



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____-_____-_____- Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other (Explain) _____

Estimated Production Per 24 Hours	Oil Bbbs.	Gas Mcf	Water Bbbs.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	Hund 1-9
Doc ID	1054931

All Electric Logs Run

CPDCN Log
AISF Elect. Log
Microresistivity Log
Dual Rec. Cement Bond Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	Hund 1-9
Doc ID	1054931

Tops

Name	Top	Datum
Stone Corral	2433	+518
Bs/Stone Corral	2455	+496
Heebner	3969	-1018
Lansing	4007	-1056
Muncie Creek	4162	-1211
Hushpuckney	4290	-1339
Marmaton	4361	-1410
Pawnee	4423	-1472
Ft. Scott	4487	-1536
Morrow	4605	-1654
Mississippian	4643	-1692
LTD	4688	

ALLIED CEMENTING CO., LLC. 035565

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Oakley, KS

DATE <u>2/17/14</u>	SEC. <u>9</u>	TWP. <u>14</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION	JOB START <u>3:00</u>	JOB FINISH <u>3:15</u>
LEASE <u>Hurd</u>	WELL # <u>1-9</u>	LOCATION <u>Oakley 205 4E 1 3/4 N</u>			COUNTY <u>Gove</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one) <u>NEW</u>		SE NE SE S INTO					

CONTRACTOR Martin 24
 TYPE OF JOB Surf Fall
 HOLE SIZE 12 1/4 T.D. 222
 CASING SIZE 8 5/8 DEPTH 222
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. 15'
 PERFS. _____
 DISPLACEMENT 13.185

OWNER Same
 CEMENT
 AMOUNT ORDERED 165 com 3070CC
207 gal

COMMON	<u>165</u>	@	<u>15.45</u>	<u>2549.25</u>
POZMIX		@		
GEL	<u>3</u>	@	<u>20.00</u>	<u>60.00</u>
CHLORIDE	<u>6</u>	@	<u>58.00</u>	<u>348.00</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>174</u>	@	<u>2.40</u>	<u>417.60</u>
MILEAGE	<u>104.5K/mi</u>			<u>348.00</u>
				TOTAL <u>3226.85</u>

EQUIPMENT

PUMP TRUCK CEMENTER Alan
 # 222 HELPER Wayne
 BULK TRUCK
 # 404 DRIVER Mike
 BULK TRUCK
 # _____ DRIVER _____

REMARKS:

Run 8 5/8 Cas
Circulate
mix 165 sks com 3070CC 207 gal
Displace w/ BBL 150
Cement did Circulate
Done by
Alan Wayne, msk

CHARGE TO: Grand Mesa
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>222'</u>		
PUMP TRUCK CHARGE			<u>1018.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>20</u>	@	<u>7.00</u>
MANIFOLD		@	
		@	
		@	
TOTAL <u>1158.00</u>			

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL _____		

To Allied Cementing Co., LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Anthony Martin
 SIGNATURE Anthony Martin
Great Job

SALES TAX (If Any) _____
 TOTAL CHARGES _____
 DISCOUNT _____ IF PAID IN 30 DAYS



CONSOLIDATED
Oil Well Services, LLC

TICKET NUMBER 30807
LOCATION Oakley Ks
FOREMAN Rick Ledford

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

Kansas

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-27-11	3372	Hend 1-9	9	14	31	Goose

CUSTOMER
Grand Mesa Operating Co

MAILING ADDRESS
1700 N. Water Front Pkwy, P.O. Box 600

CITY Wichita STATE Ks ZIP CODE 67202

Oakley 203
46
1H

TRUCK #	DRIVER	TRUCK #	DRIVER
456-T118	Chad Smith		
528-T127	John Wade		
460	Josh Gurdle		

JOB TYPE Prod-DV-0 HOLE SIZE 7 7/8 HOLE DEPTH 4690' CASING SIZE & WEIGHT 5 1/2 - 15.5 #

CASING DEPTH 4687' DRILL PIPE _____ TUBING _____ OTHER DV 22441'

SLURRY WEIGHT 14.2 # SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 11'

DISPLACEMENT 111 4/4 DISPLACEMENT PSI _____ MIX PSI _____ RATE 7-8 BPM

REMARKS: Safety Meeting, ran float equipment, Cent #2-4-6-8-10-12-14-55
Basket 3-56 - DV Top of 56, Rig up to casing to circ 30 min,
Pump 10 BBL H₂O + 500 gal Mired Flash mixed 17.5 SKs Com, 10% Salt
5# Kalseal, 2% Gel, clear - Pump + lines, release Plug + Displace 53 BBL H₂O +
58 BBL mired @ 8.50 # max, ~~500 gal~~ 1300 # release Pressure, float held
Drop opening tool, opened @ 1100 #, Circ 2 hrs
Mix 30 SKs 6940 #, in R.H, mixed 445 SKs 60/40 per, 8% gel, 1/4 # Flash, release
Plug + Displace 59 1/2 BBL H₂O @ 800 # Landed Plug @ 1700 #, released, Tool (held)
Cement did Circ, Approx 50 BBL in Pit

Thank you
Rick Ledford

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401C	1	PUMP CHARGE	2850.00	2850.00
5406	20	MILEAGE	5.00	100.00
1104C	175 SKs	Class A Cement	16.80	2940.00
1131	475 SKs	60/40 per	14.35	6,816.25
1118B	3594 #	Bentone	.24	862.56
1110A	875 #	Kalseal	.53	463.75
411	830 #	Salt	.42	348.60
1107	119 #	Flu-Seal	2.66	316.54
11446	500 gal	Mired Flash	1.00	500.00
5407A	28.65	Truck Mileage Delivery	1.58	905.40
4159	1	AFI Float Shoe	413.00	413.00
4130	8	Cent 12 1/2	58.00	464.00
4104	2	Baskets	276.00	552.00
4277	1	D.V Tool	3220.00	3220.00
				20,752.10
				4150.42
				16,601.68
			SALES TAX	1233.47
			ESTIMATED	
			TOTAL	17835.15

239747

John Arthur

AUTHORIZATION [Signature] TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



phone: 316-337-6200
fax: 316-337-6211
<http://kcc.ks.gov/>

Thomas E. Wright, Chairman
Ward Loyd, Commissioner

Corporation Commission

Sam Brownback, Governor

April 29, 2011

Ronald N. Sinclair
Grand Mesa Operating Company
1700 N WATERFRONT PKWY BLDG 600
WICHITA, KS 67206-5514

Re: ACO1
API 15-063-21890-00-00
Hund 1-9
SW/4 Sec.09-14S-31W
Gove County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Ronald N. Sinclair

LITHOLOGY STRIP LOG

WellSight Systems

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Hund No. 1-9
Location: 1482' FSL, 1873' FEL of Section 9-14S-31W Gove County, KS
License Number: API: 15-063-21890 Region: Wildcat
Spud Date: 2-17-11 Drilling Completed: 2-27-11
Surface Coordinates: 1482' FSL, 1873' FEL of 26-12S-32W

Bottom Hole Coordinates: Vertical hole

Ground Elevation (ft): 2946' K.B. Elevation (ft): 2951'
Logged Interval (ft): 3600' To: RTD Total Depth (ft): 4690'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Grand Mesa Operating Company
Address: 1700 N. Waterfront Parkway
Bldg. 600
Wichita, KS 67206-5514

GEOLOGIST

Name: Macklin M. Armstrong, P.G.
Company:
Address: 5140 North Valentine Road
Wichita, Kansas 67219
316-209-5047

COMMENTS

Contractor: Murfin Drilling Company Rig #24
Pusher: Tony Martin

Surface Casing: 8 5/8" 23# set at 220'
Production Casing: 5 1/2" 15.5# at 4685'

Mud by: MudCo - Reid Atkins was the engineer

DST's by: Eagle Testing - David Nichols was the tester

Logs by: Weatherford (DIL, CN-CD, ML)

Deviation Surveys: 1/4 deg. at 222'; 1/2 deg. at 2799'; 1/8 deg. at 3611'; 3/4 deg. at 4020'; 1/4 deg. at 4690'

Formation	Sample	Log	Datum	**
Anhydrite	2435	2433	+518	+3
B/Anhydrite	2457	2455	+496	+2
Queen Hill	3910	3906	-955	+8
Heebner	3972	3969	-1018	+5
Toronto	3992	3990	-1039	+5
Lansing	4012	4007	-1056	+6
Muncie Creek	4162	4162	-1211	+1
Stark	4257	4254	-1303	-3
Hushpuckney	4294	4291	-1340	-2
B/Kansas City	4342	4340	-1389	+1
Marmaton	4362	4360	-1400	-1

Marmaton	4332	4338	-1488	-1
Pawnee	4425	4422	-1471	-1
Fort Scott	4451	4449	-1498	-2
Cherokee Sh	4534	4530	-1579	+3
Johnson Zone	4578	4575	-1624	+1
Morrow Sh	4601	4595	-1644	+10
Morrow Sand	4611	4609	-1658	
Mississippi	4645	4642	-1691	-16
Total Depth	4690	4688	-1737	

** Structural Position to Grand Mesa Operating Company's Hess No. 1-16, 2004' FNL & 1141' FWL, Sec 16 T14S R31W, Gove County, Kansas

Bit #	Size	MFG	Type	Depth Out	Footage Cut	Hours on bit
1	12 1/4"		RDS	222'	222'	2 3/8
2	7 7/8"	Smith	MI616	3611'	3389'	50 1/2
3	7 7/8"	Smith	F-27I	4604'	993'	55 1/2
4	7 7/8"	Smith	F-27I	4690'	86'	6 1/2

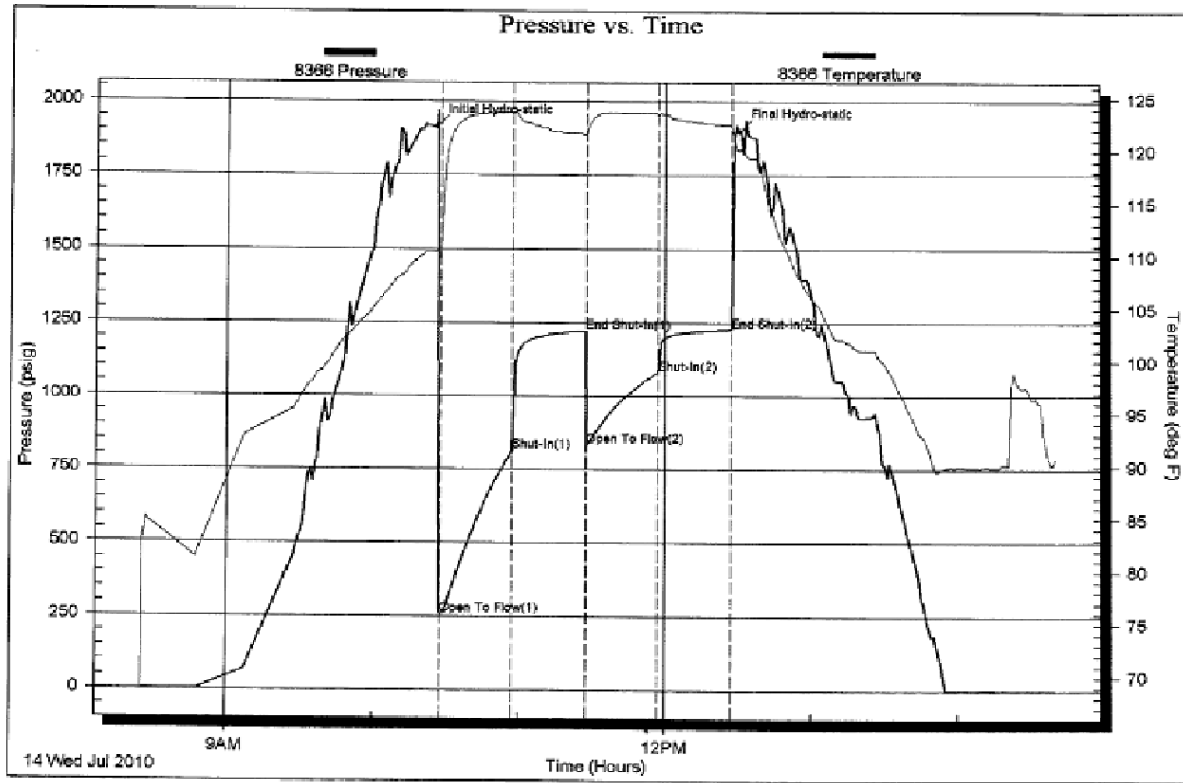
FORMATION TOPS AND STRUCTURAL COMPARISON

FORMATION	SAMPLE TOPS		LOG TOPS		COMPARISON WELL Slawson Exploration Honeyman #1 27-12-32W
	Depth	Datum	Depth	Datum	
Stone Corral	2506'	+491	2504'	+493	+6'
B/Stone Corral	2532'	+465	2528'	+469	+6'
Heebner Shale	3968'	-971	3971'	-974	-5'
Lansing	4010'	-1013	4010'	-1013	-2'
Muncie Creek Shale	4160'	-1163	4158'	-1161	-5'
Stark Shale	4241'	-1244	4241'	-1244	-3'
Hushpuckney Shale	4281'	-1284	4278'	-1281	-6'
Marmaton	4338'	-1341	4338'	-1341	+1'
Upper Fort Scott	4448'	-1451	4448'	-1451	+2'
Little Osage Shale	4469'	-1472	4470'	-1473	-4'
Excello Shale	4498'	-1501	4497'	-1500	-7'
Johnson Zone	4568'	-1571	4568'	-1571	+3'
Morrow	4591'	-1594	4590'	-1593	+7'
Mississippian	4611'	-1614	4610'	-1613	+25'
RTD	4730'	-1733			
LTD			4729'	-1732	

DRILL STEM TESTS

DST No. 1 Lansing "A"
Interval: 3992'-4028'
Times: 30-30-30-30
Recovery: 225' MCW w/trace oil (61w, 39m);
1940' fluid circ. out (dropped bar); 120'
SMCW (97w, 3m) chl. 32K
FP: 256-813/833-1081 SIP: 1222-1227
HP: 1913-1900 BHT: 122 deg. F

IFP: strong blow, B.O.B. in 1 minute
ISIP: no return
FFP: strong blow, B.O.B. in 2 minutes
FSIP: no return



DRILL STEM TESTS

DST No. 2 Lansing "C"

Interval: 4049'-4068'

Times: 30-45-45-60

Recovery: 45' SO&MCW (76w, 23m, 1o); 60'

MCW w/trace oil (79w, 21m); 1190' fluid circ.

out (dropped bar); 120' SMCW w/trace oil (95w, 5m), chl 29K

FP: 41-373/379-674 SIP: 1267-1264

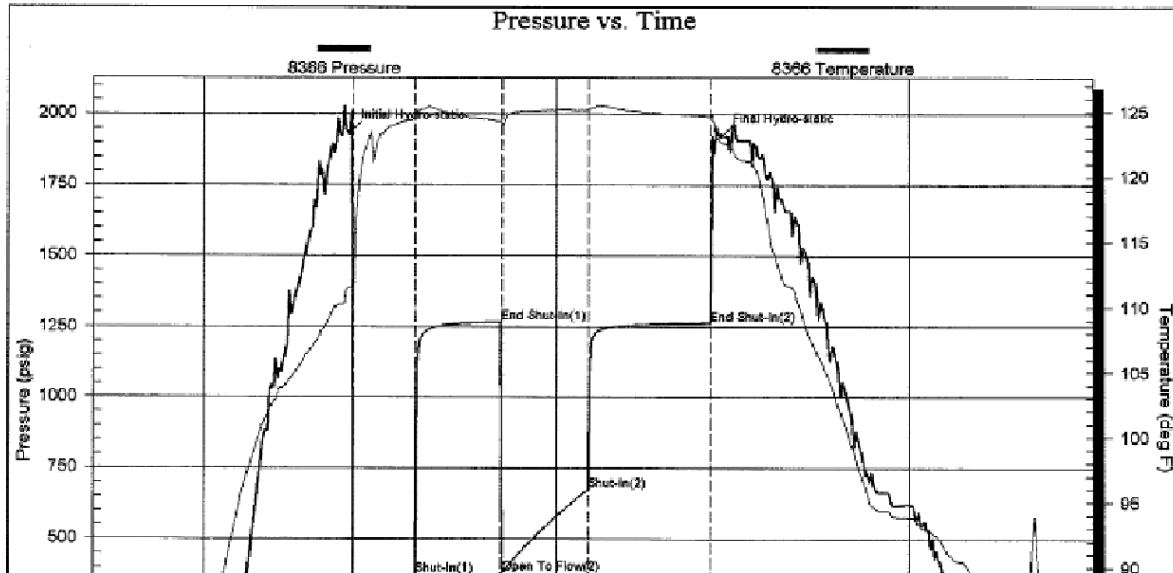
HP: 1933-1922 BHT: 125 deg. F

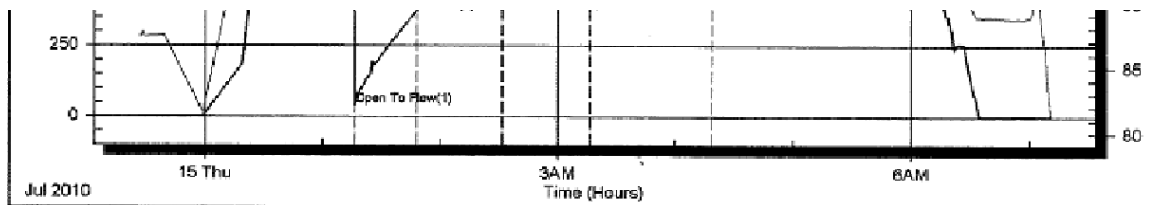
IFP: fair to strong, B.O.B. in 4 1/4 minutes

ISIP: no return

FFP: fair blow, B.O.B. in 6 minutes

FSIP: no return



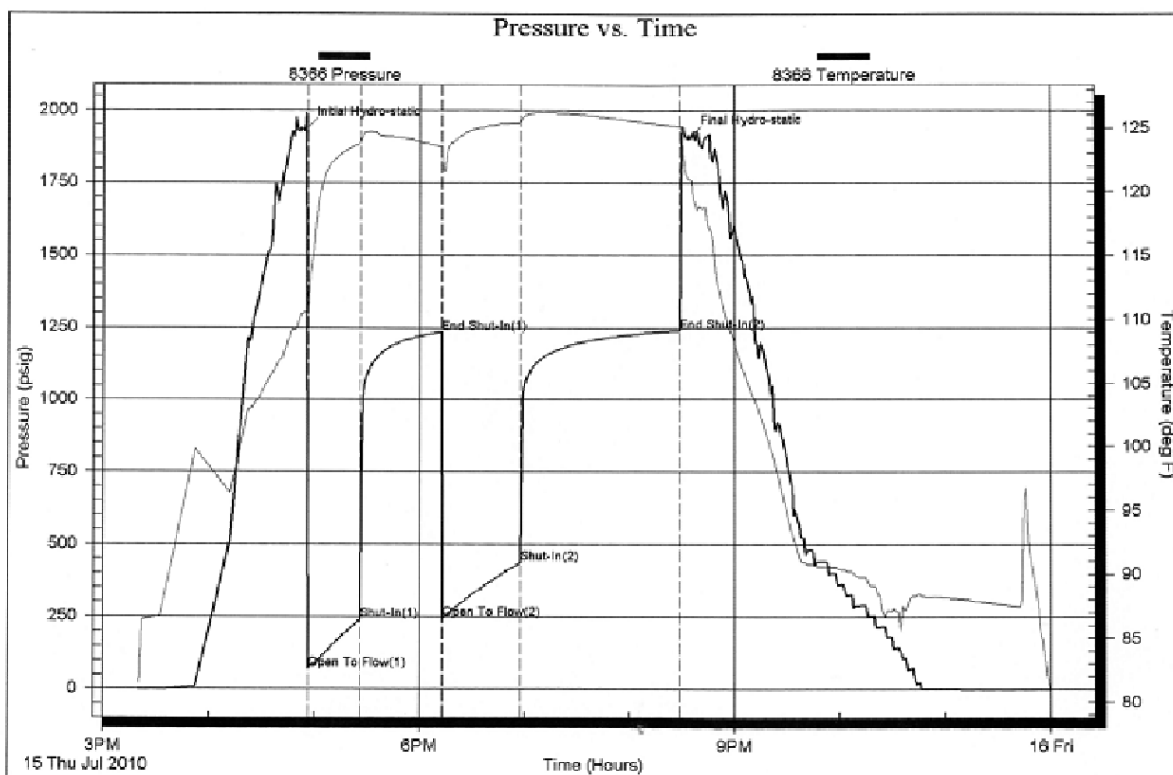


DRILL STEM TESTS

DST No. 3 Lansing "E"
 Interval: 4072'-4100'
 Times: 30-45-45-90
 Recovery: 880' GIP; 970' CGO (39g, 58o, 3m); 75' GW&MCO (30g, 50o, 7w, 13m); 120' GW&MCO (11g, 36o, 23w, 30m)
 FP: 70-238/244-436 SIP: 1234-1239
 HP: 1933-1905 BHT: 125 deg. F

IFP: strong blow, B.O.B. in 3 1/2 minutes
ISIP: blowback built to B.O.B. in 16 minutes, slowly died back at 35 minute mark
FFP: fair to strong, B.O.B. in 6 minutes
FSIP: blowback built to 4 1/2", died back at 50 minute mark, dead in 66 minutes

Serial #: 8368 Inside Grand Mesa Operating Co. 26/12s/32w Logan KS DST Test Number: 3



DRILL STEM TESTS

DST No. 4 Lansing "H"
 Interval: 4144'-4210'
 Times: 30-30-30-30
 Recovery: 20' M w/trace oil; 120' MCW (59w, 41m) chl 20K

IFP: weak blow bldg to 3 1/2 inches
ISIP: no return
FFP: no blow until 3 1/2 minutes, weak bldg to 1 3/4 inches
FSIP: no return

4 min, 0 in 20K

ISIP: no return

FP: 19-63/67-81 SIP: 1142-1073

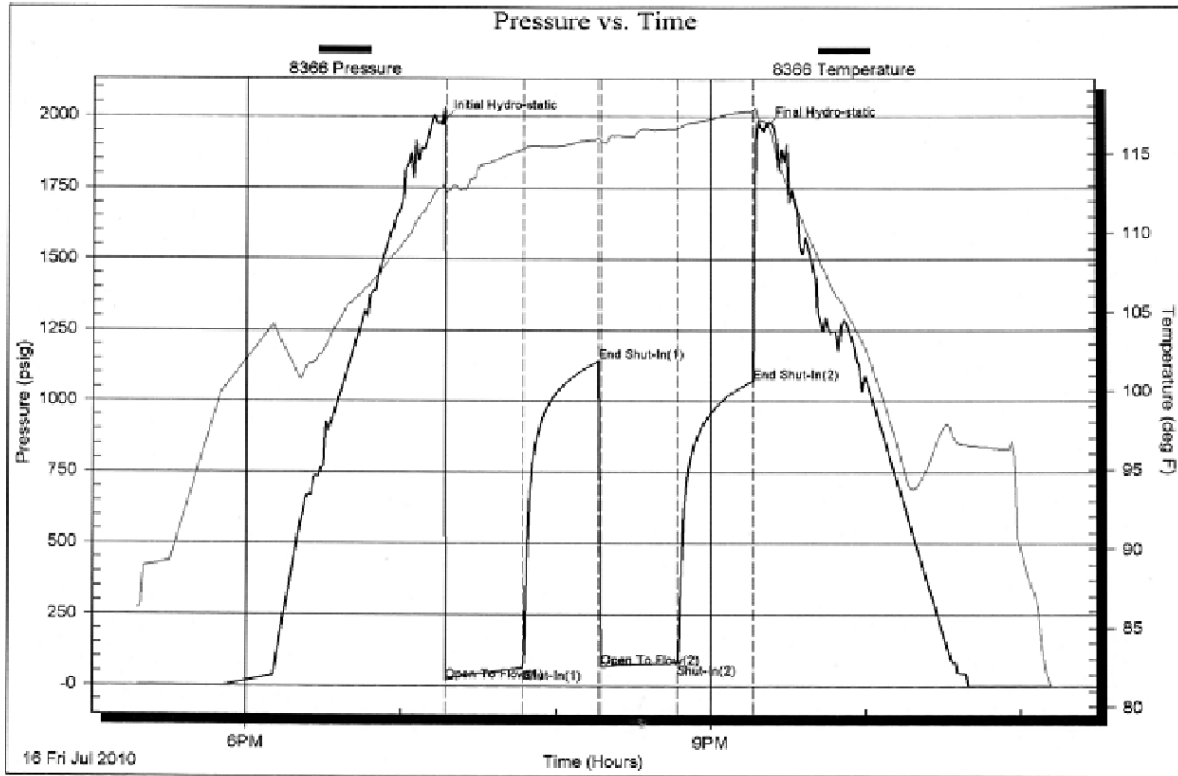
HP: 1978-1955 BHT: 118 deg. F

Serial #: 8366

Inside Grand Mesa Operating Co.

26/12s/32w Logan KS

DST Test Number: 4



DRILL STEM TESTS

DST No. 5 Lansing "I and "J"

Interval: 4202'-4241'

Times: 30-30-30-30

Recovery: 95' MCW w/trace oil (72w, 28m);

1000' MCW (reversed out); 120' MCW w/trace

oil (89w, 11m) chl 38K

FP: 51-363/368-583 SIP: 1294-1285

HP: 2018-2008 BHT: 126 deg. F

IFP: strong blow bldg to B.O.B. in 4 1/2 minutes

ISIP: no return

FFP: fair to strong blow bldg. to B.O.B. in 5 1/2 minutes

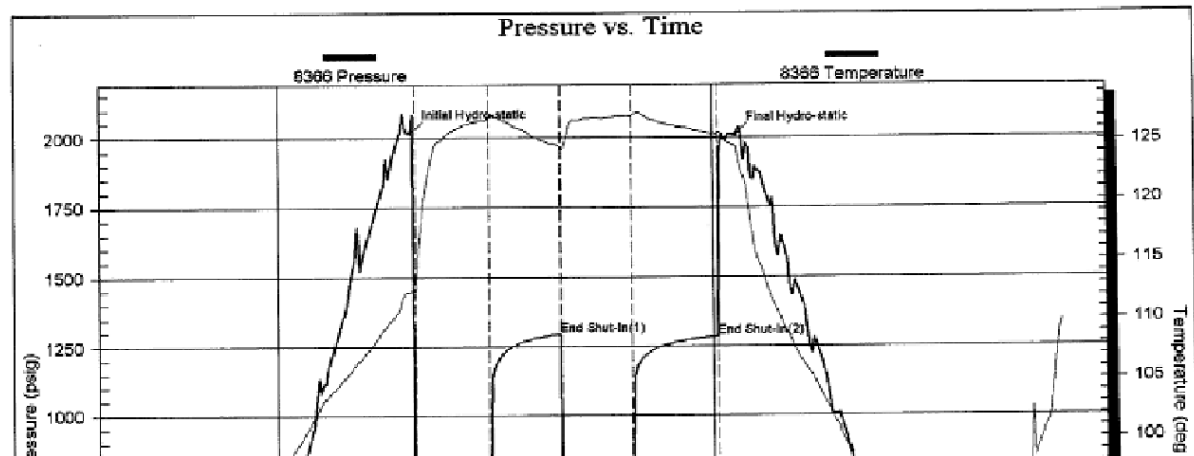
FSIP: no return

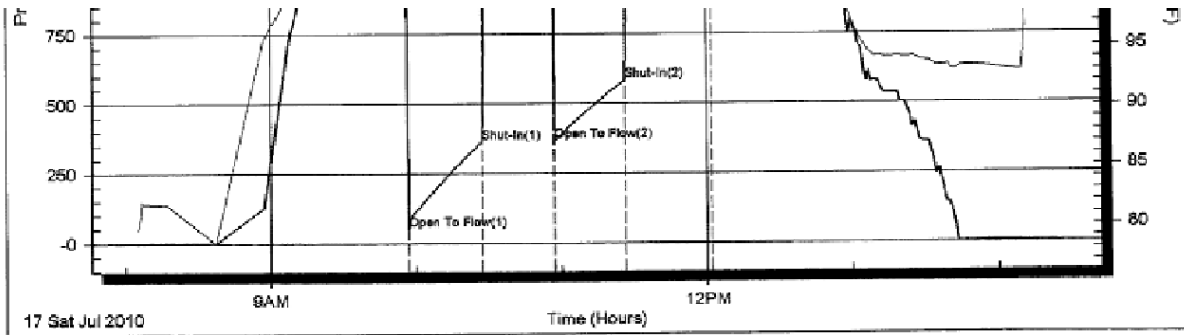
Serial #: 8366

Inside Grand Mesa Operating Co.

26/12s/32w Logan KS

DST Test Number: 5





DRILL STEM TESTS

DST No. 6 Lansing "K"
 Interval: 4242'-4274'
 Times: 30-45-45-90
 Recovery: 905' GIP; 40' CGO (30g, 69o, 1m); 565' GW&MCO (36g, 56o, 7w, 1m); 375' GO&MCW (26g, 23o, 42w, 9m); 700' W w/trace oil, chl 52K; total fluid 1680'
 FP: 95-415/427-733 SIP: 1293-1290
 HP: 2033-2031 BHT: 126 deg. F

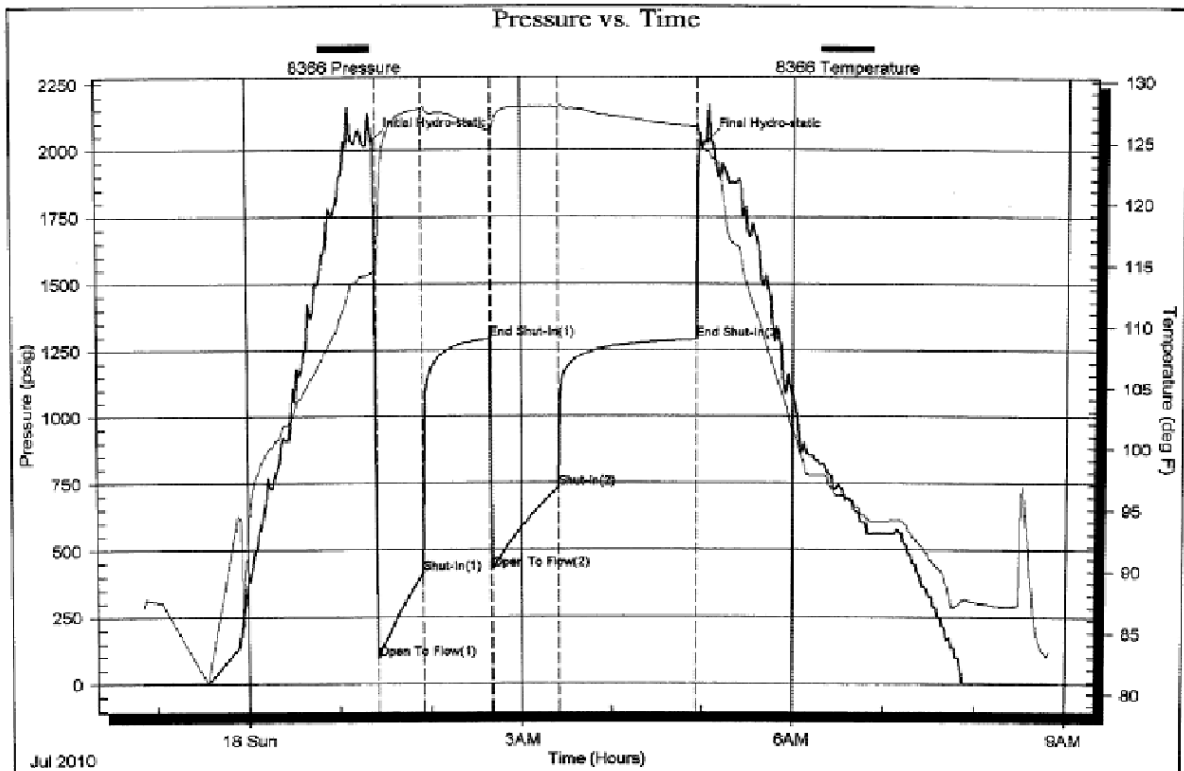
IFP: strong blow, B.O.B. in 2 min. and 20 sec.
 ISIP: slowly built to 5 1/2"
 FFP: strong blow, B.O.B. in 3 1/4 minutes
 FSIP: built to B.O.B. in 35 minutes

Serial #: 8366

Inside Grand Mesa Operating Co.

26/12s/32w Logan K5

DST Test Number: 8



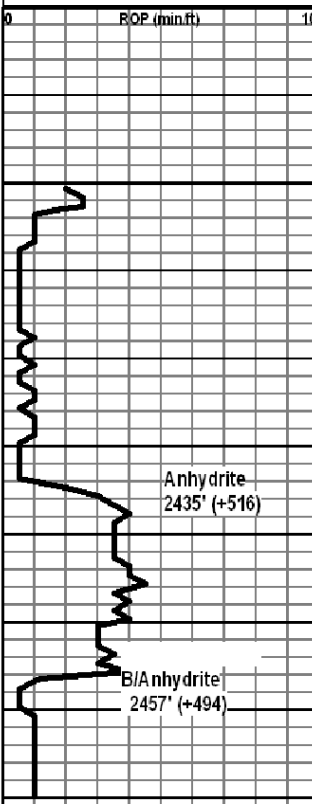
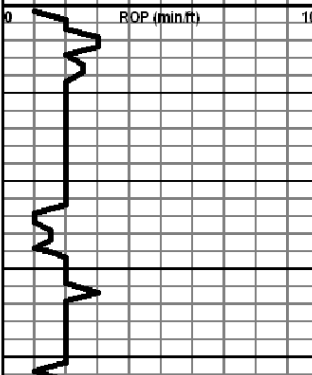
DRILL STEM TESTS

DST No. 7 Cherokee
 Interval: 4528'-4570'

IFP: surface blow, died in 12 minutes
 ISIP: no return

Times: 30-20-0-0
 Recovery: 2' SOCM (50, 95m)
 FP: 17-18 SIP: 41
 HP: 2200-2174 BHT: 117 deg. F

FFP: not taken
 FSIP: not taken

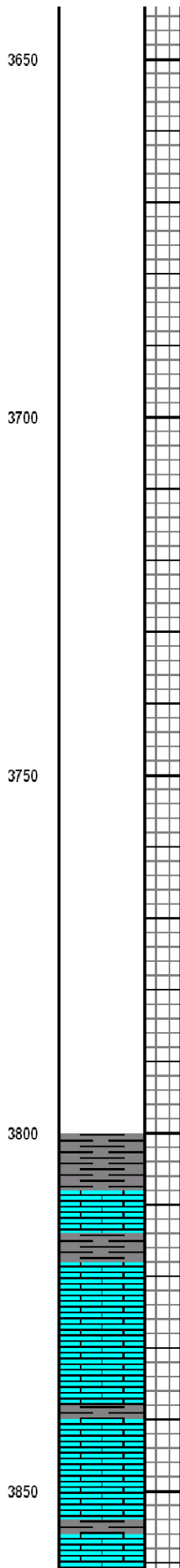
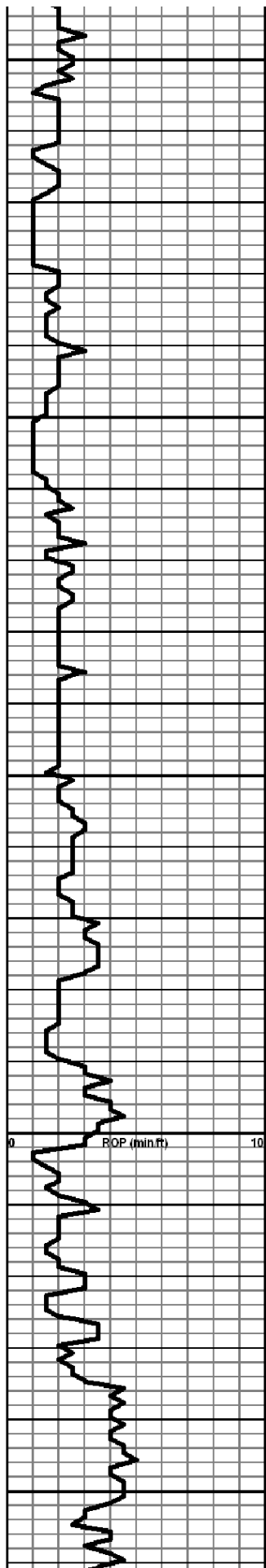
Curve Track 1 ROP (min/ft)	Depth	Lithology	SSO, SA @ 10'S	Geological Descriptions	Remarks
 <p>ROP (min/ft) 0 10</p>	2400			<p>Morning Report Depth/Activity at 7 a.m.</p> <p>Spud at 10:30 am on 2-17-2011</p> <p>2-18 Drilling at 830'</p> <p>2-19 Drilling at 2650'</p> <p>2-20 Drilling at 3611'</p> <p>2-21 Cir for Slips 1 at 4020'</p> <p>2-22 DST No. 2 at 4100'</p> <p>2-23 DST No. 3 at 4194'</p> <p>2-24 DST No. 4 at 4330'</p> <p>2-25 Drilling at 4568'</p> <p>2-26 Drilling at 4650'</p> <p>2-27 Set 5 1/2" Casing</p>	
	2450	Anhydrite 2435' (+516)			
		B/Anhydrite 2457' (+494)			
 <p>ROP (min/ft) 0 10</p>	3600				<p>Bit Trip at 3611"</p> <p>Pipe Strap at 3611' 1.17' long</p> <p>Mud Program: Mud Co/Service Mud, Inc.: Chemical Premix</p> <p>Sample Cuttings: KGS Well Sample Library</p>

Testing: Eagle Testing

Deviation:
222' - 1/4
2799' - 1/2
3611' - 1/8
4020' - 3/4
4690' - 1/4

Electric Logs:
Weatherford:
DIL-GR-SP
CN/CDL-GR-PE
MICRO LOG

Geologist on Location at
3731' at 2:22 p.m. on
2-20-11



Sh-gry/dk gry

Ls-gry fxln mhd fos trc xln por

Sh-gry/dk gry

Ls-lt gry fxln mhd/dns no por

Ls-lt gry fxln mhd trc xln por

Ls-lt gry fxln dns no por with some chit-tan/lt gry fsh opac

Ls-lt gry f mxln mhd trc xln por with some chit-AA

Ls-lt gry/gry fxln dns no por

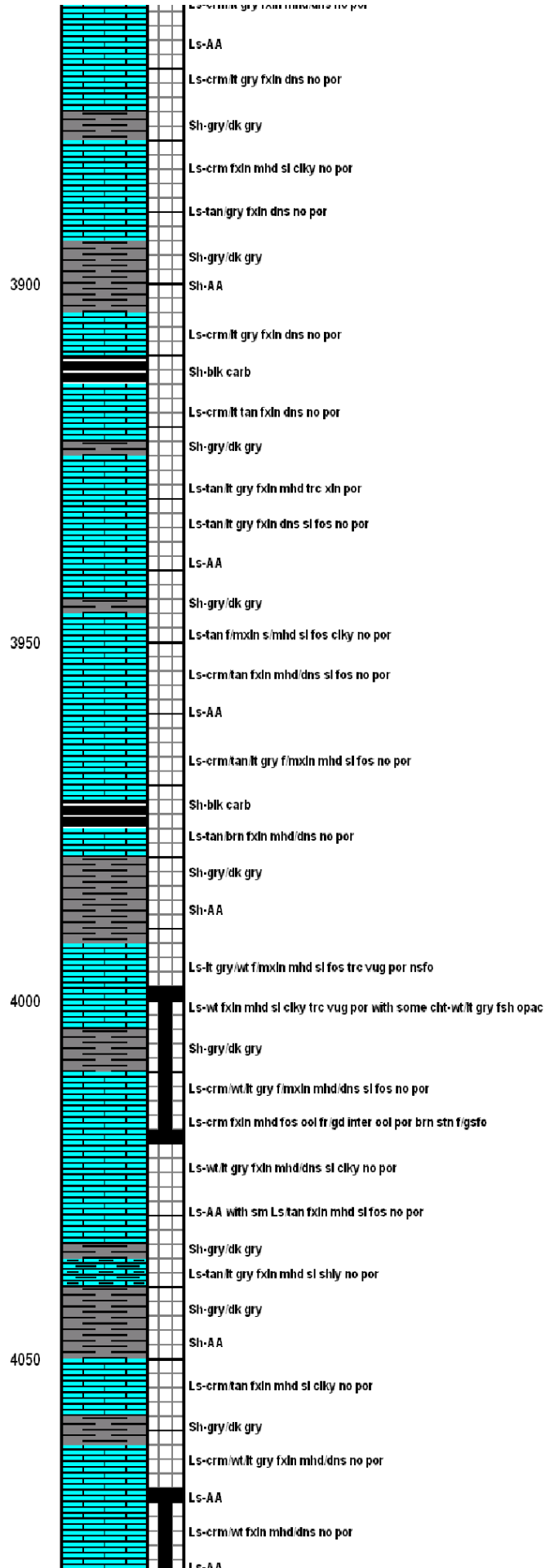
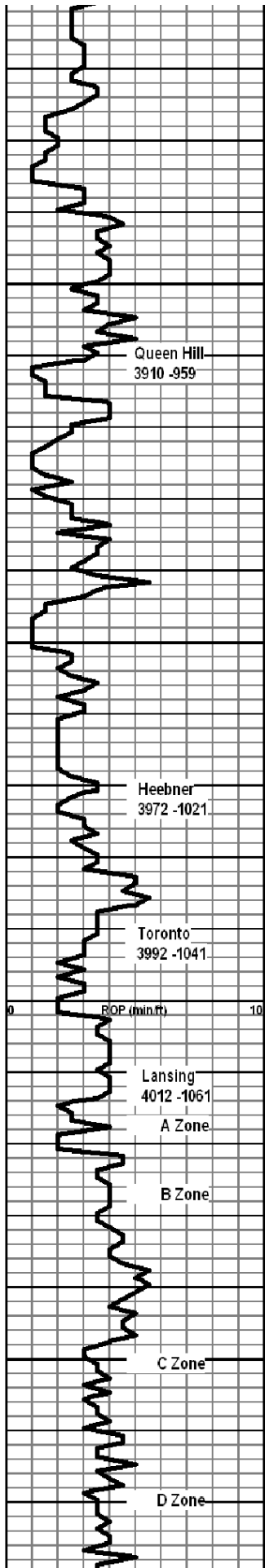
Sh-gry/dk gry

Ls-lt gry/gry fxln dns no por with some chit-lt gry fsh opac

Ls-AA

Sh-gry/dk gry

Ls-lt gry/gry fxln mhd/dns no por



DST NO. 1
3998' to 4020'

CFS at 4008' - 45"

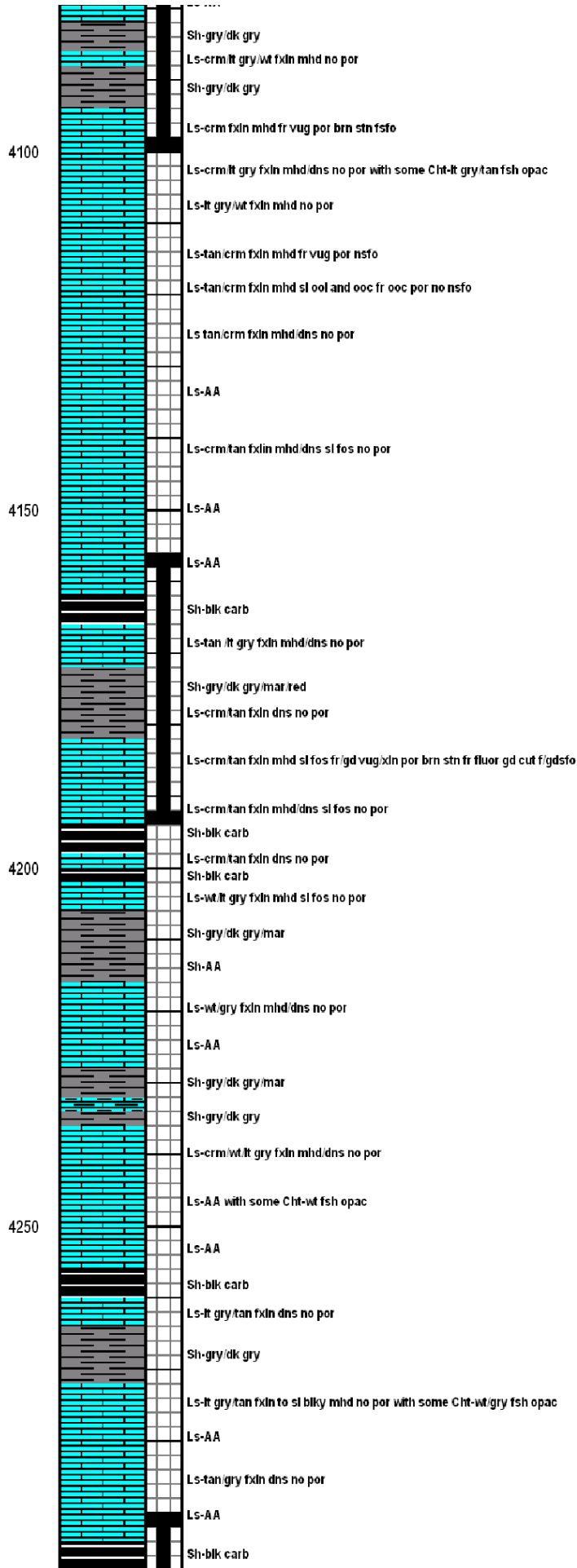
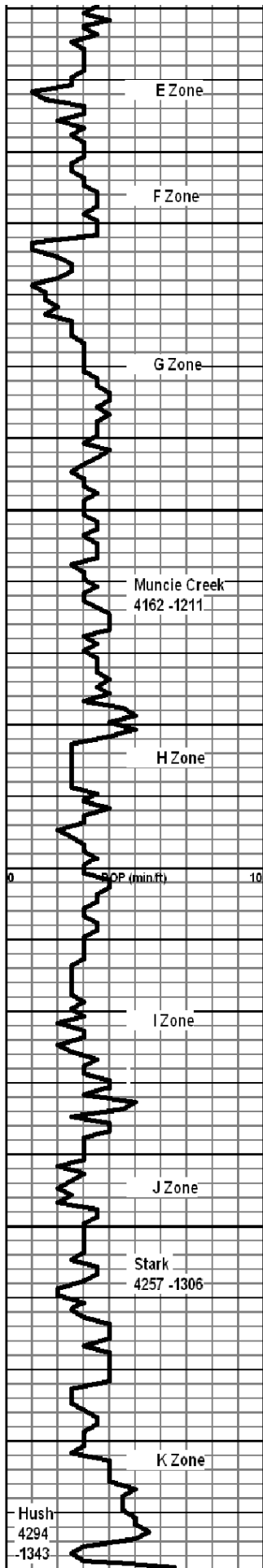
CFS at 4020' - 60"

Pulled 28 stand short trip
at 4020' then cir for test
60"

Mud Data at 4020' at
12:30 p.m. on 2-21-11 Wt
9.1 Vis 53 WL 8.8 pH 10
Chl 1900 YP 14

CFS at 4060' - 45"

DST NO. 2
4068' to 4100'



CFS at 4100' - 60"

Mud Data at 4100' at
11:15 a.m. on 2-22-11 Wt
9.1 Vis 54 WL 8.8 pH 9.5
Chl 2000 YP 17

DST NO. 3

4156' to 4194'

CFS at 4160' - 45"

CFS at 4194' - 75"

Mud Data at 4205' at
10:30 a.m. on 2-23-11 Wt
9.3 Vis 52 WL 9.6 pH 10
Chl 2114 YP 14

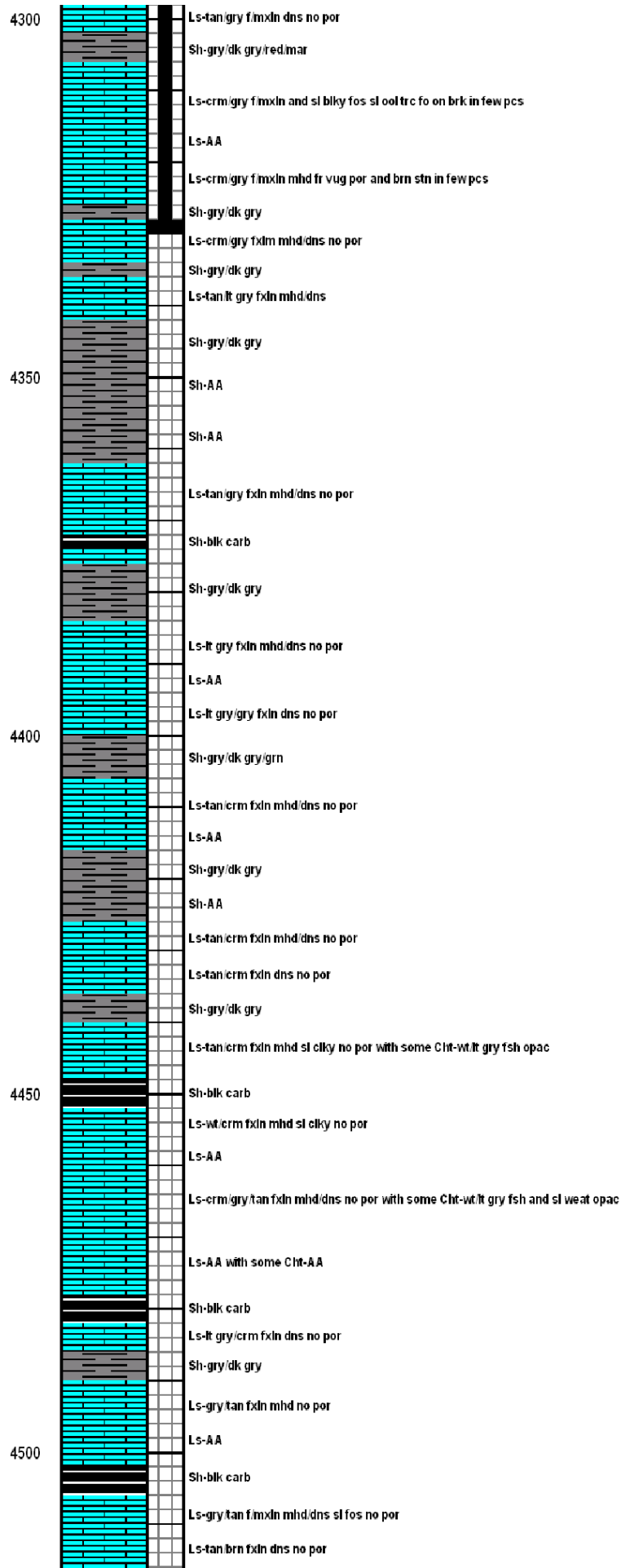
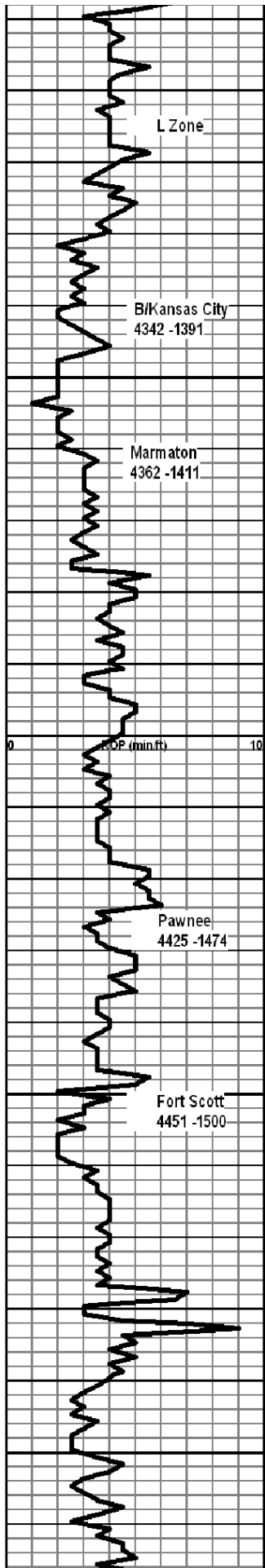
CFS at 4220' - 45"

CFS at 4246' - 45"

CFS at 4272' - 45"

DST NO. 4

4290' to 4330'

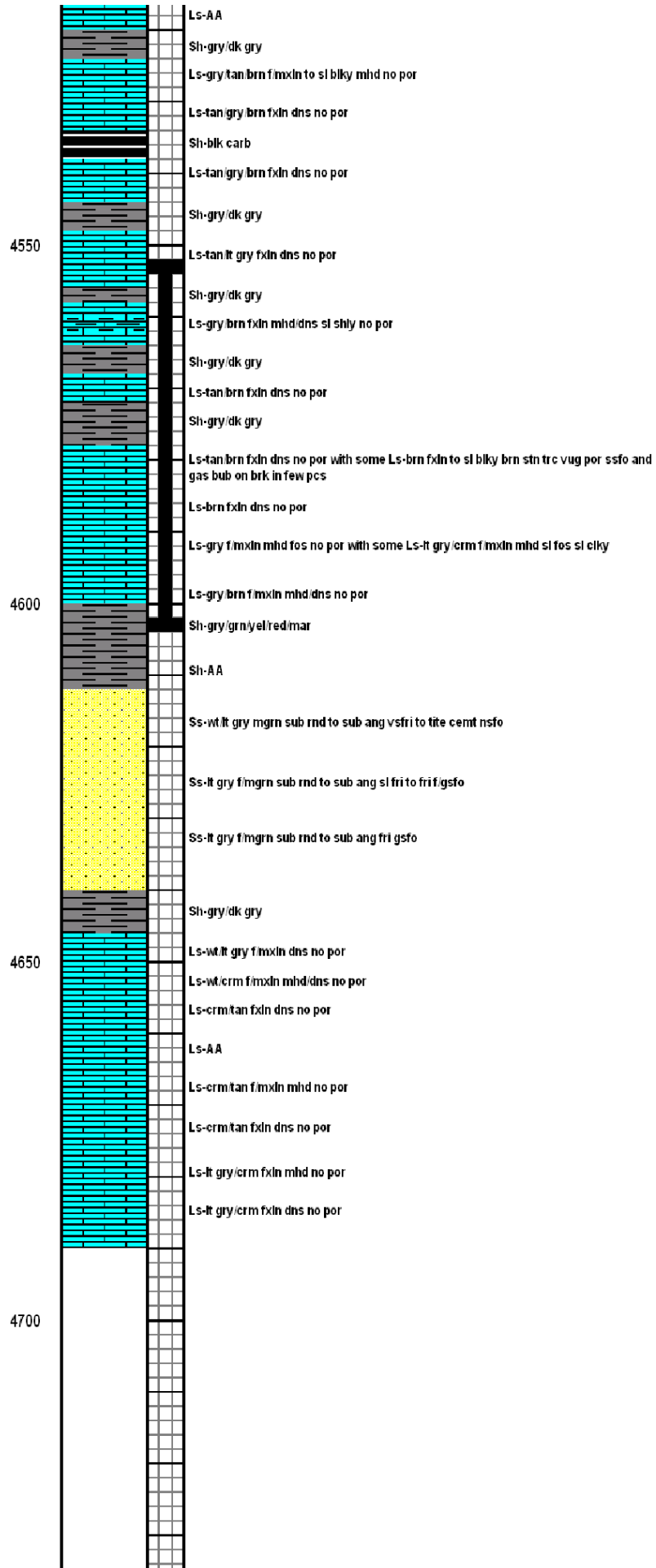
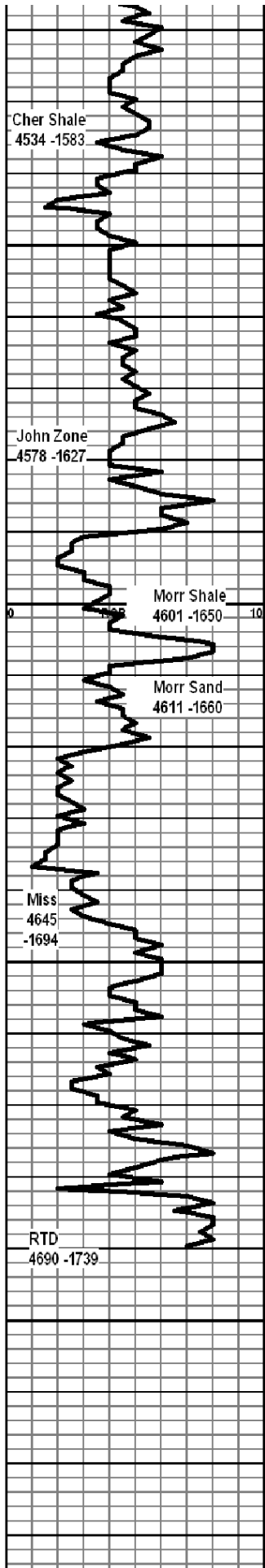


CFS at 4330' - 60"

Pulled 5 stand short trip then Cir for test 60"

Mud Data at 4330' at 10:15 a.m. on 2-24-11 Wt 9.3 Vis 51 WL 8 pH 10.5 Chl 2800 YP 16

CFS at 4476' - 90"



CFS at 4522' 30"

DST NO. 5
4552' to 4604'

CFS at 4568' - 30"
Pulled 10 stand short trip
at 4568' then cir to cond
hole for 30"
Mud Data at 4568' at 6:45
a.m. on 2-25-11 Wt 9.2
Vis 54 WL 7.2 pH 10.5
Chl 2000 YP 17

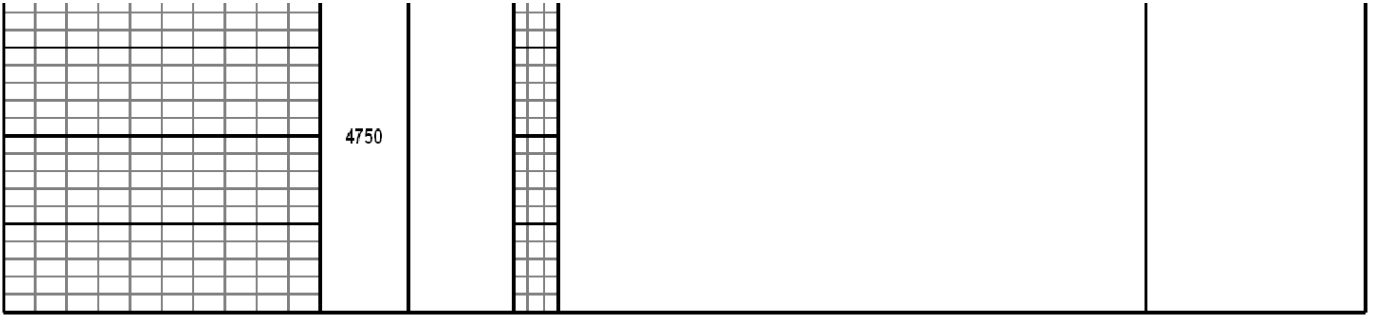
CFS at 4590' - 45"

CFS at 4604' - 120"

Mud Data at 4624' at 6:15
a.m. on 2-26-11 Wt 9.1
Vis 55 WL 7.2 pH 10 Chl
2500 YP 15

Finished Drilling at 10:52
a.m. on 2-26-11 Cir for
Log - 160"

Finished Logging at 7:00
p.m. on 2-26-11





DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

ATTN: MAC ARMSTRONG

9-14S-31W GOVE

HUND 1-9

Start Date: 2011.02.21 @ 17:00:00

End Date: 2011.02.21 @ 22:57:00

Job Ticket #: 1069 DST #: 1

Eagle Testers LLC.

P.O.Box 1011, Great Bend, KS 67530

620-617-7548

Printed: 2011.02.21 @ 18:02:34

GRAND MESA OPERATING
HUND 1-9
9-14S-31W GOVE
DST # 1
LKC-A-
2011.02.21



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1069

DST#: 1

ATTN: MAC ARMSTRONG

Test Start: 2011.02.21 @ 17:00:00

GENERAL INFORMATION:

Formation: **LKC -A-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:20:00

Time Test Ended: 22:57:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15

Interval: **3998.00 ft (KB) To 4020.00 ft (KB) (TVD)**

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4020.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: **6666** Outside

Press @ Run Depth: 80.41 psig @ 4017.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.21

End Date:

2011.02.21

Last Calib.:

2011.02.21

Start Time: 17:00:00

End Time:

22:57:00

Time On Btm:

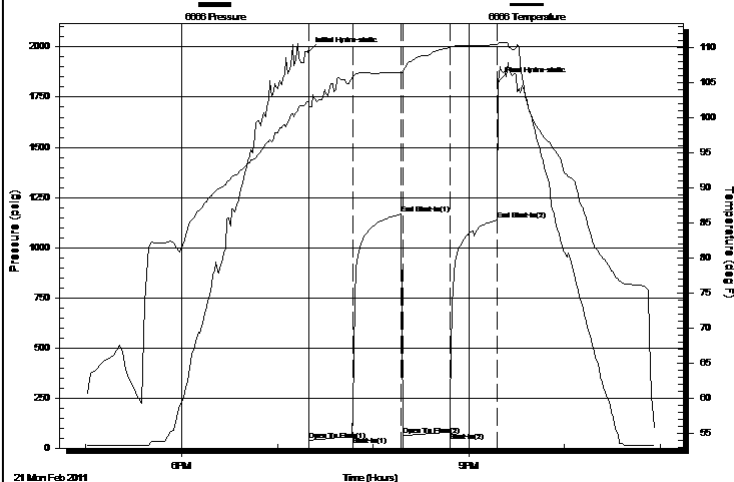
2011.02.21 @ 19:19:30

Time Off Btm:

2011.02.21 @ 21:18:30

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1975.36	102.25	Initial Hydro-static
1	39.01	101.86	Open To Flow (1)
28	60.40	105.69	Shut-In(1)
58	1165.79	106.52	End Shut-In(1)
59	62.19	106.55	Open To Flow (2)
89	80.41	110.08	Shut-In(2)
118	1136.06	110.45	End Shut-In(2)
119	1826.41	110.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MUD 100%MUD	0.30

Gas Rates

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



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1069

DST#: 1

ATTN: MAC ARMSTRONG

Test Start: 2011.02.21 @ 17:00:00

GENERAL INFORMATION:

Formation: **LKC -A-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:20:00

Time Test Ended: 22:57:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15

Interval: **3998.00 ft (KB) To 4020.00 ft (KB) (TVD)**

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4020.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: **6651**

Inside

Press @ Run Depth: 1137.54 psig @ 4016.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.21

End Date:

2011.02.21

Last Calib.:

2011.02.21

Start Time: 17:00:00

End Time:

23:01:30

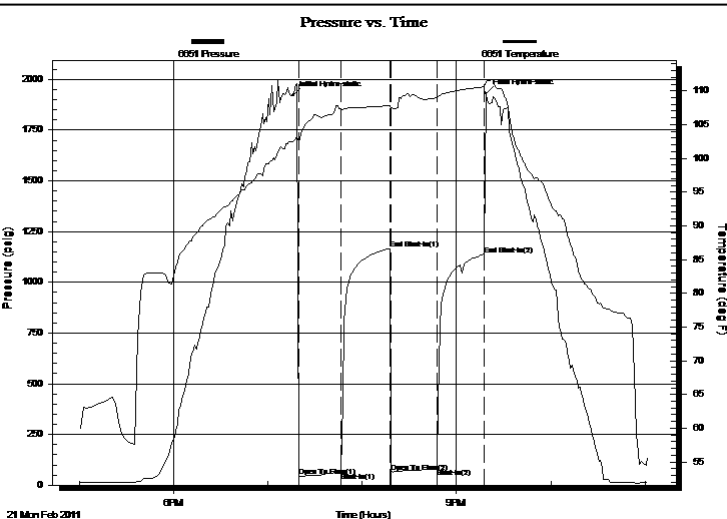
Time On Btm:

2011.02.21 @ 19:16:00

Time Off Btm:

2011.02.21 @ 21:18:30

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1922.14	102.52	Initial Hydro-static
4	43.41	102.49	Open To Flow (1)
31	62.32	107.28	Shut-In(1)
62	1166.60	107.79	End Shut-In(1)
63	65.95	107.46	Open To Flow (2)
92	82.79	108.97	Shut-In(2)
122	1137.54	110.60	End Shut-In(2)
123	1932.63	111.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MUD 100%MUD	0.30

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1069

DST#: 1

ATTN: MAC ARMSTRONG

Test Start: 2011.02.21 @ 17:00:00

Tool Information

Drill Pipe:	Length: 3852.00 ft	Diameter: 3.88 inches	Volume: 56.33 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 56.92 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.75 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3998.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	22.00 ft				
Tool Length:	50.75 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

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

Shut-in tool	5.00			3974.25	
Hydraulic tool	5.00			3979.25	
Change over sub	0.75			3980.00	
Jars	6.00			3986.00	
Safety Joint	2.00			3988.00	
Packer	5.00			3993.00	28.75 Bottom Of Top Packer
Packer	5.00			3998.00	
Anchor	17.00			4015.00	
Recorder	1.00	6651	Inside	4016.00	
Recorder	1.00	6666	Outside	4017.00	
Bull plug	3.00			4020.00	22.00 Bottom Packers & Anchor

Total Tool Length: 50.75



DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1069

DST#: 1

ATTN: MAC ARMSTRONG

Test Start: 2011.02.21 @ 17:00:00

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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MUD 100%MUD	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

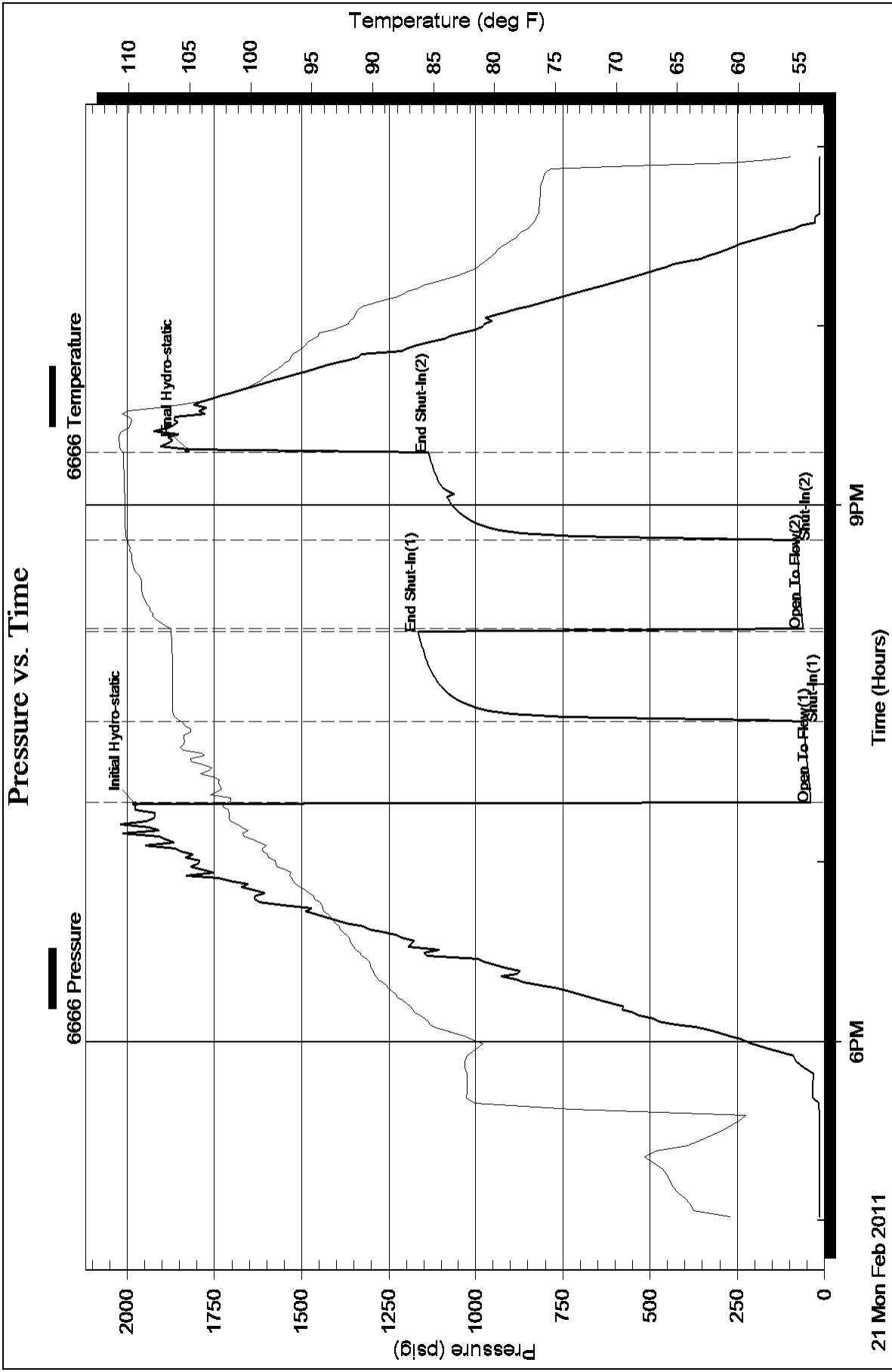
Num Gas Bombs: 0

Serial #:

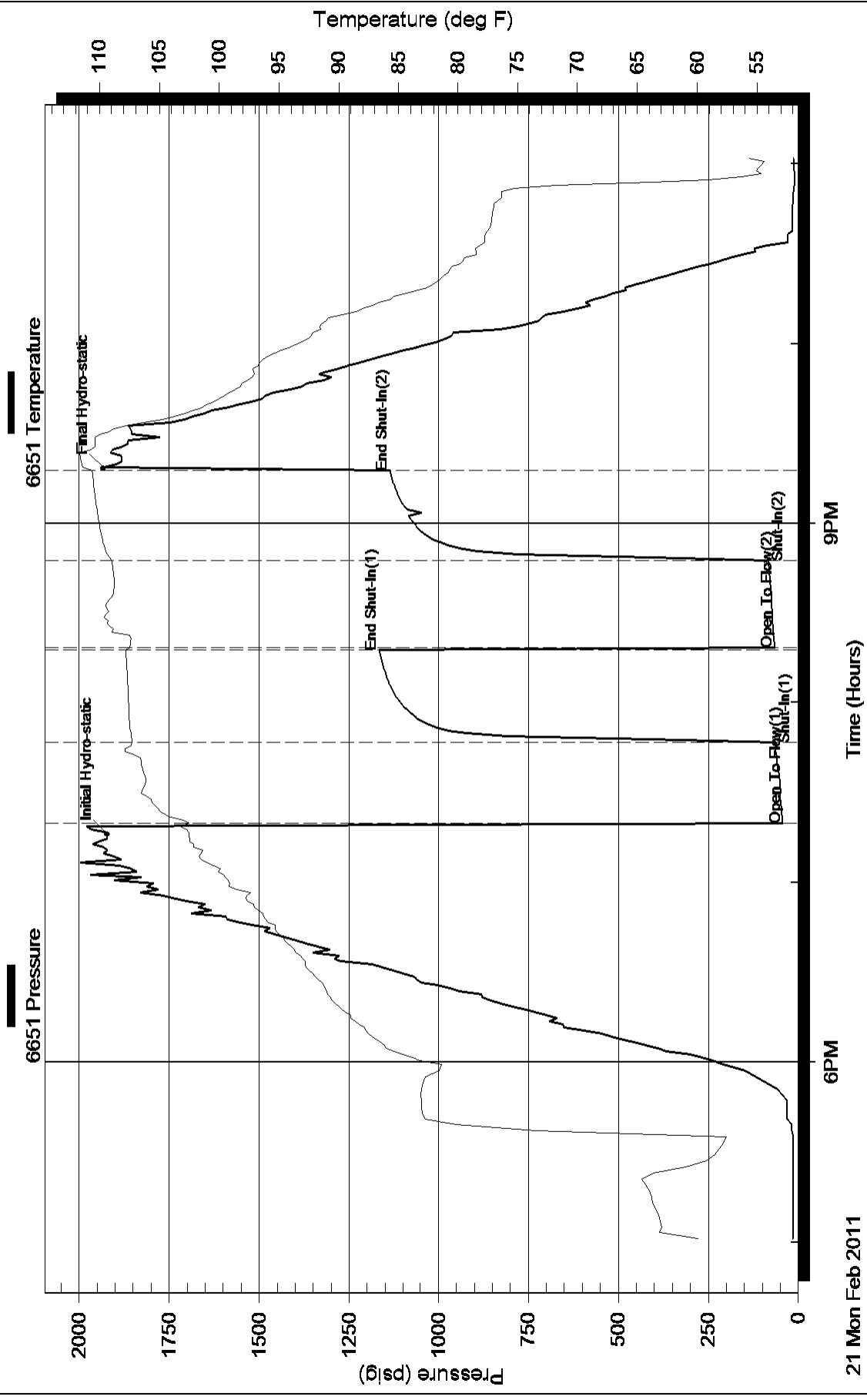
Laboratory Name:

Laboratory Location:

Recovery Comments:



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

ATTN: MAC ARMSTRONG

9-14S-31W GOVE

HUND 1-9

Start Date: 2011.02.22 @ 10:00:00

End Date: 2011.02.22 @ 16:54:00

Job Ticket #: 1070 DST #: 2

Eagle Testers LLC.

P.O.Box 1011, Great Bend, KS 67530

620-617-7548

Printed: 2011.02.22 @ 10:27:59

GRAND MESA OPERATING
HUND 1-9
9-14S-31W GOVE
DST # 2
LKC-E-
2011.02.22



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1070

DST#: 2

ATTN: MAC ARMSTRONG

Test Start: 2011.02.22 @ 10:00:00

GENERAL INFORMATION:

Formation: **LKC-E-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:28:00

Time Test Ended: 16:54:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 52 MILES RT OAKLE

Interval: 4068.00 ft (KB) To 4100.00 ft (KB) (TVD)

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4100.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6666

Inside

Press @ RunDepth: 55.26 psig @ 4096.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.22

End Date:

2011.02.22

Last Calib.:

2011.02.22

Start Time: 10:00:00

End Time:

16:54:00

Time On Btm:

2011.02.22 @ 12:26:30

Time Off Btm:

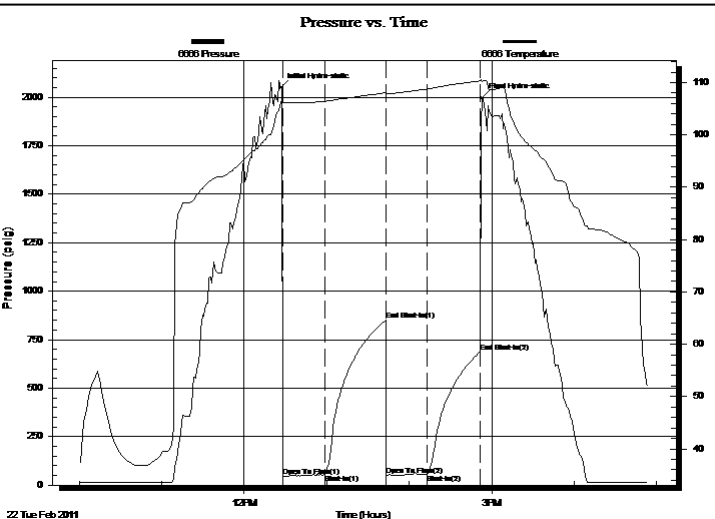
2011.02.22 @ 14:53:00

TEST COMMENT: 30-INITIAL OPENING WEAK BLOW BUILT TO 2 INCHES INTO WATER

45-INITIAL SHUT IN NO BLOW BACK

30-FINAL OPENING SURFACE BLOW

30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2048.15	106.19	Initial Hydro-static
2	44.77	106.16	Open To Flow (1)
32	53.56	106.40	Shut-In(1)
77	849.58	108.06	End Shut-In(1)
77	51.55	107.85	Open To Flow (2)
107	55.26	108.77	Shut-In(2)
145	685.88	110.31	End Shut-In(2)
147	1996.18	110.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	MUD 100#MUD	0.10

Gas Rates

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



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

ATTN: MAC ARMSTRONG

Job Ticket: 1070

DST#: 2

Test Start: 2011.02.22 @ 10:00:00

GENERAL INFORMATION:

Formation: **LKC-E-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:28:00

Time Test Ended: 16:54:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 52 MILES RT OAKLE

Interval: 4068.00 ft (KB) To 4100.00 ft (KB) (TVD)

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4100.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6651 Outside

Press @ RunDepth: 684.85 psig @ 4097.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.22

End Date: 2011.02.22

Last Calib.: 2011.02.22

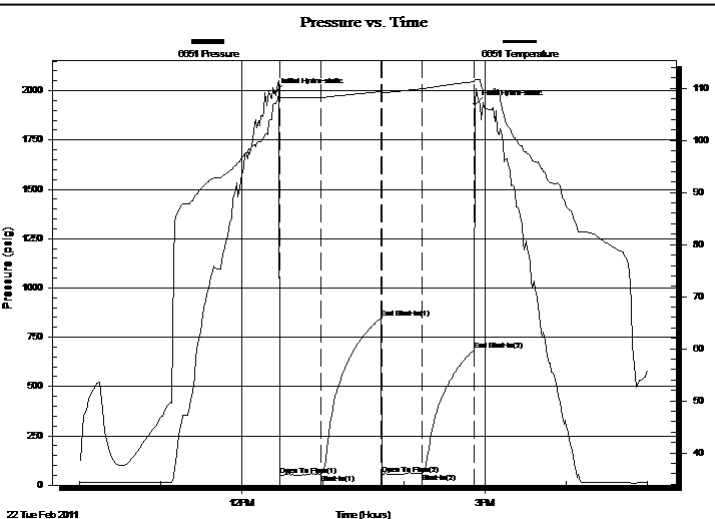
Start Time: 10:00:00

End Time: 17:01:00

Time On Btm: 2011.02.22 @ 12:24:30

Time Off Btm: 2011.02.22 @ 14:52:30

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



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1989.77	107.08	Initial Hydro-static
4	49.02	108.35	Open To Flow (1)
34	52.64	108.25	Shut-In(1)
79	848.63	109.42	End Shut-In(1)
80	55.57	109.20	Open To Flow (2)
109	57.82	109.93	Shut-In(2)
148	684.85	111.29	End Shut-In(2)
148	1931.10	111.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	MUD 100#MUD	0.10

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1070

DST#: 2

ATTN: MAC ARMSTRONG

Test Start: 2011.02.22 @ 10:00:00

Tool Information

Drill Pipe:	Length: 3922.00 ft	Diameter: 3.88 inches	Volume: 57.36 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:	20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 57.95 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.75 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4068.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	32.00 ft				
Tool Length:	60.75 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-in tool	5.00			4044.25	
Hydraulic tool	5.00			4049.25	
Change over sub	0.75			4050.00	
Jars	6.00			4056.00	
Safety Joint	2.00			4058.00	
Packer	5.00			4063.00	28.75 Bottom Of Top Packer
Packer	5.00			4068.00	
Anchor	27.00			4095.00	
Recorder	1.00	6666	Inside	4096.00	
Recorder	1.00	6651	Outside	4097.00	
Bull plug	3.00			4100.00	32.00 Bottom Packers & Anchor
Total Tool Length:		60.75			



DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING
1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206
ATTN: MAC ARMSTRONG

HUND 1-9
9-14S-31W GOVE
Job Ticket: 1070 **DST#: 2**
Test Start: 2011.02.22 @ 10:00:00

Mud and Cushion Information

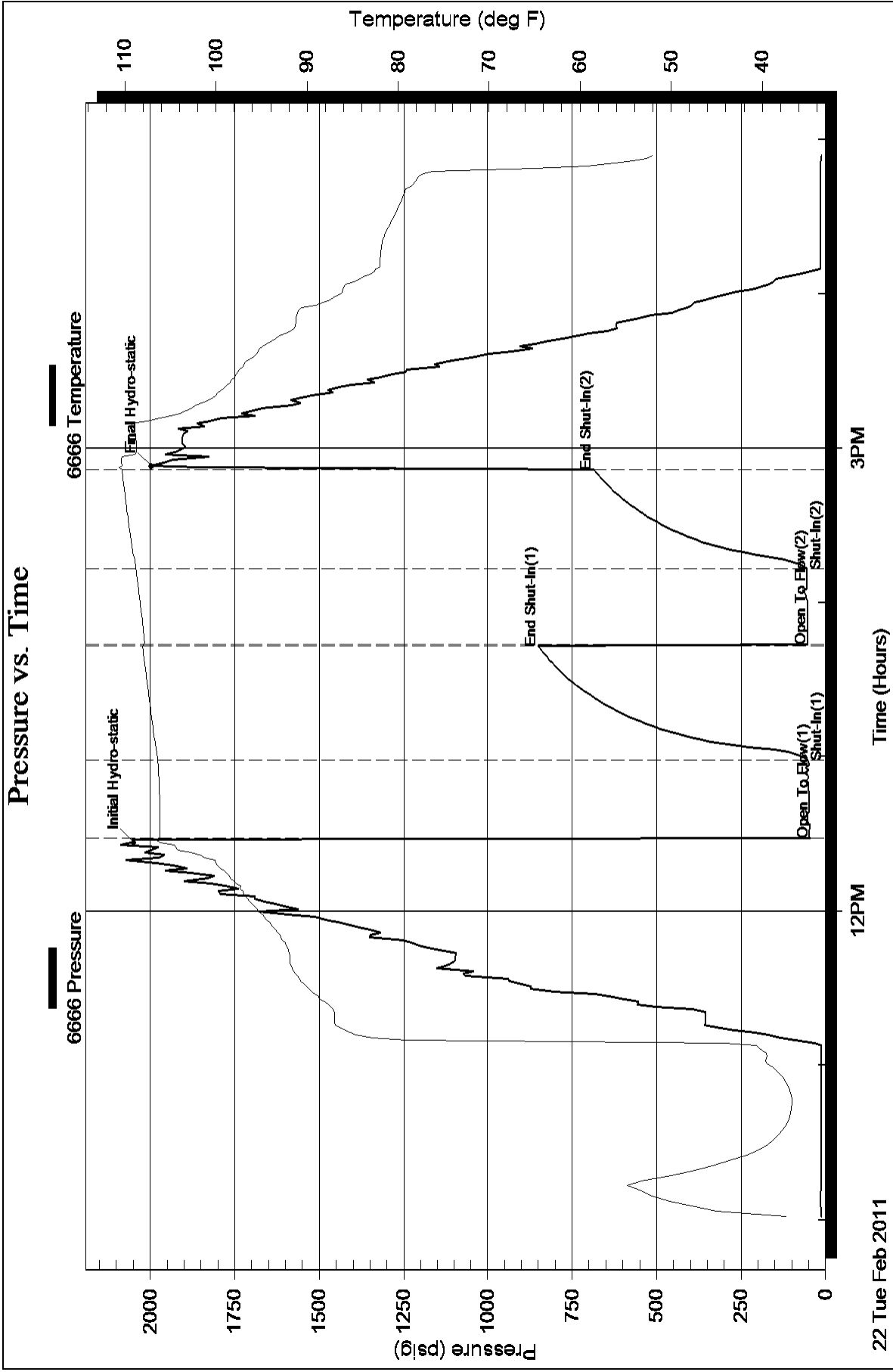
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.80 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1900.00 ppm			
Filter Cake: inches			

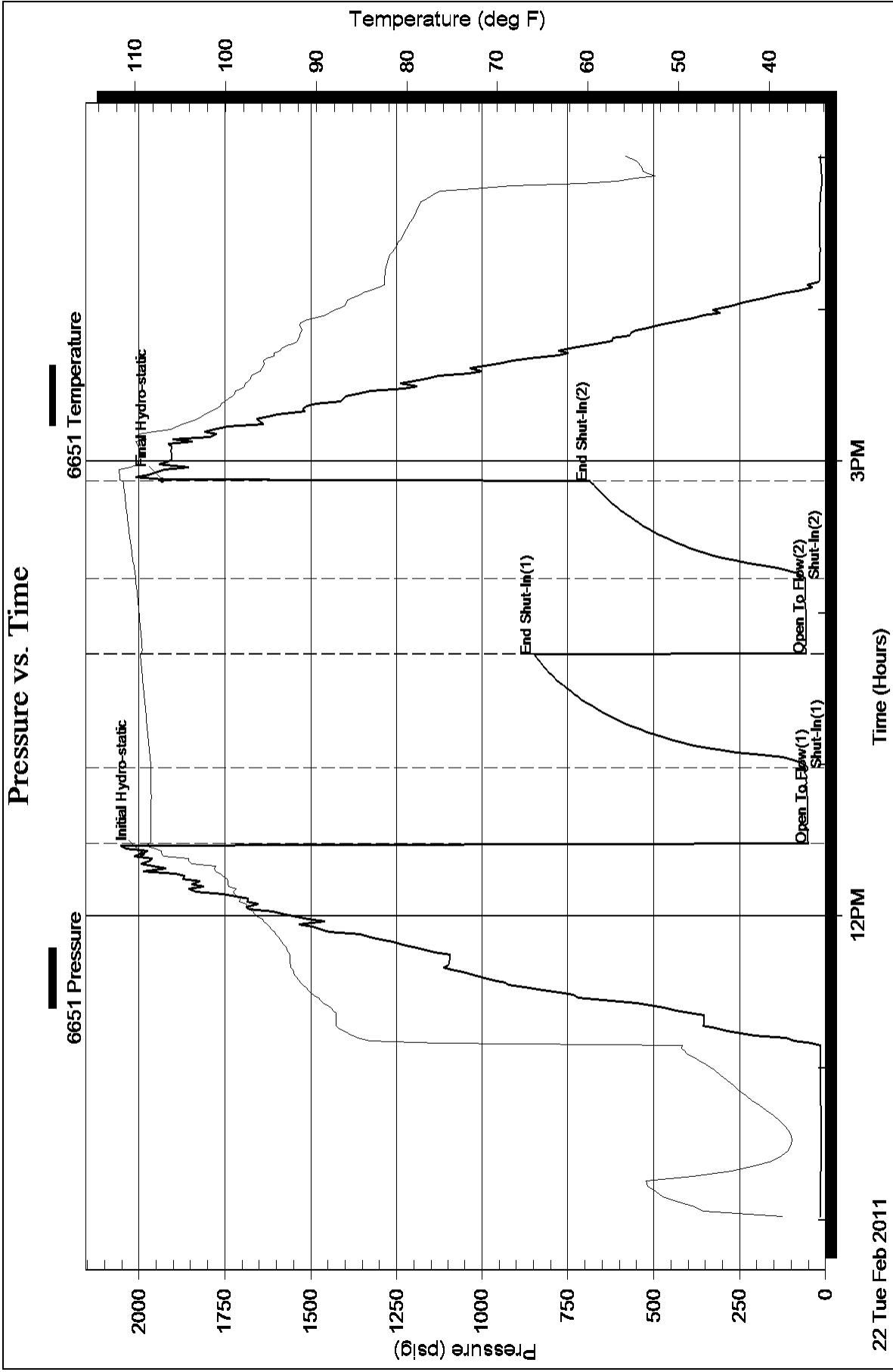
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	MUD 100#MUD	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

ATTN: MAC ARMSTRONG

9-14S-31W GOVE

HUND 1-9

Start Date: 2011.02.23 @ 05:00:00

End Date: 2011.02.23 @ 11:20:30

Job Ticket #: 1071 DST #: 3

Eagle Testers LLC.

P.O.Box 1011, Great Bend, KS 67530

620-617-7548

Printed: 2011.02.23 @ 05:25:48

GRAND MESA OPERATING
HUND 1-9
9-14S-31W GOVE
DST # 3
LKC-H-
2011.02.23



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1071

DST#: 3

ATTN: MAC ARMSTRONG

Test Start: 2011.02.23 @ 05:00:00

GENERAL INFORMATION:

Formation: **LKC -H-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:01:30

Time Test Ended: 11:20:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 52 MILES RT OAKLE

Interval: 4156.00 ft (KB) To 4194.00 ft (KB) (TVD)

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4194.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6651

Inside

Press @ Run Depth: 82.53 psig @ 4190.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.23

End Date:

2011.02.23

Last Calib.:

2011.02.23

Start Time: 05:00:00

End Time:

11:20:30

Time On Btm:

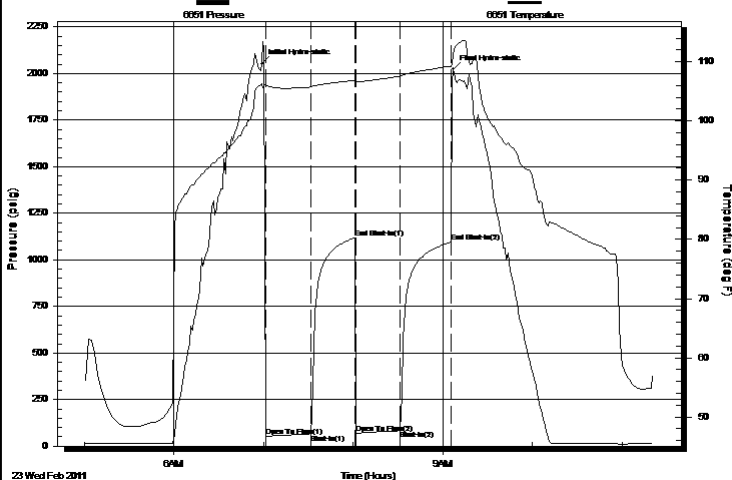
2011.02.23 @ 06:59:00

Time Off Btm:

2011.02.23 @ 09:07:00

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2052.42	106.25	Initial Hydro-static
3	52.73	105.92	Open To Flow (1)
33	66.02	105.71	Shut-In(1)
63	1118.94	106.91	End Shut-In(1)
63	71.09	106.52	Open To Flow (2)
93	82.53	107.56	Shut-In(2)
127	1094.46	109.25	End Shut-In(2)
128	2022.63	111.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	MUD 100%MUD	0.32

Gas Rates

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



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1071

DST#: 3

ATTN: MAC ARMSTRONG

Test Start: 2011.02.23 @ 05:00:00

GENERAL INFORMATION:

Formation: **LKC -H-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:01:30

Time Test Ended: 11:20:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 52 MILES RT OAKLE

Interval: **4156.00 ft (KB) To 4194.00 ft (KB) (TVD)**

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4194.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: **6666**

Outside

Press @ Run Depth: 1093.31 psig @ 4191.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.23

End Date:

2011.02.23

Last Calib.:

2011.02.23

Start Time: 05:00:00

End Time:

11:28:00

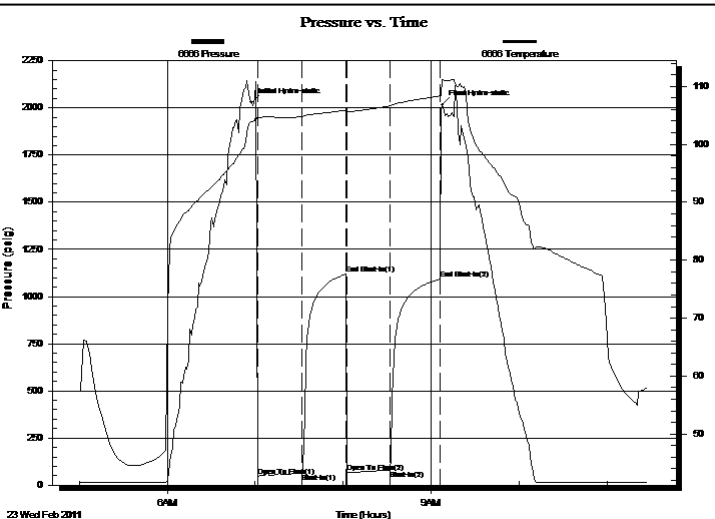
Time On Btm:

2011.02.23 @ 06:57:30

Time Off Btm:

2011.02.23 @ 09:07:30

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2028.70	103.85	Initial Hydro-static
4	47.30	104.25	Open To Flow (1)
35	63.17	104.72	Shut-In(1)
65	1118.73	105.86	End Shut-In(1)
65	66.35	105.64	Open To Flow (2)
95	79.92	106.60	Shut-In(2)
129	1093.31	108.34	End Shut-In(2)
130	2016.18	111.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	MUD 100%MUD	0.32

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1071

DST#: 3

ATTN: MAC ARMSTRONG

Test Start: 2011.02.23 @ 05:00:00

Tool Information

Drill Pipe:	Length: 4010.00 ft	Diameter: 3.88 inches	Volume: 58.64 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 59.23 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.75 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4156.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	38.00 ft				
Tool Length:	66.75 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

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

Shut-in tool	5.00			4132.25	
Hydraulic tool	5.00			4137.25	
Change over sub	0.75			4138.00	
Jars	6.00			4144.00	
Safety Joint	2.00			4146.00	
Packer	5.00			4151.00	28.75 Bottom Of Top Packer
Packer	5.00			4156.00	
Anchor	33.00			4189.00	
Recorder	1.00	6651	Inside	4190.00	
Recorder	1.00	6666	Outside	4191.00	
Bull plug	3.00			4194.00	38.00 Bottom Packers & Anchor

Total Tool Length: 66.75



DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1071

DST#: 3

ATTN: MAC ARMSTRONG

Test Start: 2011.02.23 @ 05:00:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
65.00	MUD 100%MUD	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

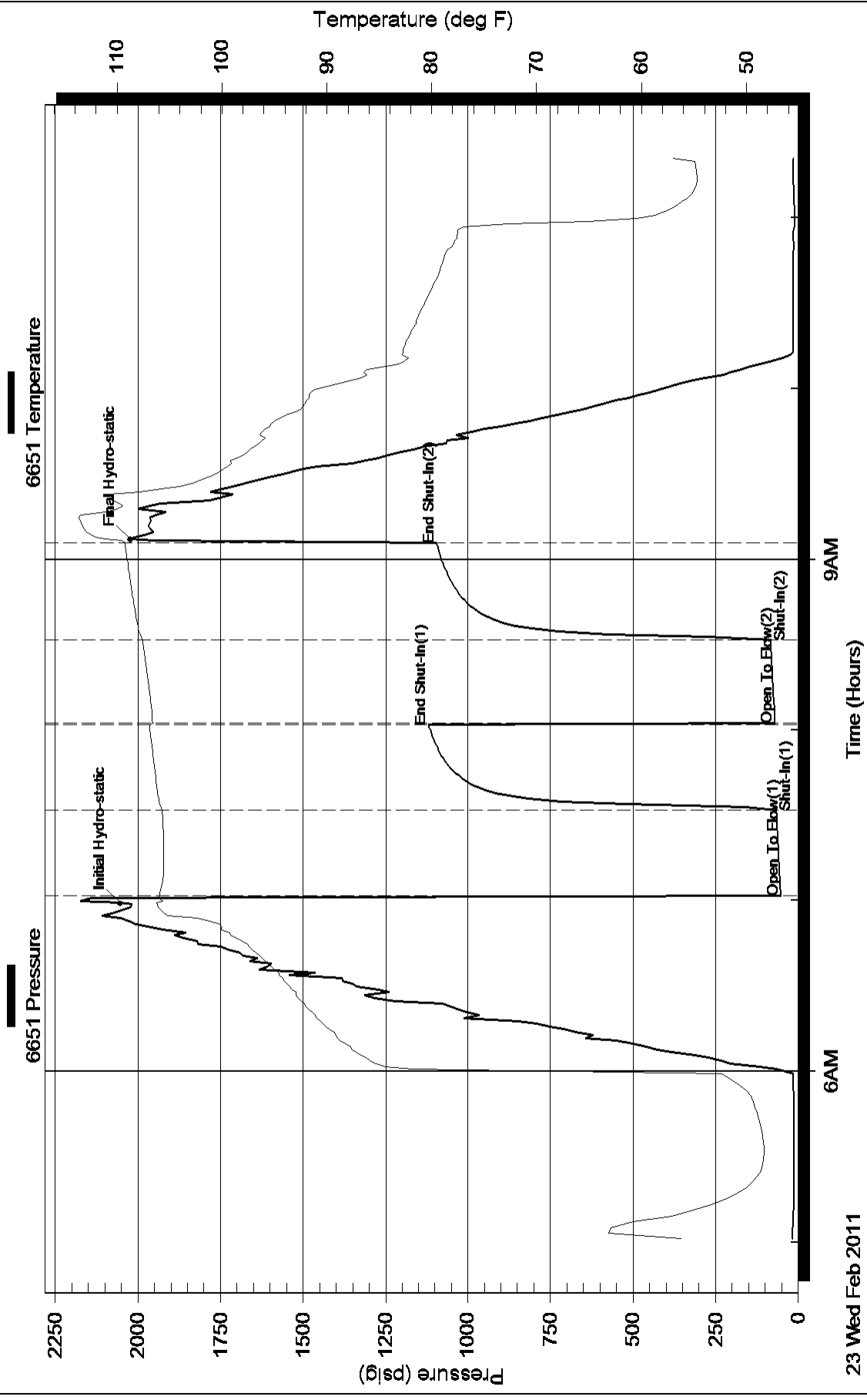
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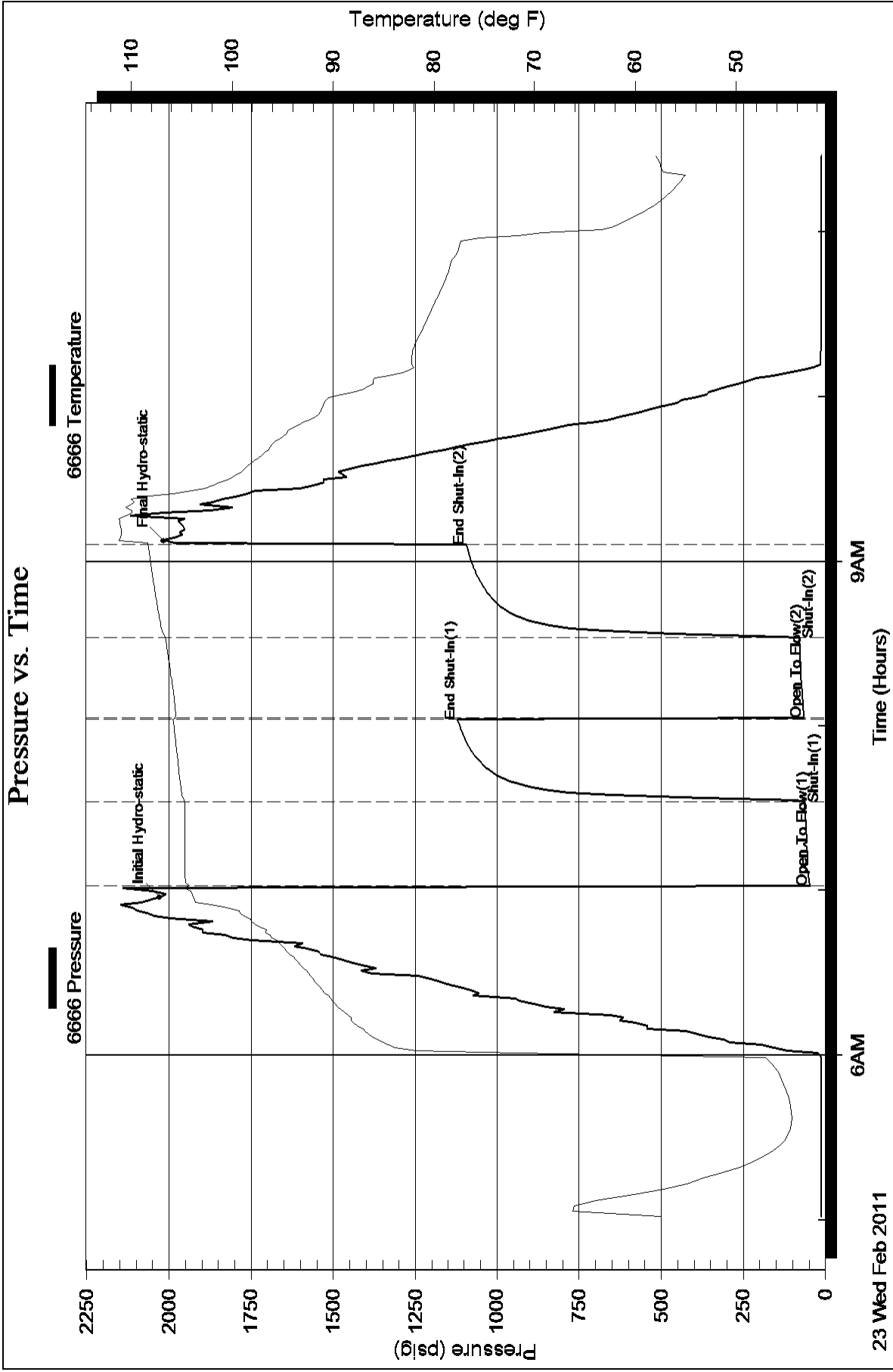
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

ATTN: MAC ARMSTRONG

9-14S-31W GOVE

HUND 1-9

Start Date: 2011.02.24 @ 08:00:00

End Date: 2011.02.24 @ 14:21:30

Job Ticket #: 1072 DST #: 4

Eagle Testers LLC.

P.O.Box 1011, Great Bend, KS 67530

620-617-7548

Printed: 2011.02.24 @ 08:27:46

GRAND MESA OPERATING
HUND 1-9
9-14S-31W GOVE
DST # 4
LKC-L-
2011.02.24



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1072

DST#: 4

ATTN: MAC ARMSTRONG

Test Start: 2011.02.24 @ 08:00:00

GENERAL INFORMATION:

Formation: **LKC -L-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:15:00

Time Test Ended: 14:21:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 52 MRT OAKLEY KS

Interval: **4290.00 ft (KB) To 4330.00 ft (KB) (TVD)**

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: **6666**

Outside

Press @ Run Depth: 47.01 psig @ 4327.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.24

End Date:

2011.02.24

Last Calib.:

2011.02.24

Start Time: 08:00:00

End Time:

14:21:30

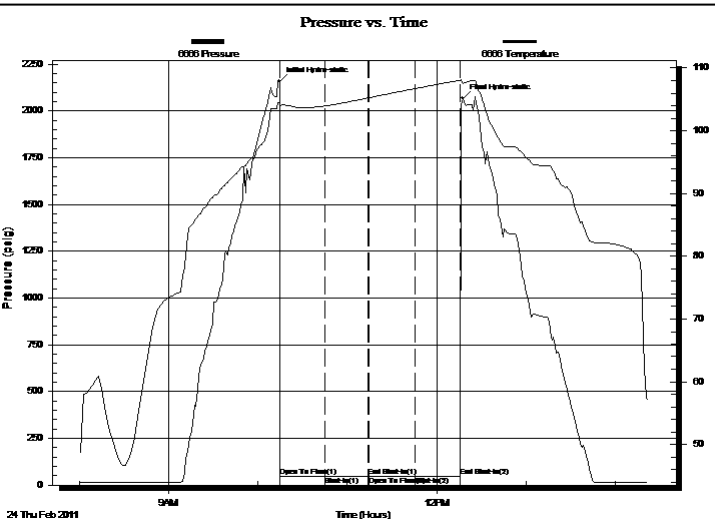
Time On Btm:

2011.02.24 @ 10:14:30

Time Off Btm:

2011.02.24 @ 12:17:30

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING WEAK SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2158.63	104.38	Initial Hydro-static
1	45.17	103.98	Open To Flow (1)
31	45.57	103.96	Shut-In(1)
60	45.84	105.23	End Shut-In(1)
60	45.57	105.26	Open To Flow (2)
91	47.01	106.73	Shut-In(2)
122	47.18	108.03	End Shut-In(2)
123	2067.64	107.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	MUD CUT OIL 30%M70%OIL	0.02

Gas Rates

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



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1072

DST#: 4

ATTN: MAC ARMSTRONG

Test Start: 2011.02.24 @ 08:00:00

GENERAL INFORMATION:

Formation: **LKC -L-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:15:00

Time Test Ended: 14:21:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 52 MRT OAKLEY KS

Interval: **4290.00 ft (KB) To 4330.00 ft (KB) (TVD)**

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4330.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: **6651**

Inside

Press @ Run Depth: 51.82 psig @ 4326.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.02.24

End Date:

2011.02.24

Last Calib.:

2011.02.24

Start Time: 08:00:00

End Time:

14:29:30

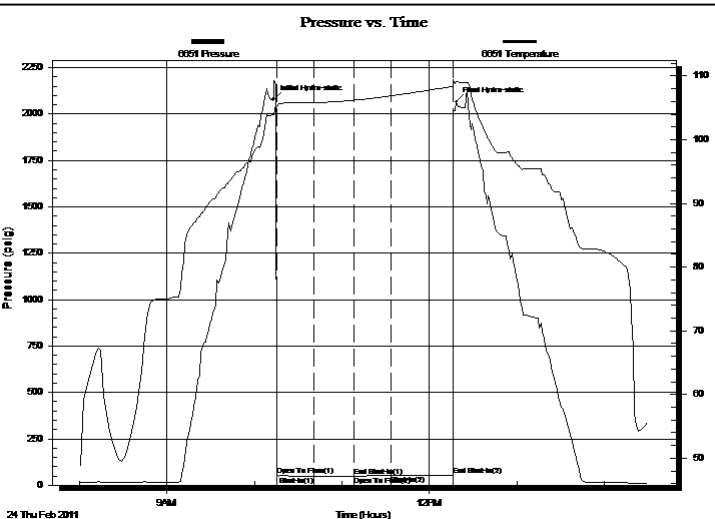
Time On Btm:

2011.02.24 @ 10:13:00

Time Off Btm:

2011.02.24 @ 12:18:30

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING WEAK SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2078.07	103.92	Initial Hydro-static
3	50.25	105.23	Open To Flow (1)
28	49.85	105.85	Shut-In(1)
55	50.00	106.19	End Shut-In(1)
56	49.96	106.20	Open To Flow (2)
81	51.28	106.88	Shut-In(2)
123	51.82	108.36	End Shut-In(2)
126	2065.29	109.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	MUD CUT OIL 30%M70%OIL	0.02

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1072

DST#: 4

ATTN: MAC ARMSTRONG

Test Start: 2011.02.24 @ 08:00:00

Tool Information

Drill Pipe:	Length: 4144.00 ft	Diameter: 3.88 inches	Volume: 60.60 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 61.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.75 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4290.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	68.75 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut-in tool	5.00			4266.25	
Hydraulic tool	5.00			4271.25	
Change over sub	0.75			4272.00	
Jars	6.00			4278.00	
Safety Joint	2.00			4280.00	
Packer	5.00			4285.00	28.75 Bottom Of Top Packer
Packer	5.00			4290.00	
Anchor	35.00			4325.00	
Recorder	1.00	6651	Inside	4326.00	
Recorder	1.00	6666	Outside	4327.00	
Bull plug	3.00			4330.00	40.00 Bottom Packers & Anchor

Total Tool Length: 68.75



DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1072

DST#: 4

ATTN: MAC ARMSTRONG

Test Start: 2011.02.24 @ 08:00:00

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:

bbbl

Water Loss: 9.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	MUD CUT OIL 30%M70%OIL	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

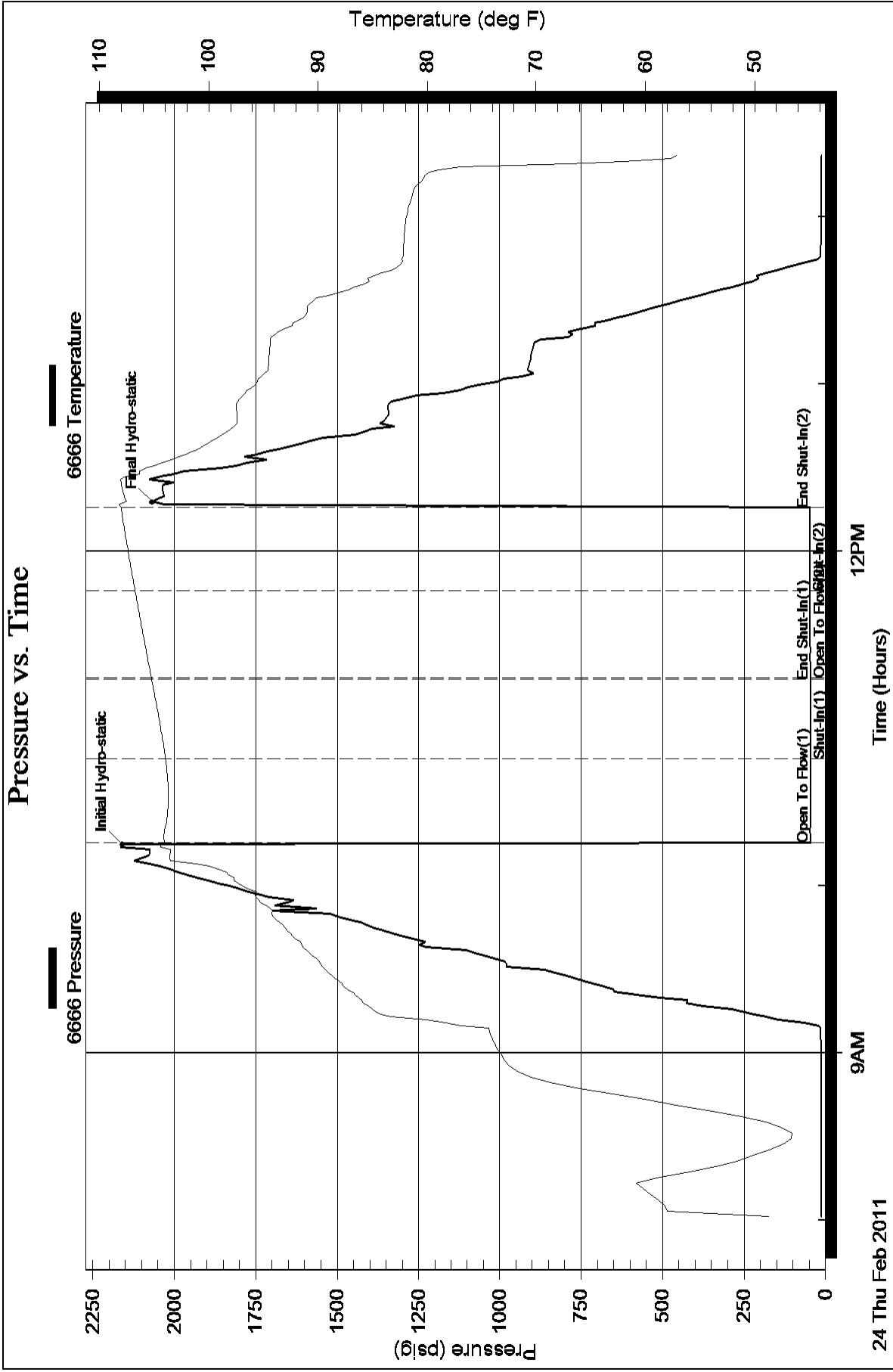
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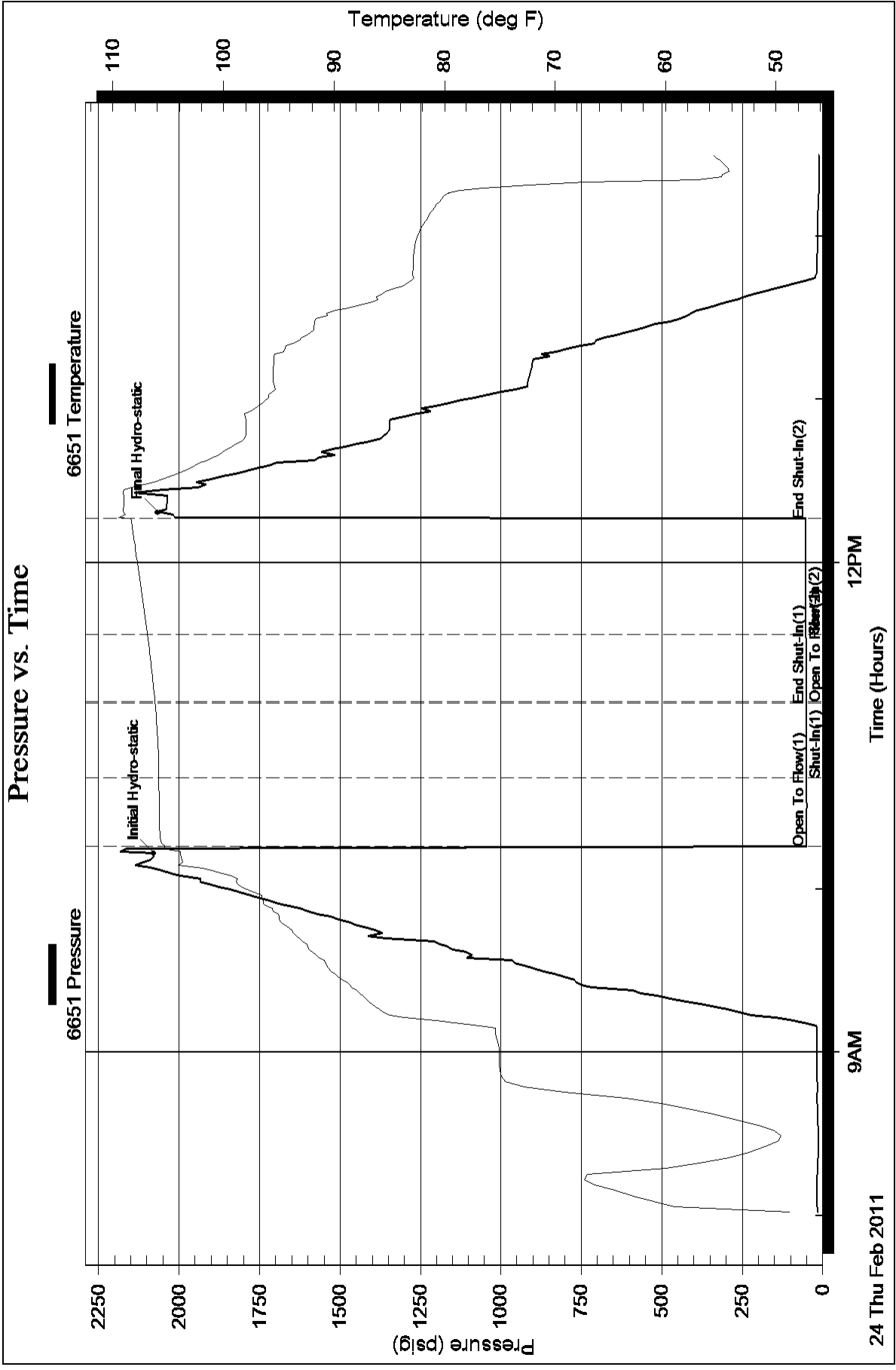
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

ATTN: MAC ARMSTRONG

9-14S-31W GOVE

HUND 1-9

Start Date: 2011.02.26 @ 01:00:00

End Date: 2011.02.26 @ 10:32:00

Job Ticket #: 1073 DST #: 5

Eagle Testers LLC.

P.O.Box 1011, Great Bend, KS 67530

620-617-7548

Printed: 2011.02.26 @ 01:48:19

GRAND MESA OPERATING
HUND 1-9
9-14S-31W GOVE
DST # 5
JOHNSON
2011.02.26



DRILL STEM TEST REPORT

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1073

DST#: 5

ATTN: MAC ARMSTRONG

Test Start: 2011.02.26 @ 01:00:00

GENERAL INFORMATION:

Formation: **JOHNSON**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:02:30

Time Test Ended: 10:32:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 52 MRT OAKLEY

Interval: 4552.00 ft (KB) To 4604.00 ft (KB) (TVD)

Reference Elevations: 2953.00 ft (KB)

Total Depth: 4604.00 ft (KB) (TVD)

2946.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6666 Outside

Press @ Run Depth: psig @ 4601.00 ft (KB)

Capacity: 50000.00 psig

Start Date: 2011.02.26

End Date: 2011.02.26

Last Calib.: 2011.02.26

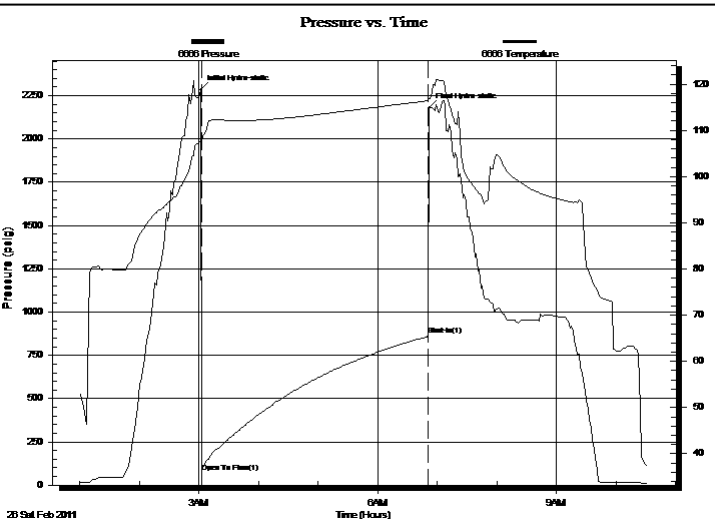
Start Time: 01:00:00

End Time: 10:32:00

Time On Btm: 2011.02.26 @ 03:02:00

Time Off Btm: 2011.02.26 @ 06:52:00

TEST COMMENT: 30-INITIAL OPENING GOOD BLOW BOTTOM BUCKET IN 8 MINS
45-INITIAL SHUT IN GOOD BLOW BACK BOTTOM BUCKET
60-FINAL OPENING GOOD BLOW BOTTOM BUCKET IN 6 MINS
90-FINAL SHUT IN GOOD BLOW BACK BOTTOM BUCKET



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2284.82	107.58	Initial Hydro-static
1	76.94	107.17	Open To Flow (1)
229	864.64	116.41	Shut-In(1)
230	2180.64	116.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1200.00	GAS IN PIPE 100%GAS	16.38
1920.00	GASSY OIL 30%GAS70%OIL	28.08
120.00	MUD CUT OIL 30%MUD 70%OIL	1.75

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1073

DST#: 5

ATTN: MAC ARMSTRONG

Test Start: 2011.02.26 @ 01:00:00

Tool Information

Drill Pipe:	Length: 4406.00 ft	Diameter: 3.88 inches	Volume: 64.43 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 65.02 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.75 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	4552.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	52.00 ft				
Tool Length:	80.75 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-in tool	5.00			4528.25	
Hydraulic tool	5.00			4533.25	
Change over sub	0.75			4534.00	
Jars	6.00			4540.00	
Safety Joint	2.00			4542.00	
Packer	5.00			4547.00	28.75 Bottom Of Top Packer
Packer	5.00			4552.00	
Anchor	5.00			4557.00	
change over sub	0.75			4557.75	
drill pipe	31.50			4589.25	
change over sub	0.75			4590.00	
anchor	9.00			4599.00	
Recorder	1.00	6651	Inside	4600.00	
Recorder	1.00	6666	Outside	4601.00	
bull plug	3.00			4604.00	52.00 Bottom Packers & Anchor

Total Tool Length: 80.75



DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

HUND 1-9

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

9-14S-31W GOVE

Job Ticket: 1073

DST#: 5

ATTN: MAC ARMSTRONG

Test Start: 2011.02.26 @ 01:00:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1200.00	GAS IN PIPE 100%GAS	16.384
1920.00	GASSY OIL 30%GAS70%OIL	28.078
120.00	MUD CUT OIL 30%MUD 70%OIL	1.755

Total Length: 3240.00 ft Total Volume: 44.462 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

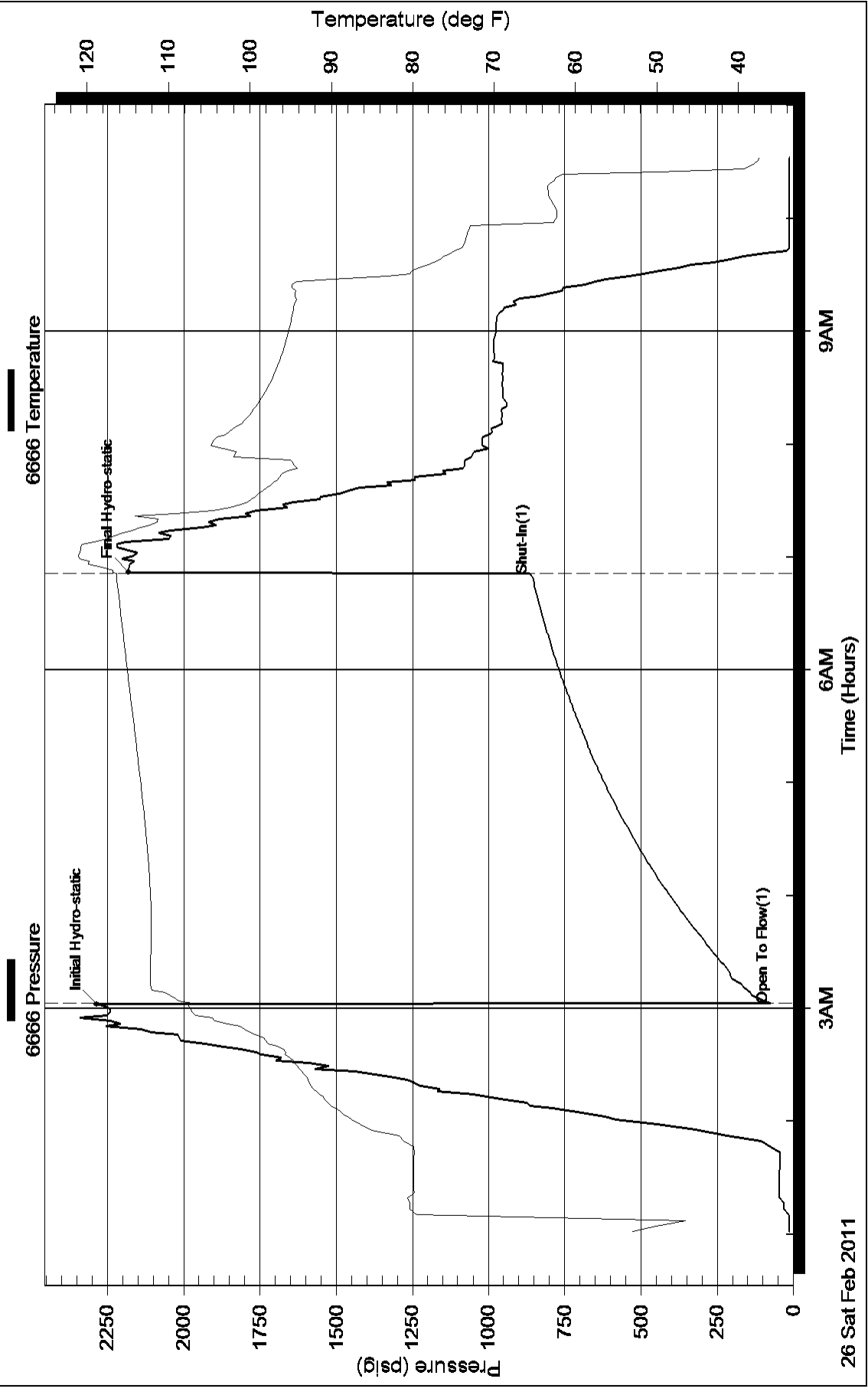
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: GRAVITY OF OIL 36

Pressure vs. Time



Serial #: 6651

Inside

GRAND MESA OPERATING

9-14S-31W GOVE

DST Test Number: 5

