
Bullnose	5.00			4366.00	83.00 Bottom Packers & Anchor
Total Tool Length:	112.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC
 PO BOX 783188
 WICHITA KS 67278
 ATTN: BRAD RINE

#1 HESS 29 CD UNIT
29-13-31
 Job Ticket: 16413 DST#: 5
 Test Start: 2009.07.08 @ 06:17:48

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.40 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 6200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

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

DST Test Number: 5

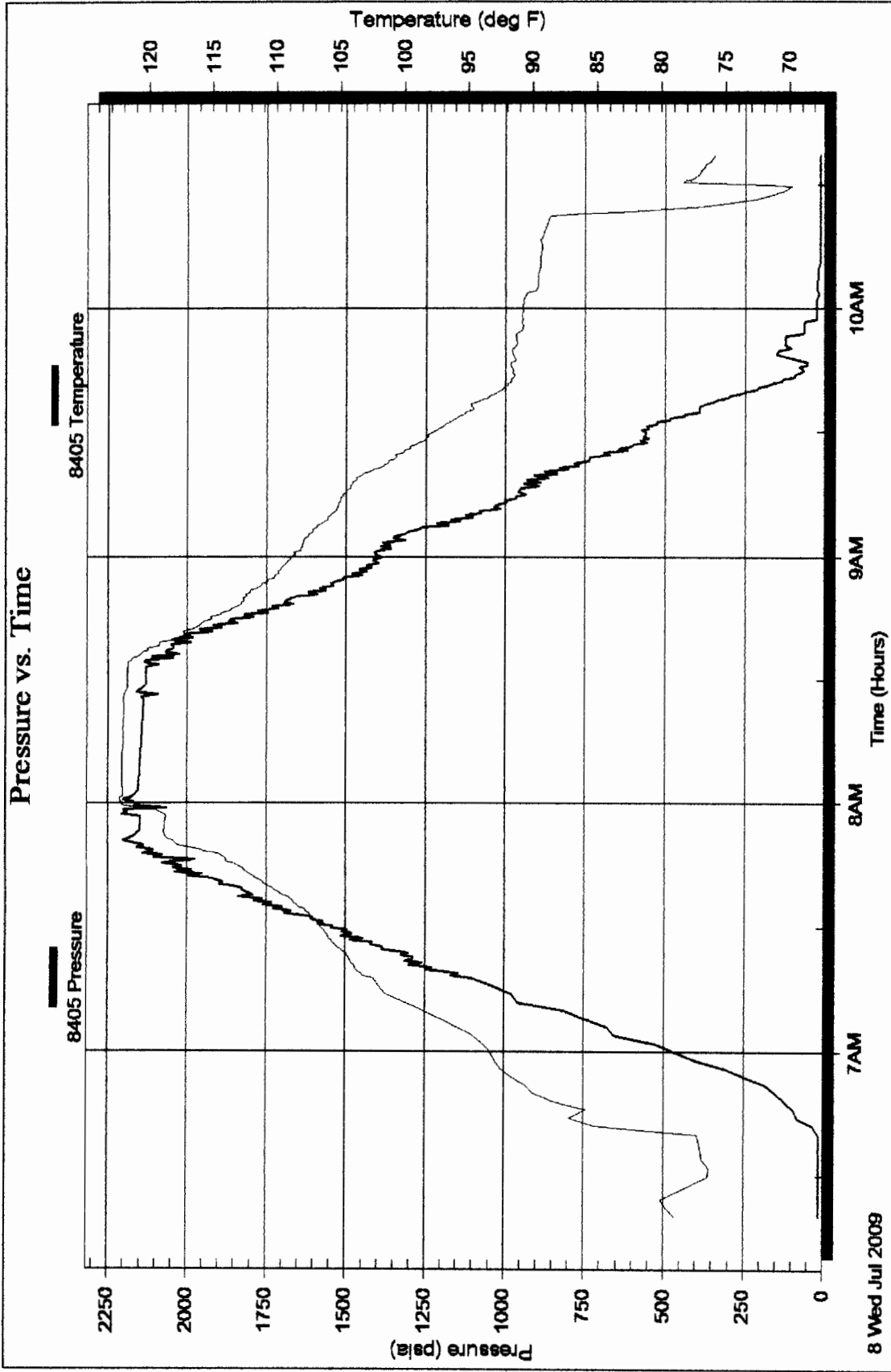
29-13-31

Inside RITCHE EXPLORATION INC

Serial #: 8405

8 Wed Jul 2009

Pressure vs. Time



Printed: 2009.07.08 @ 06:29:24

Ref. No: 16413

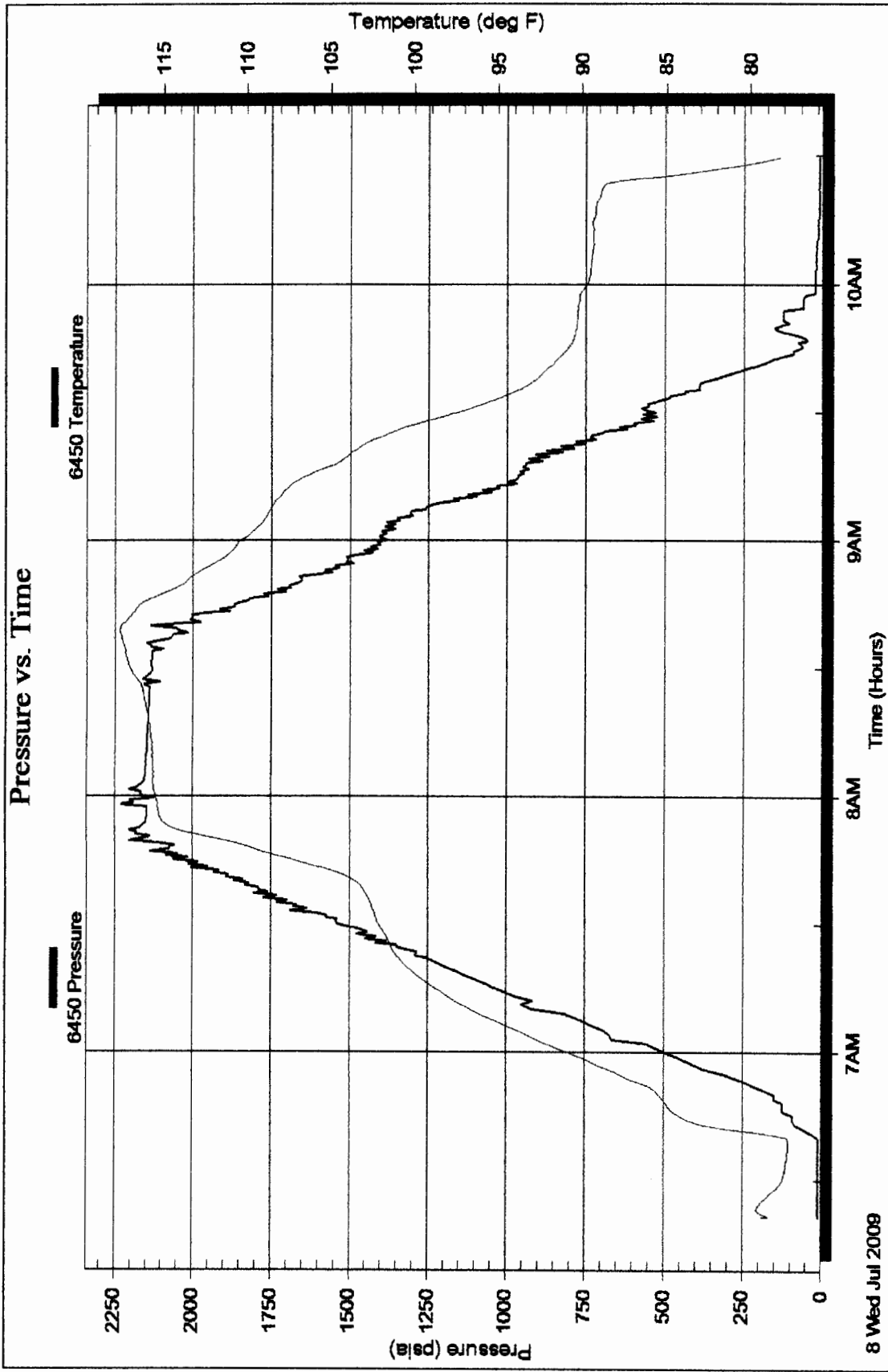
Superior Testers Enterprises LLC

DST Test Number: 5

29-13-31

Serial #: 6450 Outside RITCHEX EXPLORATION INC

Pressure vs. Time



8 Wed Jul 2009

Printed: 2009.07.08 @ 06:29:25

Ref. No: 16413

Superior Testers Enterprises LLC



DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.09 @ 02:27:13

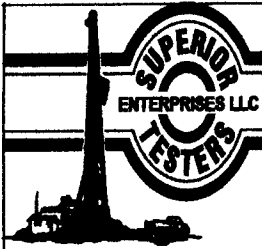
End Date: 2009.07.09 @ 09:42:13

Job Ticket #: 16414 DST #: 6

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.09 @ 02:38:36

RITICHIE EXPLORATION INC #1 HESS 29 CD UNIT 29-13-31 DST # 6 PAWNEE MYRIC 2009.07.09



DRILL STEM TEST REPORT

TOOL DIAGRAM

RTICHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16414

DST#: 6

ATTN: BRAD RINE

Test Start: 2009.07.09 @ 02:27:13

Tool Information

Drill Pipe:	Length: 4129.00 ft	Diameter: 3.88 inches	Volume: 60.38 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: 20000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 61.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	4335.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	95.00 ft			
Tool Length:	124.00 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			4307.00	
Shut-In Tool	5.00			4312.00	
Hydraulic Tool	5.00			4317.00	
Jars	6.00			4323.00	
Safety Joint	2.00			4325.00	
Packer	5.00			4330.00	29.00 Bottom Of Top Packer
Packer	5.00			4335.00	
Change Over Sub	0.75			4335.75	
Drill Pipe	63.50			4399.25	
Change Over Sub	0.75			4400.00	
Perforations	25.00			4425.00	
Recorder	0.00	8405	Inside	4425.00	
Recorder	0.00	71986	Outside	4425.00	
Bullnose	5.00			4430.00	95.00 Bottom Packers & Anchor
Total Tool Length:	124.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHIE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16414

DST#: 6

ATTN: BRAD RINE

Test Start: 2009.07.09 @ 02:27:13

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.80 in³

Resistivity: ohm.m

Salinity: 5500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	MUD TRACE OF OIL 95%M5%O	0.443

Total Length: 90.00 ft Total Volume: 0.443 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

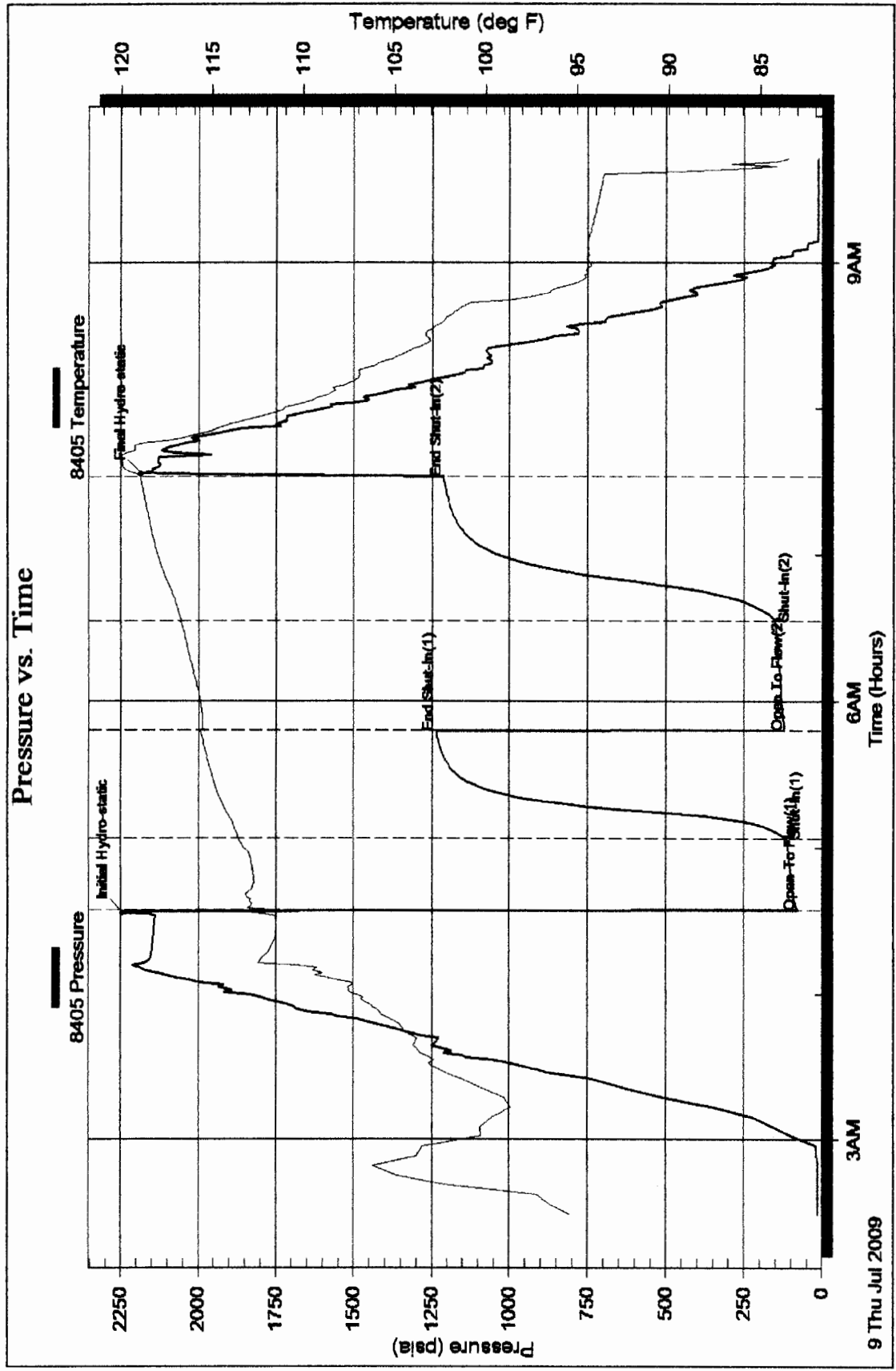
Serial #: 8405

Inside

RITCHEX EXPLORATION INC

29-13-31

DST Test Number: 6



Printed: 2009.07.09 @ 02:38:38

Ref. No: 16414

Superior Testers Enterprises LLC

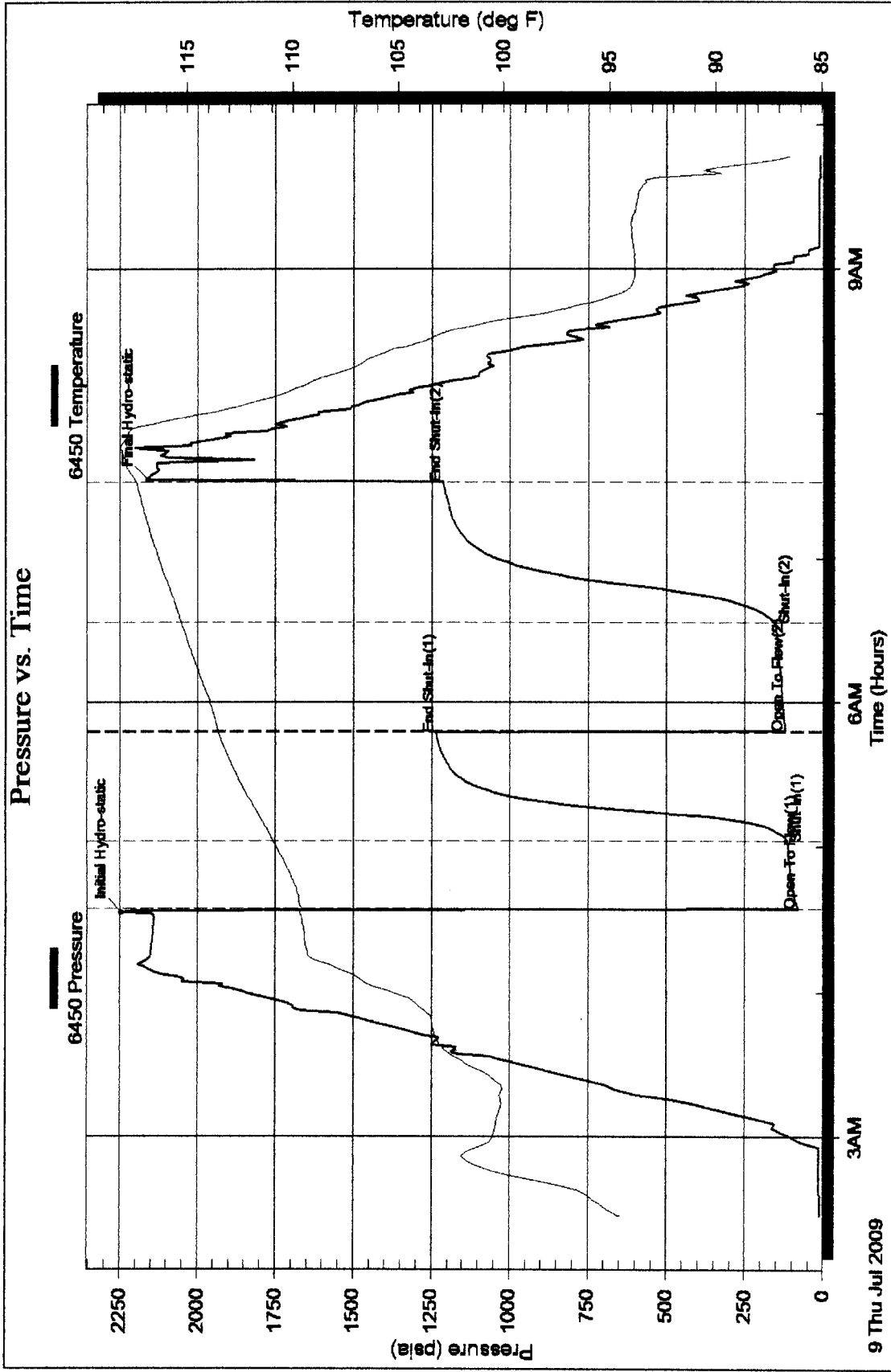
Serial #: 6450

Outside RITCHIE EXPLORATION INC

29-13-31

DST Test Number: 6

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.09 @ 20:45:47

End Date: 2009.07.10 @ 03:54:17

Job Ticket #: 16415 DST #: 7

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.09 @ 21:02:07

RITICHIE EXPLORATION INC #1 HESS 29 CD UNIT 29-13-31 DST # 7 JOHNSON 2009.07.09



DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16415 DST#: 7

ATTN: BRAD RINE

Test Start: 2009.07.09 @ 20:45:47

GENERAL INFORMATION:

Formation: **JOHNSON**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:45:47

Time Test Ended: 03:54:17

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 3345 50 M SCOTT CITY

Interval: 4444.00 ft (KB) To 4477.00 ft (KB) (TVD)

Reference Elevations: 2881.00 ft (KB)

Total Depth: 4477.00 ft (KB) (TVD)

2876.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8405

Inside

Press@RunDepth: 137.87 psia @ 4472.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2009.07.09

End Date:

2009.07.10

Last Calib.: 2009.07.09

Start Time: 20:45:47

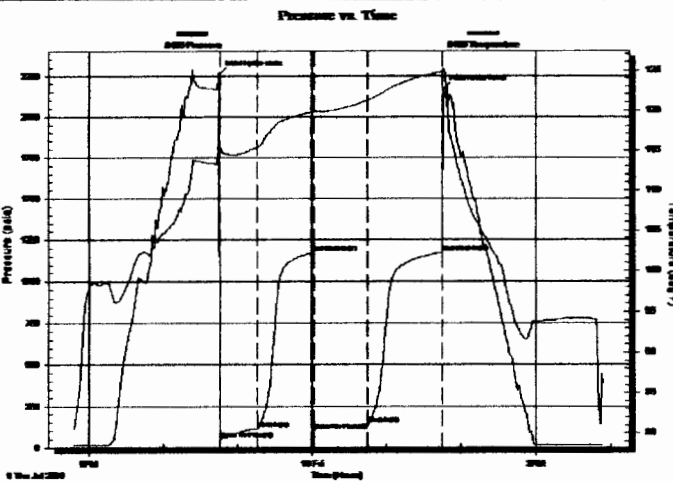
End Time:

03:54:17

Time On Btm: 2009.07.09 @ 22:45:17

Time Off Btm: 2009.07.10 @ 01:45:47

TEST COMMENT: 30-INITIAL OPENING WEAK BUILDING BLOW BUILT TO BOTTOM IN 26 MINS
45-INITIAL SHUT IN WEAK BLOW BACK
45-FINAL OPENING GOOD BLOW BOTTOM OF THE BUCKET IN 3 MINS
60-FINAL SHUT IN GOOD BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2261.79	115.93	Initial Hydro-static
1	48.44	114.83	Open To Flow (1)
31	113.14	115.36	Shut-In(1)
74	1169.78	119.70	End Shut-In(1)
77	101.92	119.77	Open To Flow (2)
120	137.87	121.23	Shut-In(2)
180	1174.74	124.82	End Shut-In(2)
181	2169.09	125.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	CLEAN GASSEY OIL 20%G80%O	0.15
240.00	MUD CUT GASSEY OIL 15%G55%O30%	12.05
360.00	GAS IN PIPE 100%G	5.26

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16415 DST#: 7

ATTN: BRADRINE

Test Start: 2009.07.09 @ 20:45:47

Tool Information

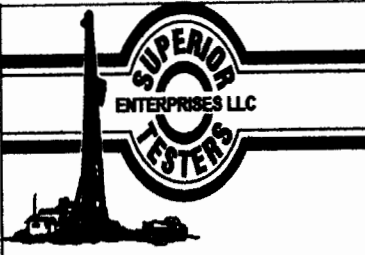
Drill Pipe:	Length: 4408.00 ft	Diameter: 3.88 inches	Volume: 64.46 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 65.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	173.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	4444.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4416.00	
Shut-In Tool	5.00			4421.00	
Hydraulic Tool	5.00			4426.00	
Jars	6.00			4432.00	
Safety Joint	2.00			4434.00	
Packer	5.00			4439.00	29.00 Bottom Of Top Packer
Packer	5.00			4444.00	
Perforations	28.00			4472.00	
Recorder	0.00	8405	Inside	4472.00	
Recorder	0.00	71986	Outside	4472.00	
Bullnose	5.00			4477.00	33.00 Bottom Packers & Anchor

Total Tool Length: 62.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RTICHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16415

DST#: 7

ATTN: BRAD RINE

Test Start: 2009.07.09 @ 20:45:47

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 11.20 in³

Resistivity: ohm.m

Salinity: 6600.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil Apt

35 deg API

Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	CLEAN GASSEY OIL 20%G80%O	0.148
240.00	MUD CUT GASSEY OIL 15%G55%O30%M	2.054
360.00	GAS IN PIPE 100%G	5.265

Total Length: 630.00 ft Total Volume: 7.467 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

Prepared For: **RITICHIE EXPLORATION INC**

PO BOX 783188
WICHITA KS 67278

ATTN: BRAD RINE

29-13-31

#1 HESS 29 CD UNIT

Start Date: 2009.07.10 @ 15:09:00

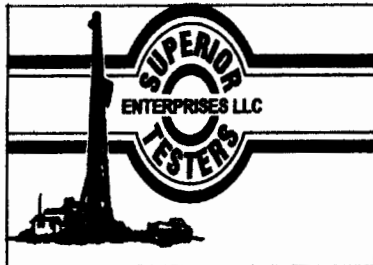
End Date: 2009.07.10 @ 22:09:30

Job Ticket #: 16416 DST #: 8

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2009.07.10 @ 15:37:48

RITICHIE EXPLORATION INC
#1 HESS 29 CD UNIT
29-13-31
DST # 8
MORROW
2009.07.10



DRILL STEM TEST REPORT

RITICHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16416 DST#: 8

ATTN: BRAD RINE

Test Start: 2009.07.10 @ 15:09:00

GENERAL INFORMATION:

Formation: **MORROW**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:04:30

Time Test Ended: 22:09:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 3345 50 MSCOTT CIT

Interval: **4482.00 ft (KB) To 4516.00 ft (KB) (TVD)**

Reference Elevations: 2881.00 ft (KB)

Total Depth: 4516.00 ft (KB) (TVD)

2876.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8405

Inside

Press@RunDepth: 114.13 psia @ 4511.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2009.07.10 End Date: 2009.07.10

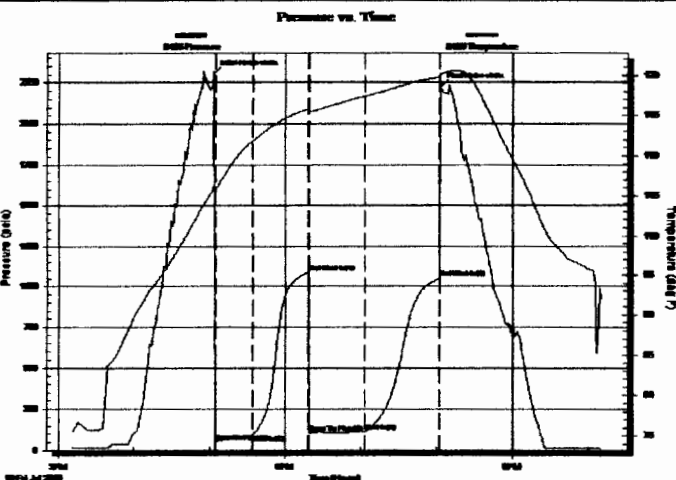
Last Calib.: 2009.07.10

Start Time: 15:11:00 End Time: 22:09:30

Time On Btrr: 2009.07.10 @ 17:03:30

Time Off Btrr: 2009.07.10 @ 20:03:00

TEST COMMENT: 30-INITIAL OPENING WEAK BLOW BUILT TO 7 INCHES INTO WATER
45-INITIAL SHUT IN WEAK BLOW BACK
45-FINAL OPENING WEAK BLOW BUILT TO BOTTOM BUCKET IN 30 MINS
60-FINAL SHUT IN FAIR BLOW BACK



PRESSURE SUMMARY

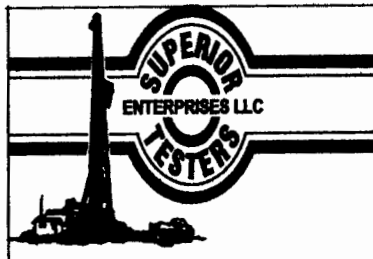
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2305.13	106.09	Initial Hydro-static
1	50.86	105.67	Open To Flow (1)
31	98.07	111.88	Shut-In(1)
75	1088.83	115.79	End Shut-In(1)
76	107.98	115.46	Open To Flow (2)
120	114.13	117.39	Shut-In(2)
179	1051.61	119.79	End Shut-In(2)
180	2225.79	120.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	GASSEY OIL 90%O10%G	0.10
180.00	MUD CUT GASSEY OIL 10%G60%O30%11.08	
240.00	GAS IN PIPE 100%GAS	3.51

Gas Rates

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



DRILL STEM TEST REPORT

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16416 DST#: 8

ATTN: BRAD RINE

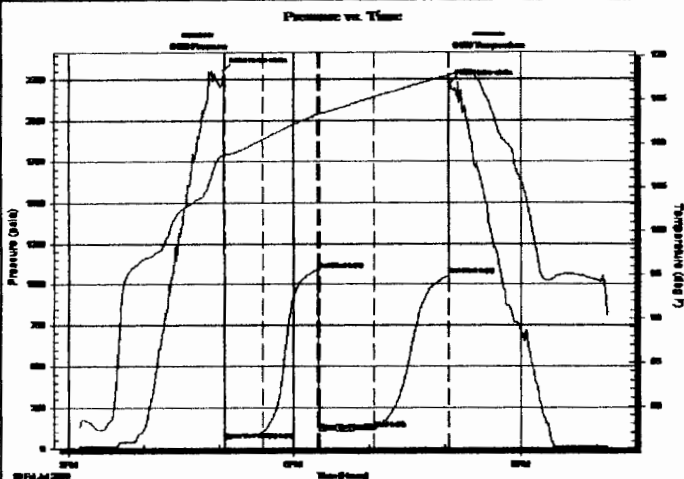
Test Start: 2009.07.10 @ 15:09:00

GENERAL INFORMATION:

Formation: **MORROW**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:04:30
 Time Test Ended: 22:09:30
 Interval: **4482.00 ft (KB) To 4516.00 ft (KB) (TVD)**
 Total Depth: 4516.00 ft (KB) (TVD)
 Hole Diameter: 7.78 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: DAVID NICHOLS
 Unit No: 3345 50 M SCOTT CIT
 Reference Elevations: 2881.00 ft (KB)
 2876.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: **6450** Outside
 Press@RunDepth: 1051.30 psia @ 4511.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2009.07.10 End Date: 2009.07.10 Last Calib.: 2009.07.10
 Start Time: 15:09:08 End Time: 22:09:17 Time On Btm: 2009.07.10 @ 17:04:17
 Time Off Btm: 2009.07.10 @ 20:03:48

TEST COMMENT: 30-INITIAL OPENING WEAK BLOW BUILT TO 7 INCHES INTO WATER
 45-INITIAL SHUT IN WEAK BLOW BACK
 45-FINAL OPENING WEAK BLOW BUILT TO BOTTOM BUCKET IN 30 MINS
 60-FINAL SHUT IN FAIR BLOW BACK



PRESSURE SUMMARY

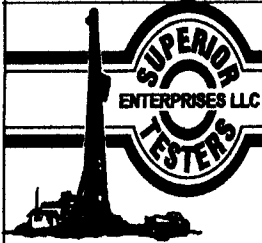
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2304.11	108.75	Initial Hydro-static
1	49.83	108.54	Open To Flow (1)
32	100.02	110.47	Shut-In(1)
75	1087.91	113.30	End Shut-In(1)
77	106.86	113.34	Open To Flow (2)
120	115.86	115.26	Shut-In(2)
179	1051.30	117.73	End Shut-In(2)
180	2221.15	117.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	GASSEY OIL 90%O10%G	0.10
180.00	MUD CUT GASSEY OIL 10%G60%O30%I.08	
240.00	GAS IN PIPE 100%GAS	3.51

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RITECH EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16416

DST#: 8

ATTN: BRAD RINE

Test Start: 2009.07.10 @ 15:09:00

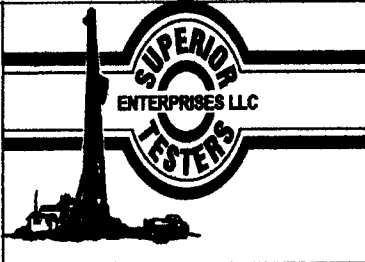
Tool Information

Drill Pipe:	Length: 4276.00 ft	Diameter: 3.88 inches	Volume: 62.53 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: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume: 63.42 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	4482.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	63.00 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			4454.00	
Shut-In Tool	5.00			4459.00	
Hydraulic Tool	5.00			4464.00	
Jars	6.00			4470.00	
Safety Joint	2.00			4472.00	
Packer	5.00			4477.00	29.00 Bottom Of Top Packer
Packer	5.00			4482.00	
Perforations	29.00			4511.00	
Recorder	0.00	8405	Inside	4511.00	
Recorder	0.00	71986	Outside	4511.00	
Bullnose	5.00			4516.00	34.00 Bottom Packers & Anchor

Total Tool Length: 63.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RITCHE EXPLORATION INC

#1 HESS 29 CD UNIT

PO BOX 783188
WICHITA KS 67278

29-13-31

Job Ticket: 16416

DST#: 8

ATTN: BRAD RINE

Test Start: 2009.07.10 @ 15:09:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 6800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	GASSEY OIL 90%O10%G	0.098
180.00	MUD CUT GASSEY OIL 10%G60%O30%M	1.079
240.00	GAS IN PIPE 100%GAS	3.510

Total Length: 440.00 ft Total Volume: 4.687 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

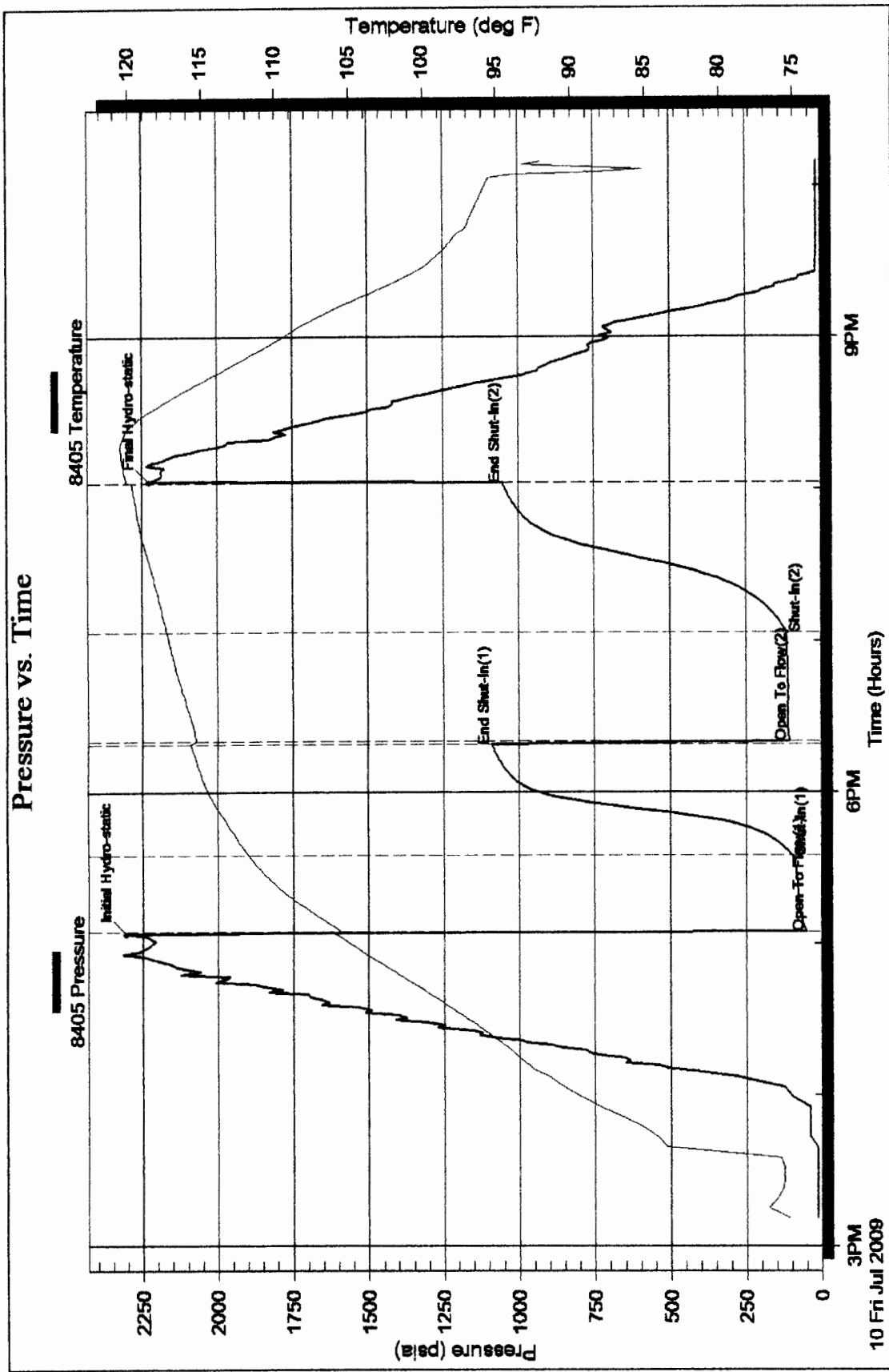
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



10 Fri Jul 2009

Pressure vs. Time

