



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: _____



1059663

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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	DIRKS 1-4
Doc ID	1059663

All Electric Logs Run

CPDCN Microresistivity Log
AI Shallow Focused Electric Log
Comp. Sonic w/Intergratedtransit time
Microresistivity Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	DIRKS 1-4
Doc ID	1059663

Tops

Name	Top	Datum
Stone Corral	2440	+628
Bs/Stone Corral	2456	+612
Heebner	3978	-910
Lansing	4018	-950
Muncie Creek	4196	-1128
Hushpuckney	4338	-1270
Marmaton	4409	-1341
Pawnee	4471	-1403
Ft. Scott	4547	-1479
Morrow	4690	-1622
Mississippian	4770	-1702
LTD	4867	

GRAND MESA

OPERATING COMPANY

(316) 265-3000
FAX: (316) 265-3455

1700 N. WATERFRONT PARKWAY
BLDG. 600
WICHITA, KANSAS 67206-5514

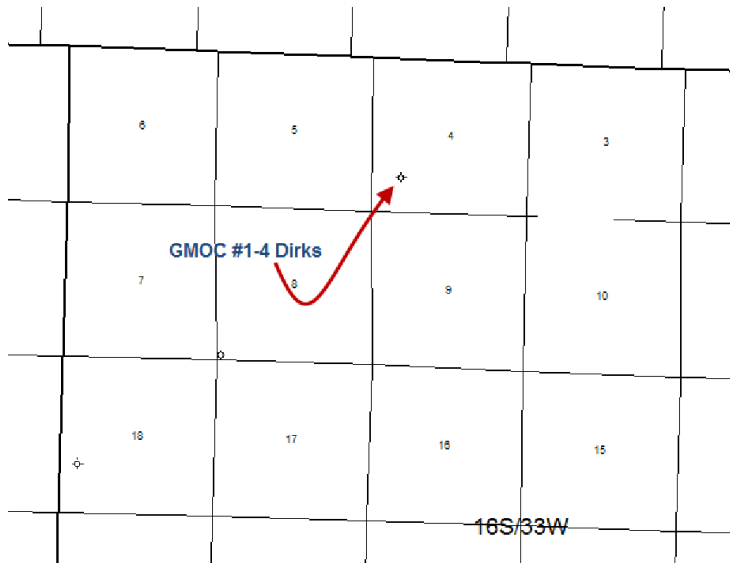
Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: #1-4 Dirks
Location: 1168FSL, 969FWL, 4-16s-33w, Scott County, Kansas
License Number: API: 15-171-20812 Region: Wildcat
Spud Date: 6-11-2011 Drilling Completed: 6-23-2011
Surface Coordinates: Lat: 38.6881754
Long: -100.977885
Bottom Hole Vertical hole
Coordinates:
Ground Elevation (ft): 3063' K.B. Elevation (ft): 3068'
Logged Interval (ft): 3600' To: RTD Total Depth (ft): 4870
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

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

GEOLOGIST

Name: Steven P. Carl and Ryan Seib
Company: Grand Mesa Operating Company
Address: 1700 N. Waterfront Parkway, Bldg 600
Wichita, Kansas 67206
316-256-3000



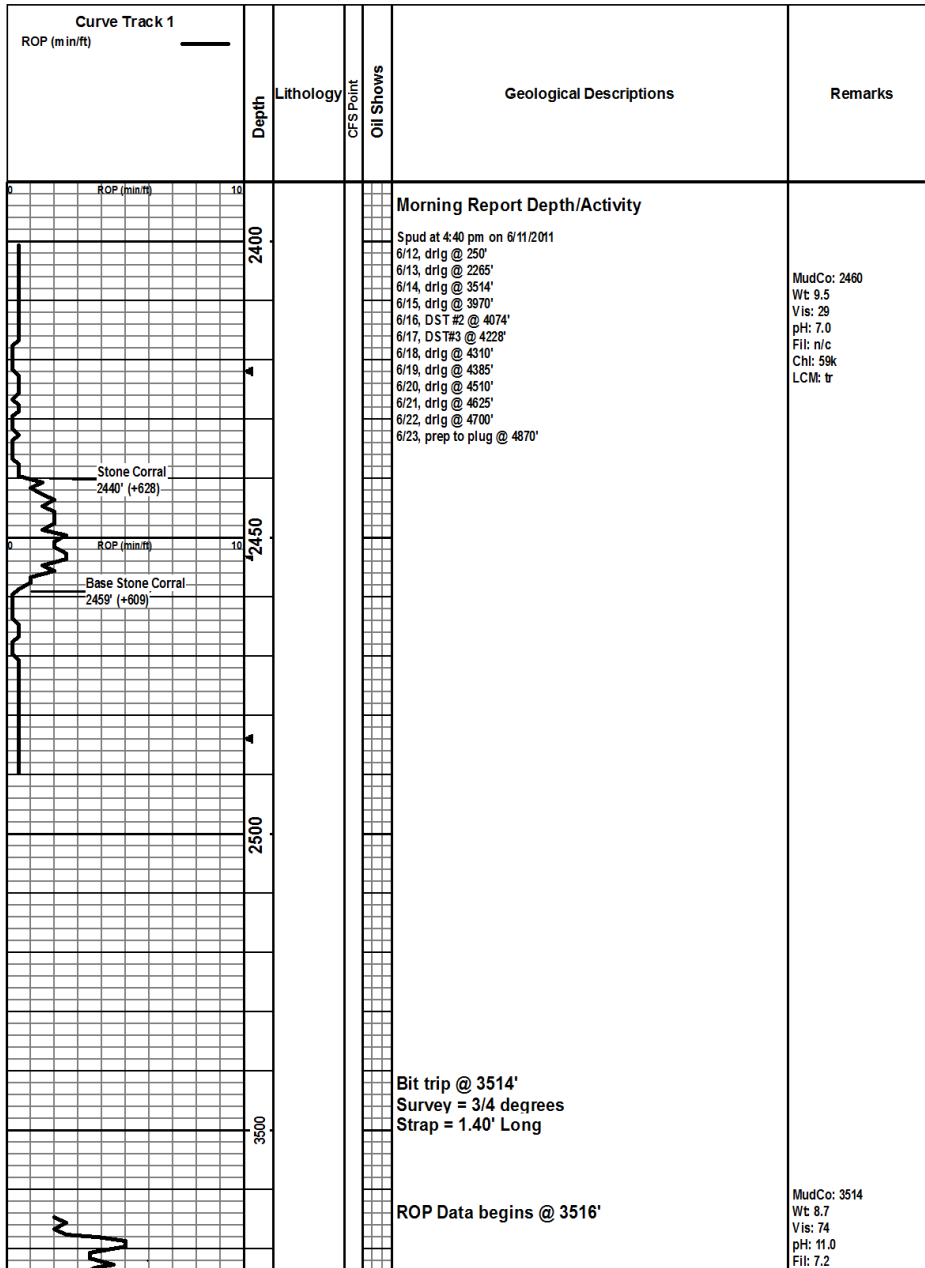
COMMENTS

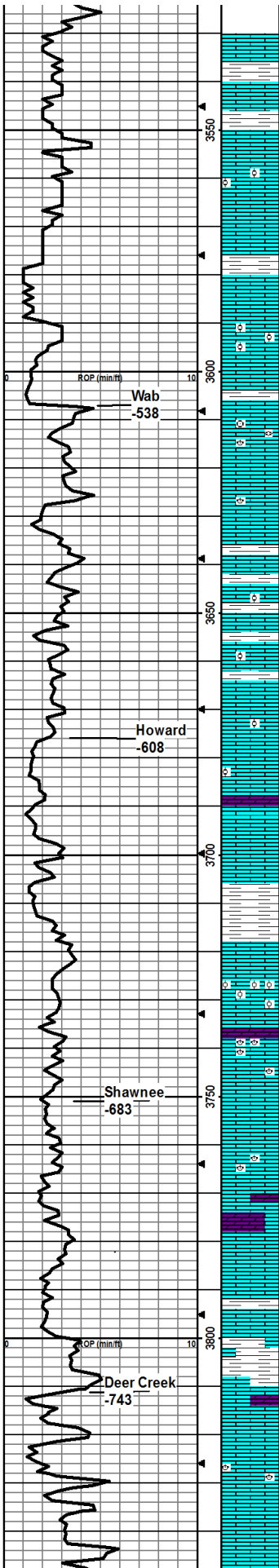
Contractor: Murfin Drilling Company Rig #24.
Pusher: Tony Martin.
Surface Casing: 8 5/8" set at 222' w/165sx.
Production Casing: none set.
Mud by: MudCo.
DST's by: Superior Testing.
Logs by: Weatherford (DIL, CN-CD, ML)
RTD=4870'
LTD=4867'

FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Stone Corral	2441'	+627	2440'	+628
B/Stone Corral	2459'	+609	2456'	+612

Heebner Shale	3981'	-913	3978'	-910
Lansing	4018'	-950	4018'	-950
Muncie Creek Shale	4200'	-1132	4196'	-1128
Stark Shale	4294'	-1226	4290'	-1222
Hushpuckney Shale	4342'	-1274	4338'	-1270
Marmaton	4410'	-1342	4409'	-1341
Little Osage Shale	4542'	-1474	4538'	-1470
Excello Shale	4560'	-1492	4556'	-1488
Johnson Zone	4635'	-1567	4630'	-1562
Morrow	4693'	-1625	4690'	-1622
Mississippian	4773'	-1705	4770'	-1702
RTD	4870'	-1802		
LTD			4867'	-1799





LS-crm-tn, vfn-fn xln, uniform-mott, very chlky, nvp, no odr, no fluor, nsfo, SH-red-gry.

LS-crm-drk gry, vfn-fn xln, uniform, sli chlky, nvp, no odr, no fluor, nsfo, SH-red-gy.

LS-crm-tn, vfn xln, nvp, no odr, no fluor, nsfo SH-red-gy.

LS-crm-gry, vfn-fn xln, ool, m ott, salt/pepper, nvp, no odr, no fluor, nsfo, occ red SH.

LS-crm-gry, vfn-fn xln, uniform, very chlky, nvp, no odr, no fluor, nsfo.

LS-crm-wht, vfn xln, uniform, chlky, nvp, no odr, no fluor, nsfo, SH-red.

LS-crm-gry, vfn-fn xln, ool, salt/pepper, sli chlky, nvp, no odr, no fluor, nsfo, SH-red-gy.

LS-crm, vfn-fn xln, mostly uniform, ool, sm salt/pepper, nvp, no odr, no fluor, nsfo.

LS-crm-gry, vfn-fn xln, ool, salt/pepper, sm SS-wht, fn-m-d grn, fri, tr blk min stn, nvp, no odr, no fluor, nsfo.

LS-crm-tn, vfn xln, uniform, sm SS-fri, gn grn, well rnd, no odr, no fluor, nsfo, SH-gy.

LS-crm-tn, vfn-fn xln, foss-vari, sm uniform, sm LS-vfn-fn xln, mott, SS-wht, fn-m-d grn, fri, blk tr min, nvp, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-vari, ool, salt/pepper, SS-wht fri, well rnd, blk tr min, occ dolo, wht, fn xln, nvp, no odr, no fluor, nsfo.

LS-crm-wht, vfn xln, foss-vari, ool, salt/pepper, mott sm SS, wht, fn grn, well rnd-ang, sm dolo, wht, fn xln, dense, nvp, no odr, no fluor, nsfo.

LS-crm-gry, vfn-fn xln, sm ool salt/pepper, mott, foss, scat pr int xln por, occ spotty brn stn, cut vwk pale blu, sm SS, gry, fn grn, fri, well rnd, occ dolo, wht, fn xln, dense, nvp, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-vari, ool, salt/pepper, mott pr int xln por, occ spotty brn stn, cut vwk pale blu, no odr, no fluor, nsfo.

LS-crm-tn, vfn xln, foss-vari, occ ool salt/pepper, mostly uniform, nvp, no odr, no fluor, nsfo.

LS-crm-gry, vfn-fn xln, foss-vari, occ ool, salt/pepper, mott, SH-red, nvp, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss-vari, sm chalk, occ dol, tan, fn xln, dense, nvp, no odr, no fluor, nsfo.

LS-crm-gry, vfn-fn xln, very chalky, pr int xln por, occ spotty brn stn, does not cut, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-vari, chalky, occ SS, vfn grn, tan, fri, rnd, blk min stn, nvp, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-vari, sli chalky, tr pyr, nvp, no odr, no fluor, nsfo.

LS-crm-wht-tn, sm drk gry, m ostly fn xln, foss-vari, sm profus ool, sli chalky, nvp, no odr, no fluor, nsfo.

LS-crm-tan, md xln, sm crs xln, profus foss-various/ool, scat pr int xln por, rare int foss por, sm LS-drk gry, vfn xln, v dense/hard, foss-brach, nvp, rare DOLO-crm/tan, vfn xln, dense, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-vari, sli ool, very chlky, occ LS-gry-drk gry, dense/hard, foss-vari, nvp, no odr, no fluor, nsfo.

LS-crm-vfn xln, foss-brach, sli ool, nvp, chlky, LS-drk gry, vfn xln, firm/dense, rare dolo, dense/hard, nvp, no odr, no fluor, nsfo.

LS-crm-tn, sm dark gry, vfn-fn xln, foss vari, scat pr int xln/foss por, sli chlky, occ dolomitic LS, wht vfn xln, dense/hard, no odr, no fluor, nsfo.

LS-crm-tn, md xln, foss-vari, dense/hard, uniform, nvp, sli chalky, LS-drk gry, vfn xln, firm/dense, nvp, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss-vari, uniform, nvp, sli chalky, LS-drk gry, dense/hard, nvp, SH-red-blk, no odr, no fluor, nsfo.

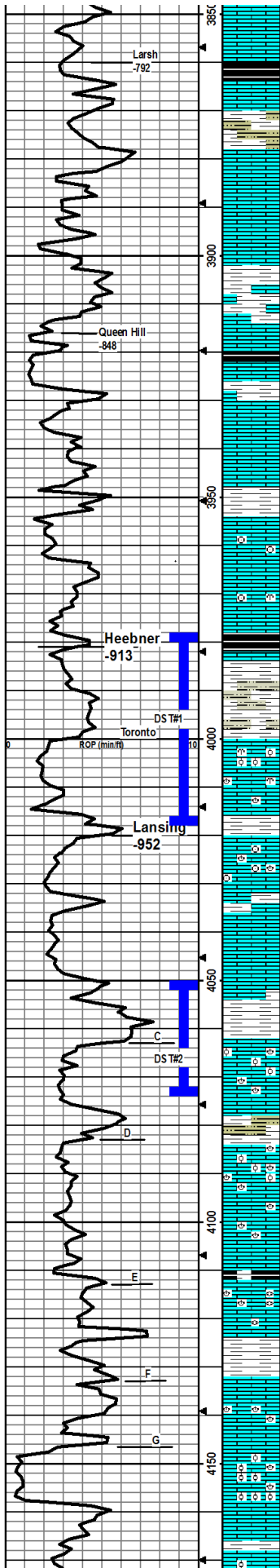
LS-crm-tn, vfn-fn xln, foss-vari, mott, ool/occ, pr int xln por, occ dolo, gry, fn xln, firm/dense, nvp, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss-vari, mostly uniform, sm sli ool, sli chlky, LS-tn, drk gry, fn xln, dense/hard, SH-red-gy, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-brach, sli ool, very chlky, occ dolo, dense hard, nvp, SH-red-gy, no odr, no fluor, nsfo.

LS-crm-tn, sm gry, vfn-fn xln, foss-vari, scat pr int xln/foss por, chlky, occ dolo, tan, vfn xln, dense/hard, SH-gry-blk, no odr, no fluor, nsfo.

LS-crm, sm arv, vfn-fn xln, foss-vari, ool, sli chlkv, occ dolo, vfn xln.



nvp, dense/hard, SH-red-gy, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss-vari, sli ool, sli chiky, occ spotty brn stn, uts wk blu, SH-red-gry-blk, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-vari, sli chiky, LS-crm, vfn xln, dense/hard, nvp, SH-red-gry-blk, no odr, no fluor, nsfo.

LS-crm-tn-gry, vfn-fn xln, foss-vari, dense, sli chalky, scat pr int xln foss por, SH-blk, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss-vari, sli ool, sli chalky, LS-gry-tn, vfn xln, dense/hard, nvp, SH-red-gy, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss-vari, ool, sli chalky, nvp, LS-gry-tn, vfn xln, dense/hard, nvp, occ chert, clear/opaque, dense, nvp, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-vari, sli ool, chiky, nvp, occ dolo, wht, fn xln, dense/hard, nvp, SH-red-gy-blk, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss-vari, sli chiky, nvp, occ chert, wht/opaque, nvp, SH-red-gy, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss, sli chiky, nvp, LS-gry-tn, vfn xln, dense/hard, occ salt/pepper, SH-red-gy, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss, very chiky, nvp, LS-gry, vfn xln, dense/hard, occ dolo/lime, dense/hard, nvp, Abund red-gry SH, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss, sli chiky, nvp, occ spotty brn m in stn, SH-red-gy, no odr, no fluor, nsfo.

LS-crm, vfn-fn xln, foss, chiky, nvp, LS-tn, vfn-fn xln, dense/hard, scat por int xln por, red-gy SH, no odr, no fluor, nsfo.

LS-crm-tn, vfn-fn xln, foss-crin, sli ool, sli chiky, SH-red-gry-blk, no odr, no fluor, nsfo.

LS-lt-med tan, predom med-ors xln, sm fn xln, mottled, sm uniform, foss-brn/crin, sm mealy, mostly dense sm nvp, sc at int xln fbs poc sm chalk, few pcs chert-wht, silty trip, few pcs LS-tan, dolomitic, scat fr-gd vug por, few pcs pe rtay w/ef fluor, fnt cup odr, ss fo.

SH-blk, carb, blocky, few fissile.

SH-gry, sm brn, sm orn, silty.

LS-lt gry/crm, fn xln, dense, mostly uniform, few pcs foss-brach, scat pr-fr pp por, rare int foss por, rare spar filled frags w/ss drk fo, sm thk tarry dead? oil, few pcs w/ef fluor, fnt cup odr, ssfo in several pcs per tray.

LS-gry/crm, fn xln, mostly dense/hard, uniform, occ foss-fus/brach, few pcs chert-wht, opaque, sm chalk, no cup odr, rare pp por w/ssfo prob from above.

SH-predom gry, sm red, silty in part, trip sample.

LS-lt tan, fn xln, mostly dense, foss-brach/crin/fus, abund chalk, ool, rare pr-fr int ool/foss por, mostly barren, no cup odr, scat dul yel m in (calc) fluor, few pcs per tray w/vsfo.

LS mostly as above, incr SH-drk gry, sm silty, stuff?, decr show lith, nvp, no cup odr, nsfo.

LS-lt tan, fn xln, dense/hard, decr ool, foss-brach/fus, decr chalk, nvp, wk m in fluor, no cup odr, nsfo.

SH-med to drk gry, waxy, sm silty, still carrying LS from above, no cup odr, ns.

LS-lt tan/crm, fn xln, mostly dense, uniform w/nvp, sm LS-crm, fn xln, profus ool/foss-brach w/fr int ool por, sho drk fo in all por, wk bleed on break, no gas bub, dul yel fluor, streaming out, no cup odr.

LS-crm, fn xln, dense, uniform w/nvp, sm ool/foss-brach/fus w/pr int ool por, occ ool stn from above, Abund red-gry SH, silty, no odr, no fluor, nsfo.

LS-crm, fn-m-d xln, dense, uniform, sm w/pr-fr int ool por, foss-brach/fus, occ tn LS-fn xln, dense w/nvp, SH-red-gry, no cup odr, wk m in fluor, ssfo in several pcs/tray.

LS-crm fn xln, mostly uniform as above, dense, nvp, occ foss, decr ool, no cup odr, carrying few pcs ool w/sho from above.

LS-crm, micro-fn xln, dense, brittle, foss-brach, v rare pp por, 1-2 pcs per tray w/vsfo, no cup odr, no fluor.

SH-mostly gry, few pcs blk carb.

LS-crm, fn xln, dense, brittle, foss-brach/fus, scat pr int xln/foss por, sm fr vug por, barren, sm ool w/pr-fr int ool por, no cup odr, no fluor, vsfo in rare (1-2) pcs per tray.

SH-med gry, sm brn, sm orn, waxy, silty.

LS-crm, fn xln, mostly uniform, dense, foss-brach, few frags filled w/med brn min, does not cut, rare pr vug por, no cup odr, no fluor, nsfo.

LS-crm-lt tan, fn xln, sm sparry crs xln, mostly uniform, dense/hard/brittle, stylo, rare foss-brach, few pcs per tray w/fr vug por, no cup odr, vnt pale fluor on cut, nsfo.

LS-crm-tan, fn xln, foss-brach, dense/hard, ool w/ gd vug/ool por, SH-red-gy, no odr, no fluor, nsfo.

LS-crm, fn xln, foss-vari, ool/ool, hard/brittle, fr-gd vug/ool por, sm LS-crm-tn, vfn xln, occ red SH, no odr, no fluor, nsfo.

LS-crm, fn xln, foss-vari, ool, dense/hard, decr fr-gd vug/ool por, LS-tn, vfn-fn xln, dense/hard, nvp, no odr, no fluor, nsfo.

MudCo: 3981
Wt: 9.0
Vis: 55
pH: 10
FI: 8.8
Chl: 4.8k
LCM: 3

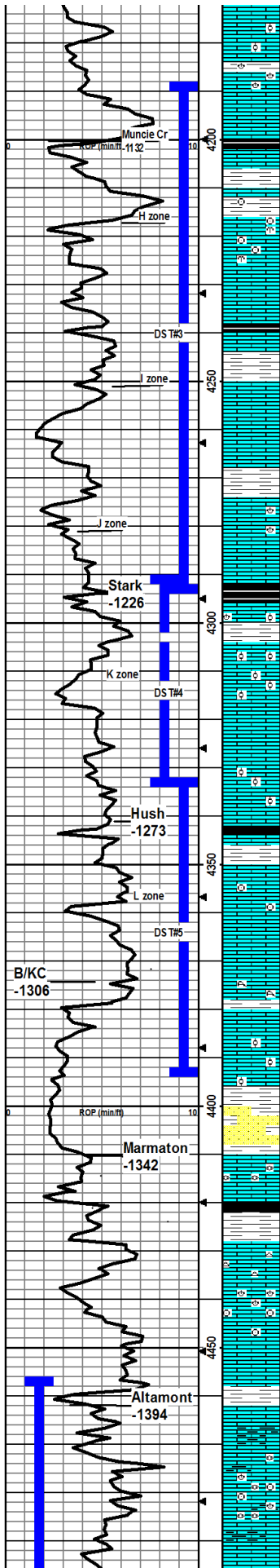
DST #1
Toronto
3979-4018'
30-30-20-40
Rec: 65' Mud
IFP: 49-77#
FFP: 68-78#
ISIP: 1105#
FSIP: 1111#

Vis: 49
Wt: 9.1

DST #2
Lan C
4050-4074'
30-30-30-30
Rec: 65' OSM
IFP: 40-54#
FFP: 55-67#
ISIP: 1076#
FSIP: 1042#

MudCo: 4074
Wt: 9.0
Vis: 53
pH: 10.5
FI: 8.0
Chl: 5k
LCM: 2

MudCo: 4200
Wt: 9.2
Vis: 59
pH: 10.5



LS-crm, fn xln, foss-vari, ool, sm mott, dense/hard, pr-fr vug por, LS-gry, vfn xln, dense/hard, nvp, no odr, no fluor, nsfo.

LS-crm, vfn xln, foss/brach, ool, dense/hard, nvp, occ brn min stn, LS-crm, fn xln, ool, dense/hard, pr-fr vug/ool por, SH- red-gry no odr, no fluor, nsfo

SH-blk, carb.

LS-drk-med tan, micro-fn xln, v dense/hard, foss-brach/crin/spic, rare stylo frags caked w asphaltoid oil, wicking cut, pale blu, no cup odr, nsfo. SH-gry, waxy.

LS-med tan, fn xln, vdense/hard, diff crush, mostly uniform, sm foss-crin, nvp, no fluor no odr, ns.

LS-erm/lt gry, crs xln, profus foss-byzbrach/crin/fts, dense/hard, rare frac faces w/d oil cake, cuts dull yel, LS-med gry/tan, fn xln, mottled, foss-vari, v hard/dense, nvp, no cup odr, nsfo.

LS-as above, decr foss, few pcs per tray w/pr int xln por, int ux of chalk & chert-whit, opaque, v fnt cup odr, ves drk fo in few pcs per tray.

LS-erm/lt gry, fn xln, foss-vari, dense/hard, abund chert-gry, opaque, scat pr pp por, no odr, no fluor, ns.

LS-erm, micro-fn xln, mostly uniform, dense/hard, rare foss, scat pr pp por, no cup odr, no fluor, ns. SH-gry.

LS-gry, fn xln, mostly dense/hard, uniform, rare foss, chert-gry, opaque, few pcs per tray LS-erm, med xln, pr-fr int xln por, fr vug por, fnt cup odr, dul yel fluor, ssfo.

LS-erm, fn xln, dense/hard, uniform, rare foss, nvp, LS-tan, vfn-fn xln, dense/hard, mottled, nvp, SH-red-gry-blk, faint odr, few pcs per tray w/ weak blu fluor on cut, nsfo.

LS-erm/gry, micro-fn xln, mostly dense/hard, uniform, sm v foss-vari, several pcs per tray w/fr-gd vug por, calcite rhombs in vugs, gd cup odr, dul gold fluor, pale blu strng cut, fair sho drk fo.

LS-erm/gry, fn xln, mostly uniform, dense/hard, occ foss, nvp, no cup odr, no fluor, ns, abund SH-gry/brn.

SH-blk, carb.

LS-med tan, micro-fn xln, v dense/hard, ool/foss in part, few pcs w/gd vug por, fs drk fo in al por, fnt cup odr, gold fluor, strng cut.

LS-erm/tan, mostly fn xln, dense, sm chalk, rare spotty int xln por w/rare ss drk fo, fnt cup odr, wk fluor in few pcs.

LS-erm, fn-med xln, mostly uniform, rare foss, brittle/flaky, sltly chalky, sm chert-m lly-gry-opaque rare vpr int xln por, vsso in 1-2 pcs per tray, faint cup odr.

LS-erm/tan, mostly fn xln, few crs xln, chalky, scat vpr int xln por, few pcs chert-gry/whit, opaque, no cup odr, spotty m in fluor, nsfo.

LS-erm, fn xln, ool/foss, dense/hard, sli chiky, nvp, LS-tan, fn vfn xln, dense/brittle, nvp, chert-whit, dense/hard, nvp, Abund red-gry-blk SH, no odr, no fluor, nsfo.

SH-blk, carb.

LS-erm, fn xln, foss-vari, ool, dense/hard, mostly uniform, sli chiky, m/p, rare bmblik min stn, LS-tn-gry, vfn xln, dense/hard, m/p, no odr, no fluor, nsfo.

LS-erm, fn xln, foss/crin, brittle, mott, sli chiky, some brn-blk min stn, LS-tn-gry, fn xln, dense/hard, pr int xln por, v fnt int odr, no fluor, vsso.

LS-erm, fn xln, foss-vari, dense/brittle, mott, pr int xln por, occ bmblik stn, trpyr, LS-tn, vfn xln, dense/hard, rare pr int xln por SH-red-gry, faint cup odr, no fluor, vsso.

LS-erm, fn-vfn xln, foss-vari, dense/hard, uniform, pr int xln por, trpyr, some LS-tn-gry, vfn xln, m/p SH-red-gry, fnt cup odr, no fluor, vsso in few pcs per tray.

LS-erm, fn xln, foss/coral, brittle, mostly uniform, scat pr fr int xln por, LS-tn, fn xln, pr fr int xln por, rare pieces Chert-whit, dense/hard, m/p, fr cup odr, faint yel fluor, vsso in few pcs per tray.

LS-erm, med xln, mostly dense/uniform, chalky, rare pr fr int xln por w/vvsso, difficult to break out of por, LS-tan, fn xln, ool, mostly dense w/calcite filled in to od por, rare pr int ool por w/vvsso, patchy gold fluor, fnt cup odr, patchy lt brn stn in dry.

LS-erm, vfn-fn xln, dense/hard, uniform, nvp, LS-tn, vfn-fn xln, dense/brittle, nvp, occ. SS-gry, vfn grn, subrnd, well sorted, nvp, Abund red-gry-blk SH, no odr, no fluor, nsfo.

LS-gry-tan, mostly uniform, dense, sm crs xln, foss-fus, calcite filled frags, few pcs/tray w/pr int xln por, sm dead oil stn, 2 pcs/tray w/vsso, no cup odr, scat m in fluor, patchy lt-med brn stn, pr sat in dry.

SH-predom gry, few pcs blk, carb.

LS-gry, fn xln, uniform, chert-whit, opaque, sm chalk no cup odr, scat m in fluor, nsfo, 1 pc/tray w/pr pp por, lt brn patchy stn, cuts wht/blu.

LS-gry, predom as above sm LS-blk, fn-med xln, foss-crin, hard/dense, nvp, no cup odr, nsfo, sm LS-gry, fn xln, chalky, scat pr in xln por, frcs dead oil stn, scat patchy bmblik stn in dry.

SH-drk tan, brn, gry, few blk carb.

LS-gry, fn xln, uniform, dense, nvp, LS-tt gry-erm, fn xln, chalky, soft/flaky, rare patchy pr int xln por, 1-2 pc/tray w/vsso, locked into por, abund red SH, cup water muddy red, no cup odr.

LS-med tan, vfn xln, dense/brittle, v foss-fus/crin/brach, few frac faces, no fluor along frags, one pc per tray w/vpr int xln por w/vsso locked in por, patchy med brn stn, cuts blu/wht in dry, no cup odr.

LS-tt tan, vfn-fn xln, dense/brittle, decr foss, mostly uniform w/sm mottling, sm chalky, m/p, nsfo, in flu x LS-erm, micro xln, ool, dense y pac ke dw/calcite filled in to ool por, no cup odr, scat dul min fluor, ns.

Fit: 9.6
Chl: 7.4k
LCM: 2

DST#3
Lan H-I-J
4188-4293'
30-45-45-60
Rec: 295' TF
55' OSM
60' OCM
180' OCWM
IFP: 95-174#
FFP: 175-232#
ISIP: 1210#
FSIP: 1214#

MudCo: 4300
Wt: 9.2
Vis: 57
pH: 10.5
Fit: 8.8
Chl: 7k
LCM: 2

MudCo: 4333
Wt: 9.0
Vis: 58
pH: 10.5
Fit: 9.6
Chl: 10k
LCM: 2

DST#4
Lan K
4290-4333'
30-30-30-30
Rec: 65' Mud
Show oil
on top
IFP: 48-66#
FFP: 67-84#
ISIP: 1252#
FSIP: 1244#

DST#5
Lan L-Pleas
4333-4395'
30-45-45-60
Rec: 1420' MW
IFP: 94-408#
FFP: 421-703#
ISIP: 1225#
FSIP: 1202#

MudCo: 4386
Wt: 9.0
Vis: 57
pH: 10.5
Fit: 9.2
Chl: 8.2k
LCM: 2

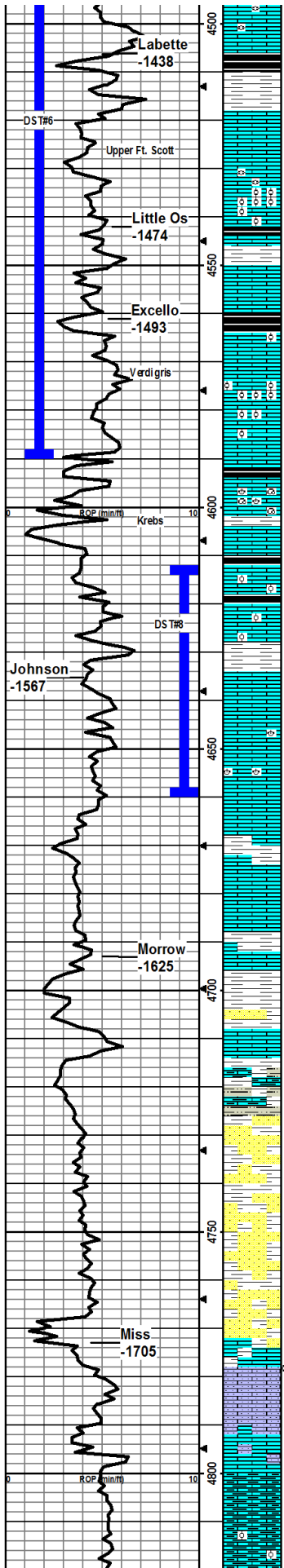
Influx of red/brn SH, rounded, firm, sm silty, v abund in samples.

Still carrying red SH.

MudCo: 4514
Wt: 9.1
Vis: 61
pH: 10.0
Fit: 10.4
Chl: 8.5k
LCM: 2

Still carrying red SH.

DST #6
Alt-Vert



LS-tt tan-lt gry, med xln, foss-crinifus, mostly dense, hard, sm brittle w/easy crush, sm ool, few pcs chert-milky, foss, no cup odr, nvp, no fluor, ns.

SH-blk, carb, flood in 4520smpl.

SH-predom drk gry, sm grn/maroon/redbrn, rare silty, no cup odr, no fluor, LS-tt gry, fn xln, dense/hard, nvp, no fluor, ns.

LS-med gry-lt gry, fn xln, dense, mostly uniform, nvp, no cup odr, ns, carrying abund SH-as above.

LS-med tan-lt gry, fn-m d xln, sparry, foss-fus, dense, brittle, rare dolo-lt tan, fn xln, nvp, no cup odr, ns.

LS-med tan, micro xln, profusely ool/foss, dense, nvp, LS-tt tan, fn xln, dense, uniform, nvp, no cup odr, ns.

SH-blk, carb.

LS-drk-lt brn, fn xln, sparry, hard, brittle, mostly dense, few pcs/frag w/pr int xln/pp por w/vss drk fo, dul yel fluor, pale blu streaming cut, no cup odr.

SH-blk, carb.

LS-crm, fn xln, dense/brittle, occ foss, nvp, LS-tt-gry, vfn-fn xln, hard/dense, sm frac, nvp, Abund SH-red-gry-grn, blk carb, faint cup odr, no fluor, nsfo.

LS-tt gry/crm/tan, fn-med xln, dense/uniform, sm foss-brach, sm profus ool, rare pr int xln por, vssfb, will not break out of por, no cup odr although roughneck reported odr while collecting smpl, NOTE: smpl nearly all drk gry SH, few pcs of LS as described.

LS-gry, crs xln, easy crush, nvp, no fluor, no cup odr, ns. Sample is predom drk gry SH.

LS-gry/drk tan, med xln, foss-brach/fusigas, ool/pis, hard/brittle, nvp, no cup odr, fn min fluor, ns, abund SH-blk carb and as above.

LS-predom gry-fn xln, dense/hard, uniform, sm foss/ool/pis w/nvp, few pcs LS-gry/mottled, med xln, brittle, easy crush, fr int xln pot s sfo, wk bleed on break, dul yel/gold fluor, blu/wht streaming/wicking cut, fr cup odr.

LS-gry, fn xln, dense, uniform, nvp, ns, abund SH-as above, few pcs LS-gry, med xln, spotty pr int xln por, vs sfo, difficult to break out of por, no cup odr, dul yel fluor, w/htblu cut, sh pcs may be from above.

Several LS's as follow:
 LS-drk-med brn, crs xln, hard/brittle, foss-crin/spic/ool, rare spotty in foss por, vssfo in rare spots.
 LS-tt gry, fn xln, uniform, dense, nvp, ns.
 LS-med gry, micro-v fn xln matrix, profus foss-crins pic/brach, dense, brittle, rare pp por, vs sfo, no cup odr.

LS-mostly gry, fn xln, dense, brittle, nvp, ns, LS-tt tan brn, v fn xln, dense/ly hard, sm calcite filled frags, spots of blk (dead?) oil within frags and along faces, wk yel fluor, pale cut, no cup odr.

LS-med tan, micro xln, vhard, dense, scat pr-fr vug por, brn stn and gold fluor along vug walls, streaming blu cut, few droplets blk oil in dimple dish, no cup odr.

LS-tan/brn, micro-fn xln, dense, brittle, foss-brach, nvp, no cup odr, ns.

LS-tt tan/gry, med xln, foss-epic/vari, dense, hard, nvp, no fluor, no cup odr, ns. SH-drk gry, flecked w/blk min, striated.

LS-tt gry, med xln, foss-vari, dense, sparry, nvp, no cup odr, ns.
 SH-gry, brittle to waxy, sm blk organic remains.

LS-tt gry, fn xln, mostly uniform, sm foss-vari, nvp, ns, LS-drk-med tan, micro-vfn xln, uniform, rare foss, rare frac, dense, brittle, nvp, no cup odr, ns.

SH-predom gry, sm olive sm varicolored, finely laminated in part, few cong, waxy, firm, sm S-S gry, fn grn, well srted, sub round, arg, glauc, no cup odr, ns.

LS-gry-lt tan, fn xln, vhard, dense, nvp, brt yel m in (calc) fluor, nvp, no cup odr, ns.

Mix of LS-as above, few clusters SS-gry/grn, fn grn, well srted, glauc, SH-s as above, no cup odr, ns.

SS-tt blu, fn grn, well srted, sub rnd, glauc, pr int grn por, semi fri, few pcs w/drk stn, cuts weak pale blu, no cup odr, no fluor, nsfo. SH-gry, sm striated.

SS-grn/blu, vfn-fn grn, well srted, sub rnd, glauc matrix, few pcs v friable, no vis por, no cup odr, nsfo.

SS as above w/mix of md-gry matrix.

SS-wht/grn/blu grns, vfn-fn grn, well srted, sub-well rnd, glauc matrix, hard w/ few pcs of soft ss, no vis por, no cup odr, ns.

SS-white, vfn-fn grn, well srted, sub-well rnd, glauc matrix, less dense than above, no vis por, no cup odr, ns.

LS-whtbuf, fn xln, vry sndy, vfn-fn grn, sub-rnd, hard w/slt chalky-sft pcs, no vis por, no cup odr, ns.

LS-wht-lt brn, fn xln, sly sndy vfn-fn grn, sub-rnd, hard, pr int xln por, no cup odr, ns.

LS-wht-buf, fn xln, hard, some foss and some pyrite, gry and dk green soft Sh, some int xln por, no cup odr, ns.

LS-wht-buf, fn xln, hard, foss, some ool, (green, dk gry to blk Sh, soft), sm pp por in ool pcs, no cup odr, ns.

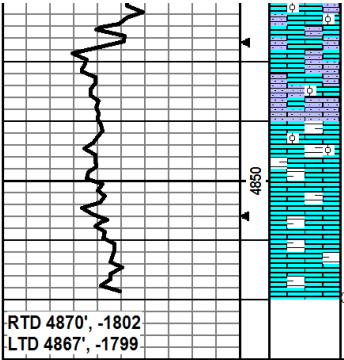
4456-4590'
 30-30-out
 Packer failed attempting 2nd open.
 1st period: Weak blow building to 1/2", no return.
 Rec: 1800' Mud
 No shows of Oil IFF: 102-105#
 FFP: N/A
 ISIP: 446#
 FSIP: N/A

DST#7
 Johnson
 4612-4660'
 Misrun:
 Pkr failed on 2nd open as in DST#6. DST Tool replaced.

DST #8
 Johnson
 4613-4660'
 30-30-30-30
 Rec: 15' Mud
 IFF: 64-65#
 FFP: 62-64#
 ISIP: 80#
 FSIP: 76#

MudCo: 4630
 Wt: 9.2
 Vis: 57
 pH: 10.0
 Fil: 9.6
 Chl: 7.5k
 LCM: 2

MudCo: 4733
 Wt: 9.2
 Vis: 56
 pH: 10.5
 Fil: 8.8
 Chl: 6.5k
 LCM: 4



LS-white-tt brn, m xin, hard, toss, some ool, sit sandy w/ vm-m grn, well srted, sub rnd, (green to dk gry to blk soft SH), sm int xin por, no cup odr, ns.

LS-wht-tt brn, fn xin, softer than above, foss, increase in sand, vfn-fn grn, (dk green to dk gray soft sh), no cup odr, ns.

LS-wht-buf, fn-med xin, hard, foss frags, some ool pcs, hard, med green to dk gry soft SH, no cup odr, ns.

same as above LS, some SS, vfn-fn grn, well srted, rnd, sm pp por, some sily chalky pcs, SH- same as above, no cup odr, ns.

LS-white-tt brn, fn xin, hard, sm pyrite xts, some soft sily chalky pcs, some sily chalky, lt to dk gry and green shale sm pp por, no cup odr, ns.

RTD 4870', -1802
LTD 4867', -1799



DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.15 @ 14:48:00

End Date: 2011.06.15 @ 20:25:30

Job Ticket #: 16584 DST #: 1

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

Printed: 2011.06.15 @ 18:48:34



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16584

DST#: 1

Test Start: 2011.06.15 @ 14:48:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:38:30

Time Test Ended: 20:25:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325/Scott City/28

Interval: 3979.00 ft (KB) To 4018.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4018.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6748 Outside

Press @ Run Depth: 78.28 psig @ 4015.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.15 End Date: 2011.06.15

Last Calib.: 2011.06.15

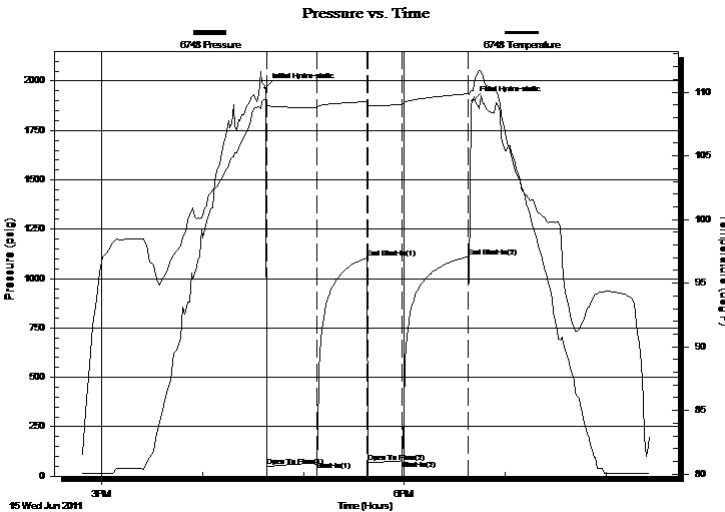
Start Time: 14:48:00 End Time: 20:25:30

Time On Btm: 2011.06.15 @ 16:37:30

Time Off Btm: 2011.06.15 @ 18:40:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1 1/4 inch
 1ST Shut In 30 Minutes/No blow back
 2ND Open 20 Minutes/No blow
 2ND Shut In 40 Minutes/No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1967.20	109.45	Initial Hydro-static
1	49.54	108.97	Open To Flow (1)
31	77.36	108.77	Shut-In(1)
60	1105.40	109.25	End Shut-In(1)
61	68.00	108.98	Open To Flow (2)
81	78.28	109.04	Shut-In(2)
121	1111.27	109.89	End Shut-In(2)
123	1898.68	110.15	Final Hydro-static

Recovery

Gas Rates

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

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



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16584

DST#: 1

Test Start: 2011.06.15 @ 14:48:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:38:30

Time Test Ended: 20:25:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325/Scott City/28

Interval: 3979.00 ft (KB) To 4018.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4018.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6749 Inside

Press @ Run Depth: 1111.13 psig @ 4014.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.15 End Date: 2011.06.15

Last Calib.: 2011.06.15

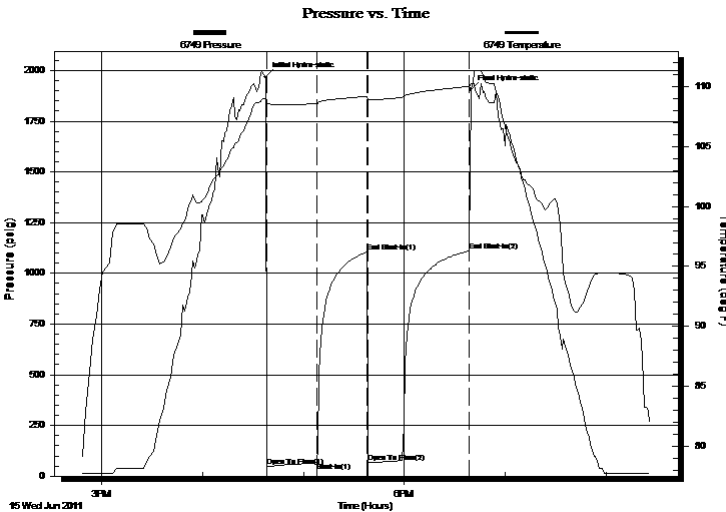
Start Time: 14:48:00 End Time: 20:26:00

Time On Btm: 2011.06.15 @ 16:37:30

Time Off Btm: 2011.06.15 @ 18:39:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1 1/4 inch
 1ST Shut In 30 Minutes/No blow back
 2ND Open 20 Minutes/No blow
 2ND Shut In 40 Minutes/No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1968.21	109.02	Initial Hydro-static
1	48.53	108.58	Open To Flow (1)
31	67.36	108.56	Shut-In(1)
60	1103.98	109.18	End Shut-In(1)
61	67.30	108.93	Open To Flow (2)
122	1111.13	110.02	End Shut-In(2)
122	1906.02	110.23	Final Hydro-static

Recovery

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

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16584

DST#: 1

Test Start: 2011.06.15 @ 14:48:00

Tool Information

Drill Pipe:	Length: 3837.00 ft	Diameter: 3.88 inches	Volume: 56.11 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:	80000.00 lb
			<u>Total Volume: 56.70 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	3979.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	39.00 ft				
Tool Length:	68.00 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			3955.00	
Hydraulic tool	5.00			3960.00	
Change over sub	1.00			3961.00	
Jars	6.00			3967.00	
Safety Joint	2.00			3969.00	
Packer	5.00			3974.00	29.00 Bottom Of Top Packer
Packer	5.00			3979.00	
Anchor	34.00			4013.00	
Recorder	1.00	6749	Inside	4014.00	
Recorder	1.00	6748	Outside	4015.00	
Bullnose	3.00			4018.00	39.00 Bottom Packers & Anchor

Total Tool Length: 68.00



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514
ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16584

DST#: 1

Test Start: 2011.06.15 @ 14:48:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 55.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 4800.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud 100%	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

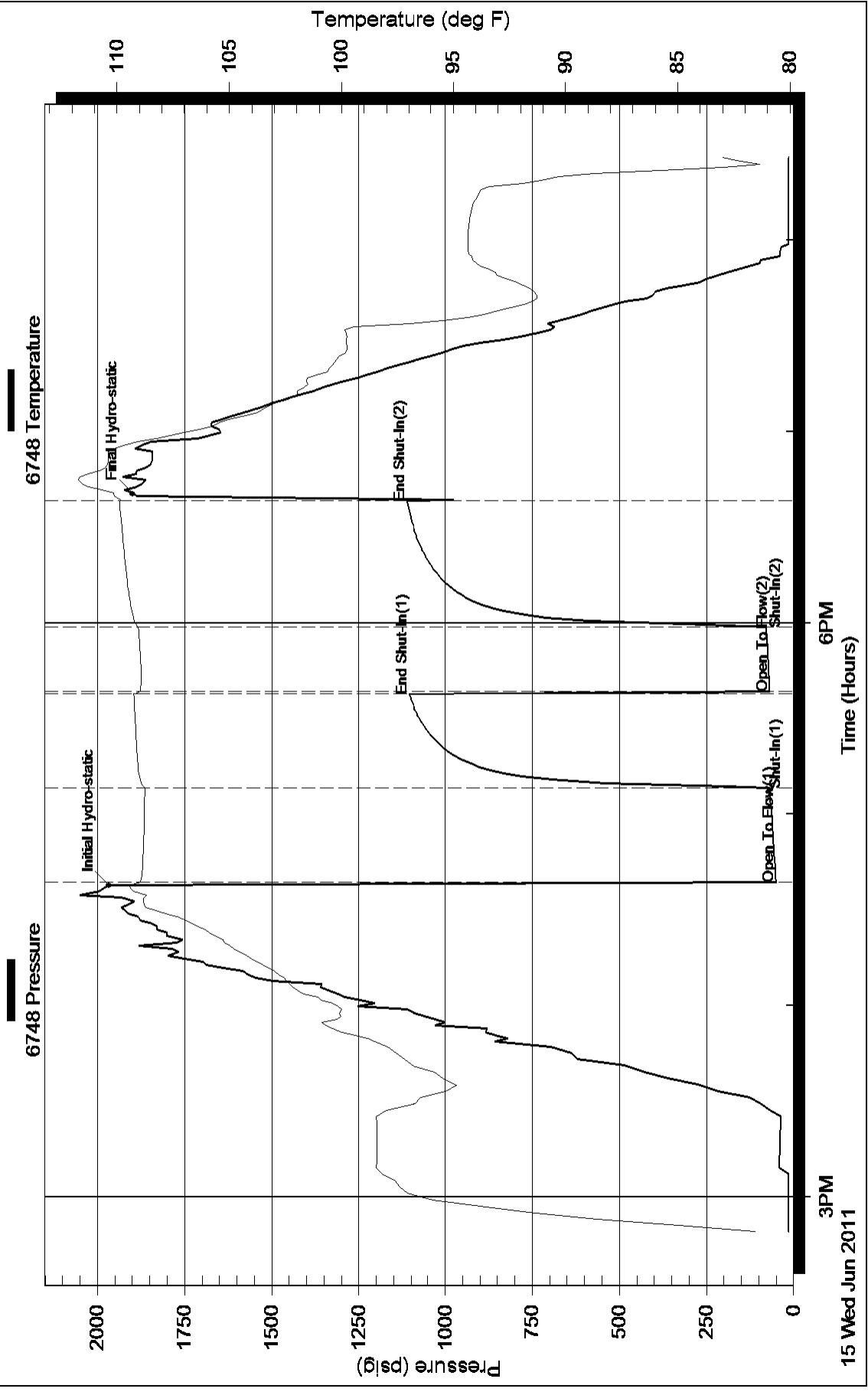
Serial #:

Laboratory Name:

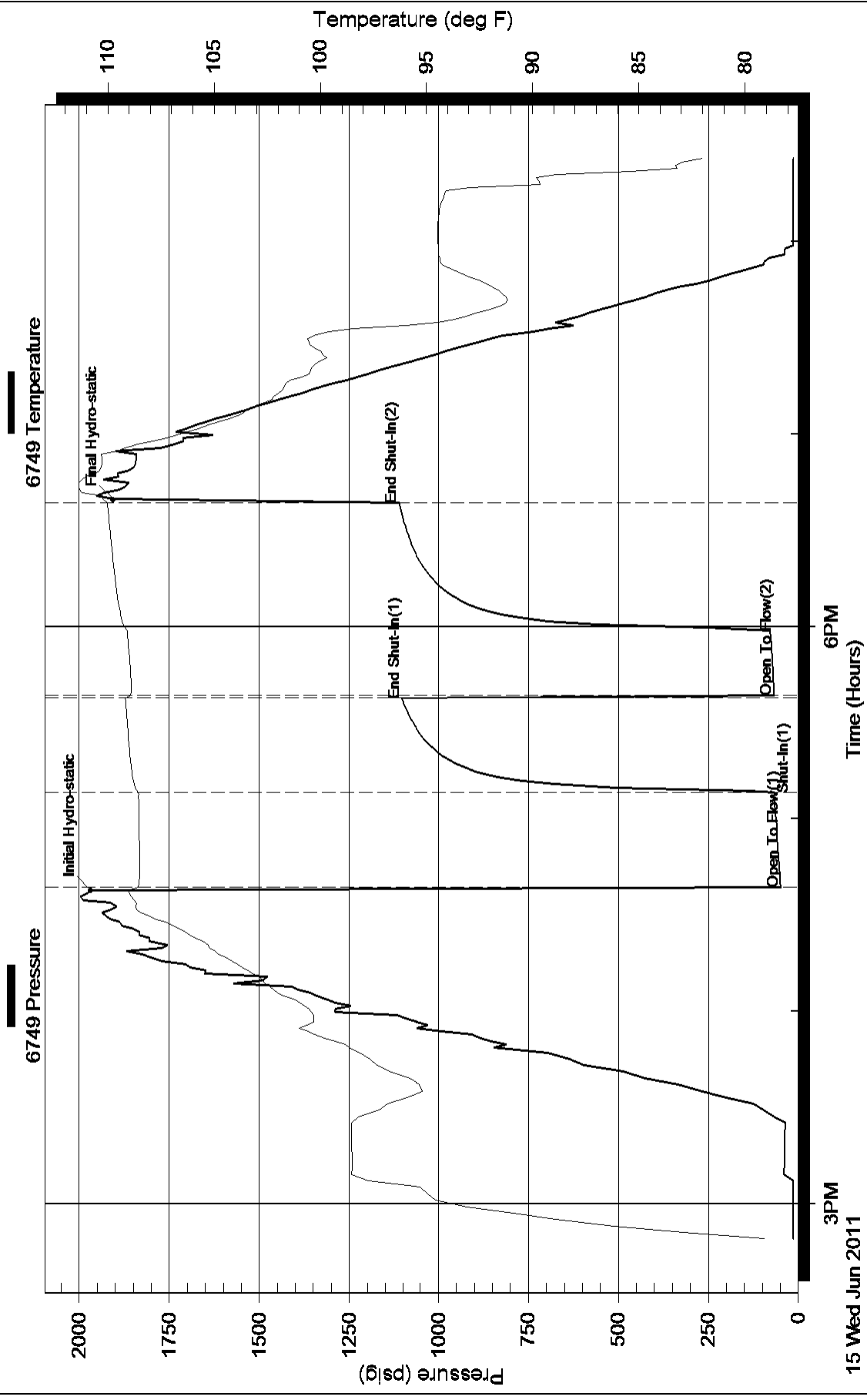
Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.16 @ 06:07:00

End Date: 2011.06.16 @ 12:59:30

Job Ticket #: 16585 DST #: 2

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

Printed: 2011.06.16 @ 11:15:09

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 2
Lansing zone C
2011.06.16



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16585

DST#: 2

Test Start: 2011.06.16 @ 06:07:00

GENERAL INFORMATION:

Formation: **Lansing zone C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:28:30

Time Test Ended: 12:59:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4050.00 ft (KB) To 4074.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4074.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6748 Outside

Press @ Run Depth: 67.24 psig @ 4071.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.16 End Date: 2011.06.16

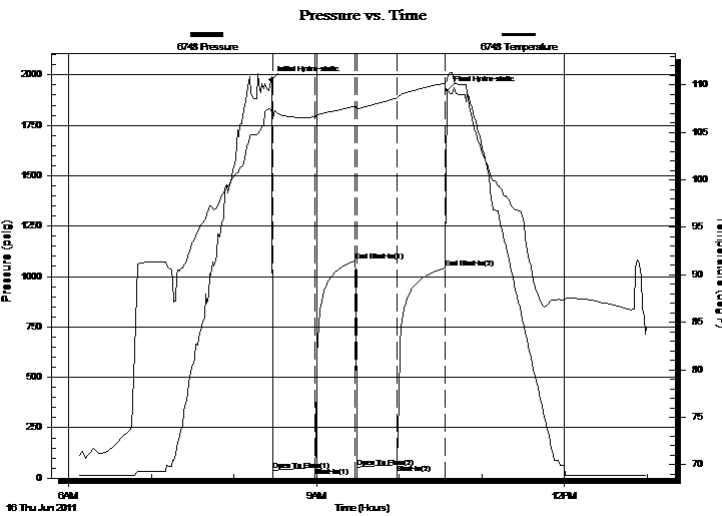
Last Calib.: 2011.06.16

Start Time: 06:07:00 End Time: 12:59:30

Time On Btm: 2011.06.16 @ 08:26:30

Time Off Btm: 2011.06.16 @ 10:34:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1 inch
 1ST Shut In 30 Minutes/No blow back
 2ND Open 30 Minutes/Weak blow /Blow built to 1/2 inch
 2ND Shut In 30 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1972.29	107.38	Initial Hydro-static
2	39.65	106.52	Open To Flow (1)
33	54.04	106.64	Shut-In(1)
62	1076.64	107.74	End Shut-In(1)
63	55.36	107.51	Open To Flow (2)
92	67.24	108.65	Shut-In(2)
127	1042.86	110.20	End Shut-In(2)
128	1923.44	110.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud with show of oil Mud 100%	0.32

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16585

DST#: 2

Test Start: 2011.06.16 @ 06:07:00

Tool Information

Drill Pipe:	Length: 3929.00 ft	Diameter: 3.88 inches	Volume: 57.46 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 58.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4050.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	53.00 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			4026.00	
Hydraulic tool	5.00			4031.00	
Change over sub	1.00			4032.00	
Jars	6.00			4038.00	
Safety Joint	2.00			4040.00	
Packer	5.00			4045.00	29.00 Bottom Of Top Packer
Packer	5.00			4050.00	
Anchor	19.00			4069.00	
Recorder	1.00	6749	Inside	4070.00	
Recorder	1.00	6748	Outside	4071.00	
Bullnose	3.00			4074.00	24.00 Bottom Packers & Anchor

Total Tool Length: 53.00



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16585

DST#: 2

Test Start: 2011.06.16 @ 06:07:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 53.00 sec/qt
 Water Loss: 8.00 in³
 Resistivity: ohm.m
 Salinity: 5000.00 ppm
 Filter Cake: 1.00 inches

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

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud with show of oil Mud 100%	0.320

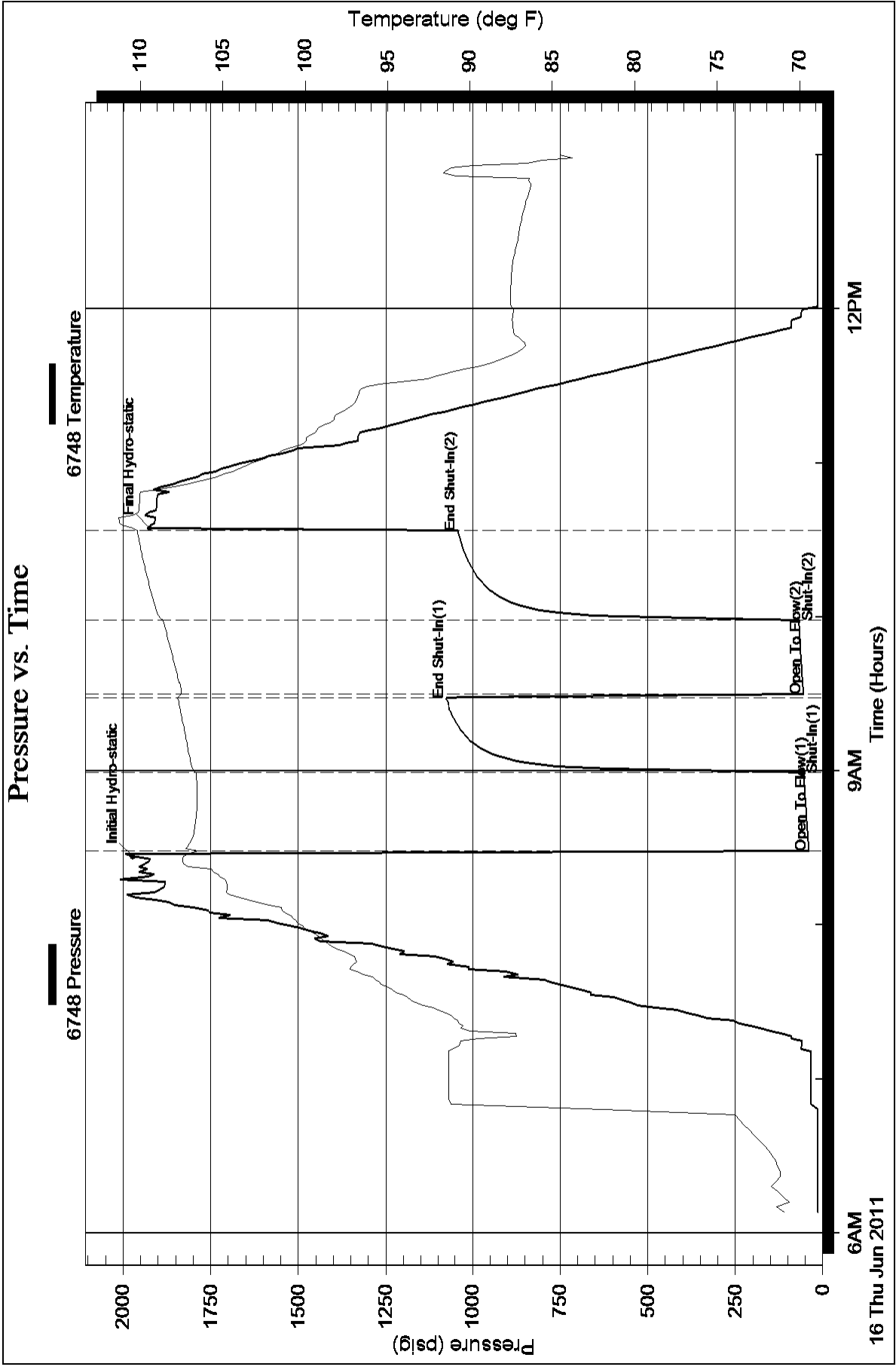
Total Length: 65.00 ft Total Volume: 0.320 bbl

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

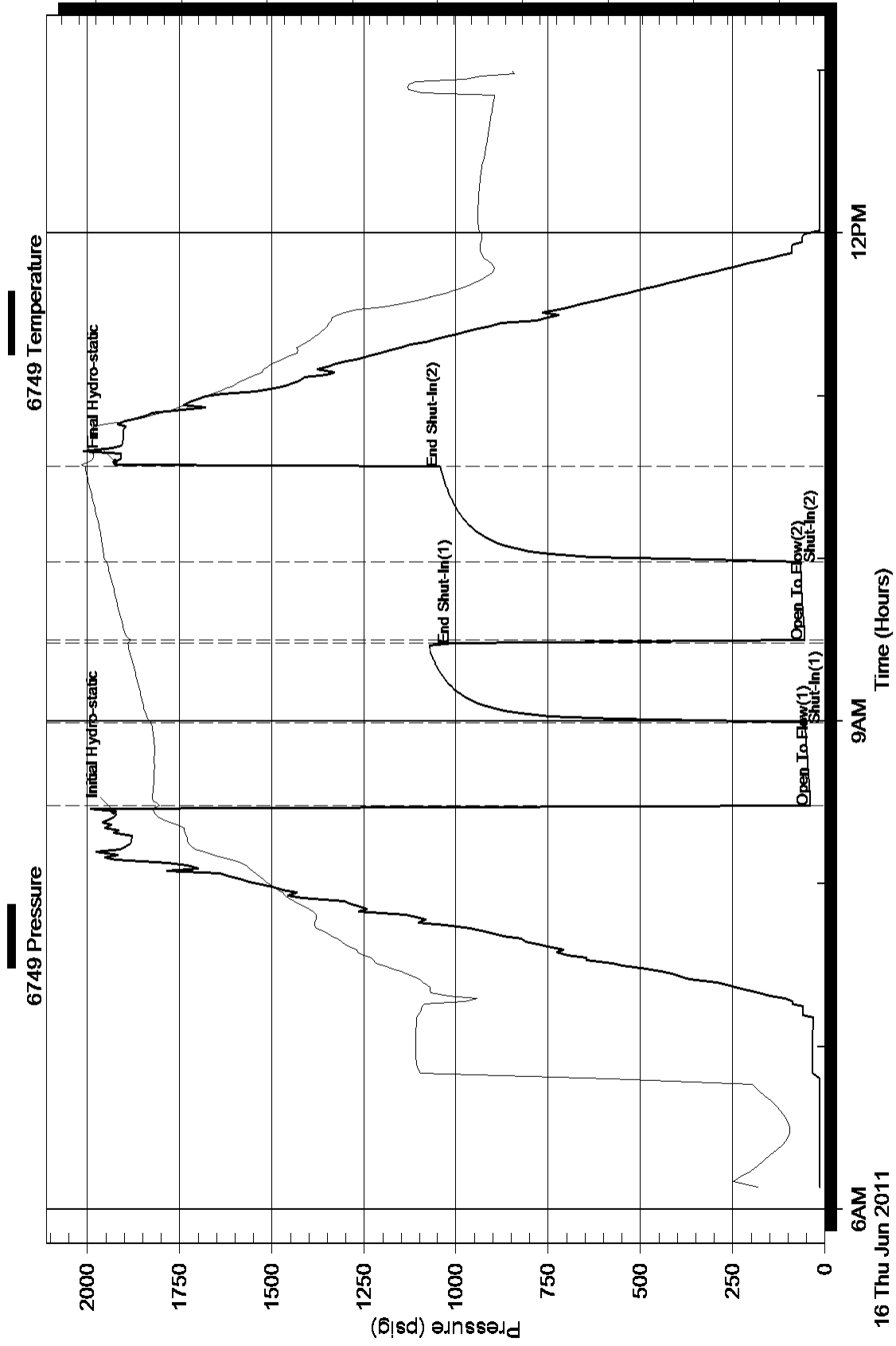
Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.17 @ 17:56:00

End Date: 2011.06.18 @ 02:47:30

Job Ticket #: 16586 DST #: 3

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

Printed: 2011.06.18 @ 00:22:52

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 3
Lansing zones H,I,J
2011.06.17



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16586

DST#: 3

Test Start: 2011.06.17 @ 17:56:00

GENERAL INFORMATION:

Formation: **Lansing zones H,I,J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:50:00

Time Test Ended: 02:47:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: **4188.00 ft (KB) To 4293.00 ft (KB) (TVD)**

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4293.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6749

Inside

Press @ Run Depth: 232.54 psig @ 4288.60 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.17

End Date: 2011.06.18

Last Calib.: 2011.06.17

Start Time: 17:57:00

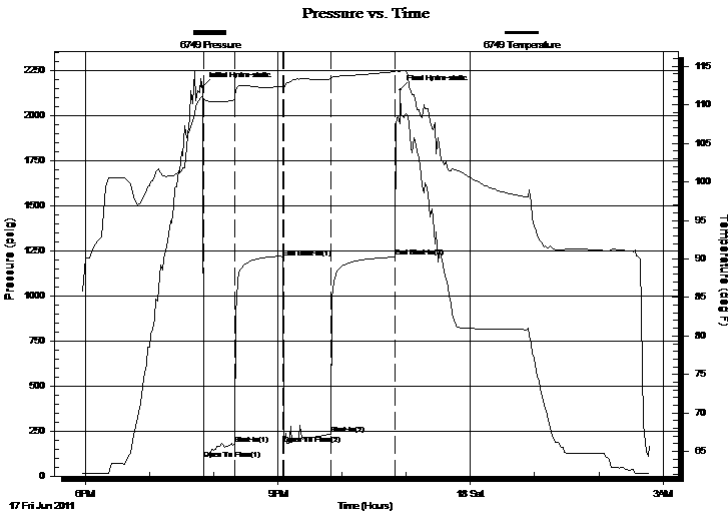
End Time: 02:47:30

Time On Btm: 2011.06.17 @ 19:49:00

Time Off Btm: 2011.06.17 @ 22:54:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 11 inches
 1ST Shut In 45 Minutes/No blow back
 2ND Open 45 Minutes/Weak blow/Blow built to 13 inches
 2ND Shut In 60 Minutes/No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2159.69	111.12	Initial Hydro-static
1	95.69	110.63	Open To Flow (1)
31	174.04	111.03	Shut-In(1)
75	1210.58	112.37	End Shut-In(1)
76	175.22	112.11	Open To Flow (2)
120	232.54	113.35	Shut-In(2)
181	1214.99	114.32	End Shut-In(2)
185	2141.51	114.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
55.00	Mud with show of oil Mud 100%	0.27
60.00	Oil cut mud---Oil 5% Mud 95%	0.30
60.00	Oil cut w atery mud	0.83
0.00	Oil 10% Water 25% Mud 65%	0.00
120.00	Oil cut w atery mud	1.75
0.00	Oil 20% Water 40% Mud 40%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16586

DST#: 3

Test Start: 2011.06.17 @ 17:56:00

GENERAL INFORMATION:

Formation: **Lansing zones H,I,J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:50:00

Time Test Ended: 02:47:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: **4188.00 ft (KB) To 4293.00 ft (KB) (TVD)**

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4293.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **6748** Outside

Press @ Run Depth: 1215.94 psig @ 4289.60 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.17 End Date: 2011.06.18

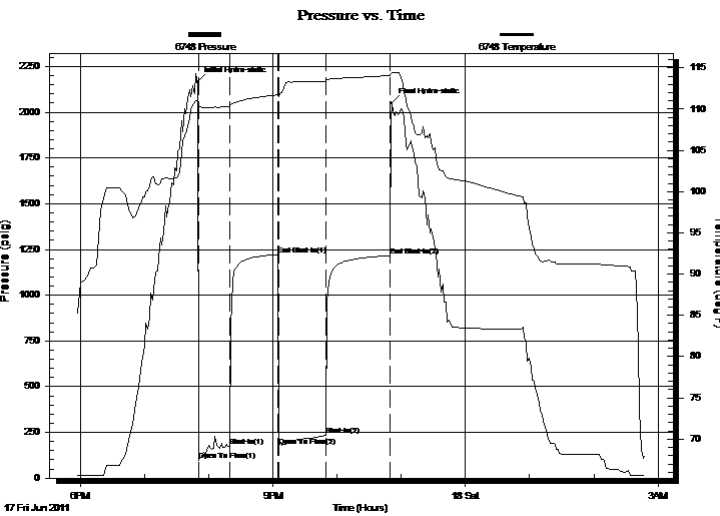
Last Calib.: 2011.06.17

Start Time: 17:57:00 End Time: 02:48:30

Time On Btm: 2011.06.17 @ 19:49:00

Time Off Btm: 2011.06.17 @ 22:51:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 11 inches
 1ST Shut In 45 Minutes/No blow back
 2ND Open 45 Minutes/Weak blow/Blow built to 13 inches
 2ND Shut In 60 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2166.45	110.90	Initial Hydro-static
1	95.35	110.35	Open To Flow (1)
31	174.66	110.29	Shut-In(1)
75	1221.92	111.75	End Shut-In(1)
76	175.76	111.47	Open To Flow (2)
120	233.13	113.34	Shut-In(2)
181	1215.94	114.08	End Shut-In(2)
182	2049.90	114.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
55.00	Mud with show of oil Mud 100%	0.27
60.00	Oil cut mud---Oil 5% Mud 95%	0.30
60.00	Oil cut w atery mud	0.83
0.00	Oil 10% Water 25% Mud 65%	0.00
120.00	Oil cut w atery mud	1.75
0.00	Oil 20% Water 40% Mud 40%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16586

DST#: 3

Test Start: 2011.06.17 @ 17:56:00

Tool Information

Drill Pipe:	Length: 4053.00 ft	Diameter: 3.88 inches	Volume: 59.27 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:	70000.00 lb
			<u>Total Volume: 59.86 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.75 ft			String Weight: Initial	57000.00 lb
Depth to Top Packer:	4188.00 ft			Final	59000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	104.60 ft				
Tool Length:	133.35 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			4164.25	
Hydraulic tool	5.00			4169.25	
Change over sub	0.75			4170.00	
Jars	6.00			4176.00	
Safety Joint	2.00			4178.00	
Packer	5.00			4183.00	28.75 Bottom Of Top Packer
Packer	5.00			4188.00	
Anchor	5.00			4193.00	
change over sub	0.75			4193.75	
drill pipe	63.10			4256.85	
change over sub	0.75			4257.60	
anchor	30.00			4287.60	
Recorder	1.00	6749	Inside	4288.60	
Recorder	1.00	6748	Outside	4289.60	
bull plug	3.00			4292.60	104.60 Bottom Packers & Anchor

Total Tool Length: 133.35



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16586

DST#: 3

Test Start: 2011.06.17 @ 17:56:00

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: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7400.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
55.00	Mud with show of oil Mud 100%	0.270
60.00	Oil cut mud--Oil 5% Mud 95%	0.295
60.00	Oil cut w atery mud	0.829
0.00	Oil 10% Water 25% Mud 65%	0.000
120.00	Oil cut w atery mud	1.755
0.00	Oil 20% Water 40% Mud 40%	0.000

Total Length: 295.00 ft Total Volume: 3.149 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Recovery Chlorides 25000 ppm

Serial #: 6749

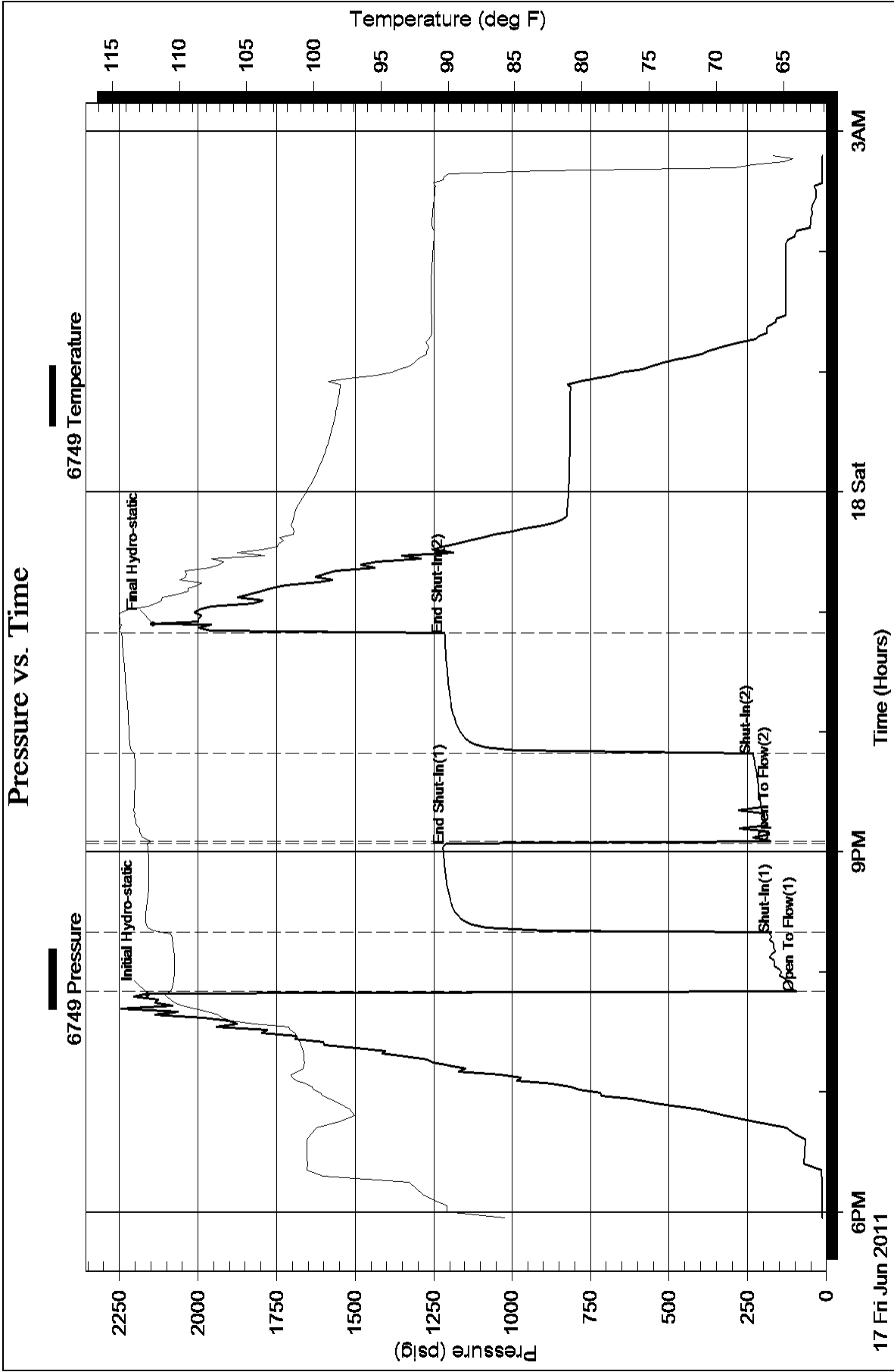
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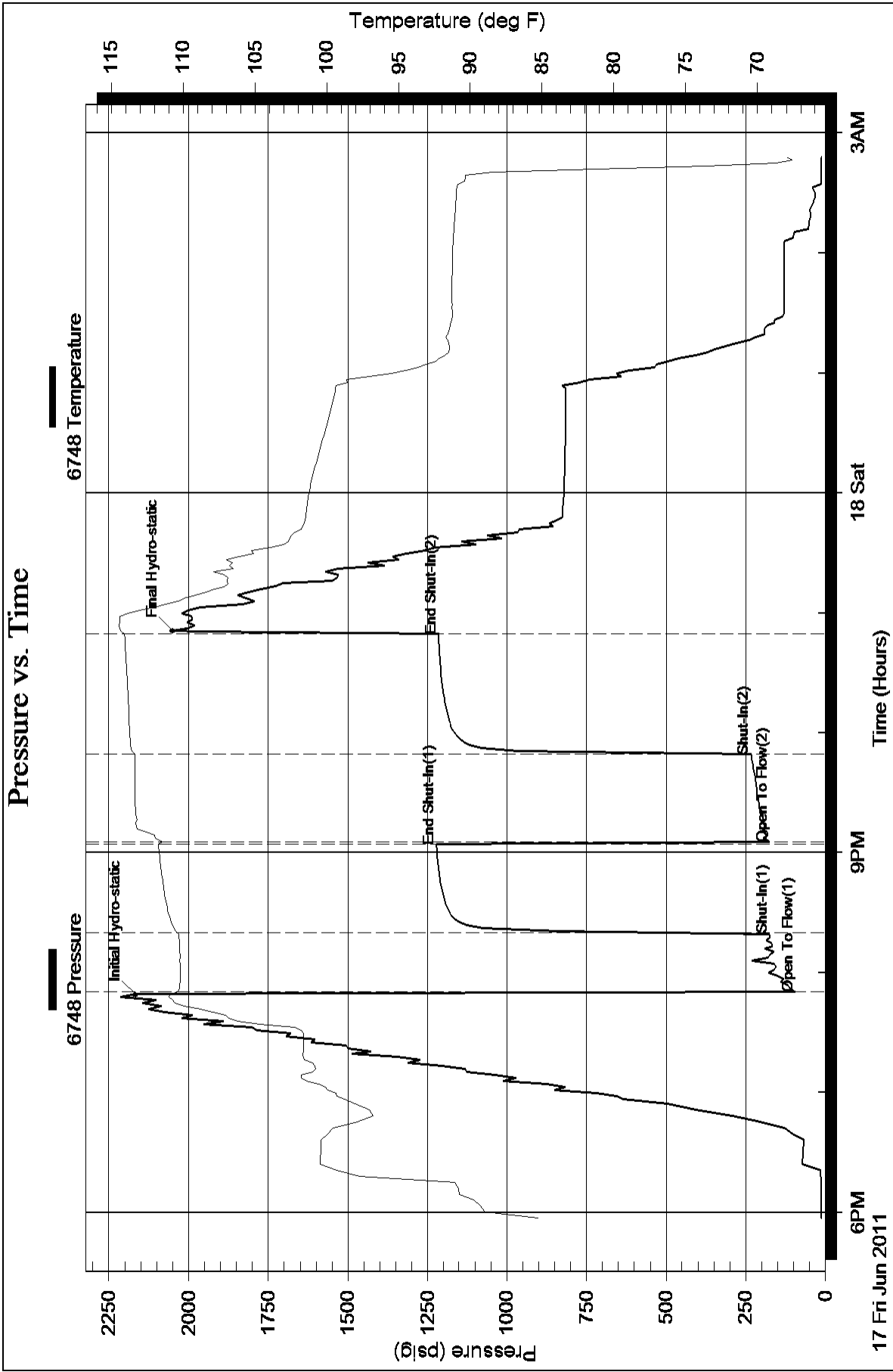
Grand Mesa Operating

4/16S/33W/Scott

DST Test Number: 3

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.18 @ 17:27:00

End Date: 2011.06.18 @ 22:53:30

Job Ticket #: 16587 DST #: 4

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

Printed: 2011.06.18 @ 21:09:16

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 4
Lansing zone K
2011.06.18



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16587

DST#: 4

Test Start: 2011.06.18 @ 17:27:00

GENERAL INFORMATION:

Formation: **Lansing zone K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:14:30

Time Test Ended: 22:53:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4290.00 ft (KB) To 4333.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4333.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6749 Inside

Press @ Run Depth: 82.71 psig @ 4329.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.18 End Date: 2011.06.18

Last Calib.: 2011.06.18

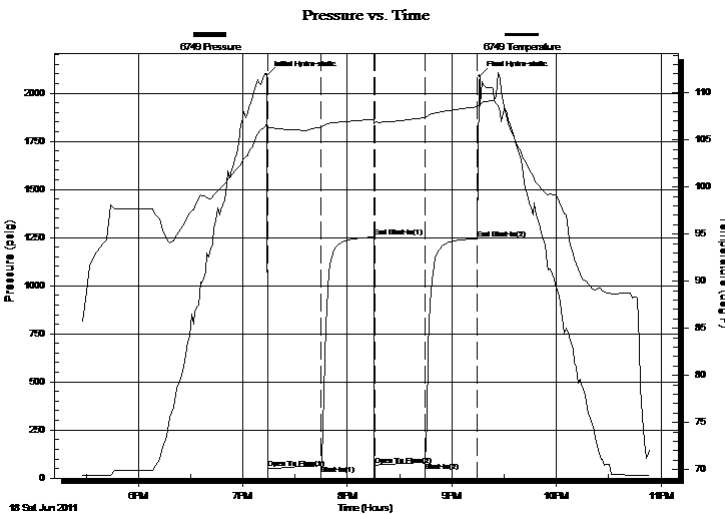
Start Time: 17:27:00 End Time: 22:53:30

Time On Btm: 2011.06.18 @ 19:14:00

Time Off Btm: 2011.06.18 @ 21:16:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1 inch
 1ST Shut In 30 Minutes/No blow back
 2ND Open 30 Minutes/Weak blow /Blow built to 1/2 inch
 2ND Shut In 30 Minutes/No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2093.85	106.80	Initial Hydro-static
1	48.80	106.32	Open To Flow (1)
31	66.13	106.35	Shut-In(1)
61	1252.59	107.19	End Shut-In(1)
62	67.84	106.74	Open To Flow (2)
91	82.71	107.38	Shut-In(2)
121	1244.63	108.51	End Shut-In(2)
122	2090.76	108.77	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
65.00	Mud with show of oil Mud 100%	0.32

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



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16587

DST#: 4

Test Start: 2011.06.18 @ 17:27:00

GENERAL INFORMATION:

Formation: **Lansing zone K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:14:30

Time Test Ended: 22:53:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: **4290.00 ft (KB) To 4333.00 ft (KB) (TVD)**

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4333.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **6748** Outside

Press @ RunDepth: 1245.37 psig @ 4330.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.18 End Date: 2011.06.18

Last Calib.: 2011.06.18

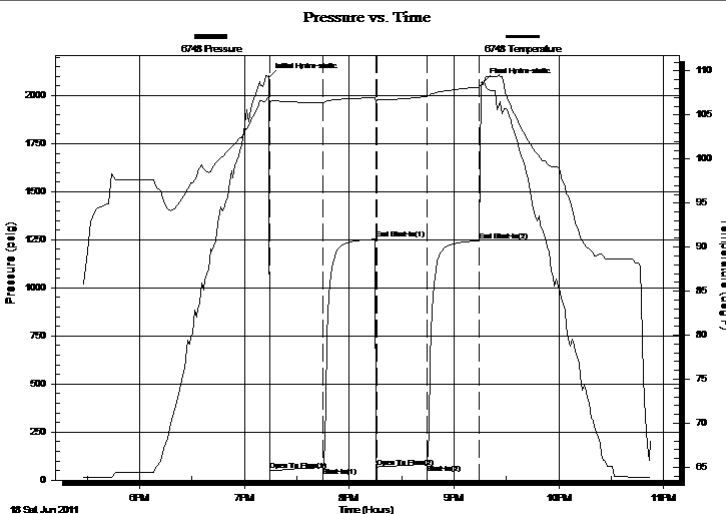
Start Time: 17:27:00 End Time: 22:53:00

Time On Btm: 2011.06.18 @ 19:14:00

Time Off Btm: 2011.06.18 @ 21:16:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1 inch
 1ST Shut In 30 Minutes/No blow back
 2ND Open 30 Minutes/Weak blow /Blow built to 1/2 inch
 2ND Shut In 30 Minutes/No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2093.97	107.11	Initial Hydro-static
1	49.03	106.44	Open To Flow (1)
31	66.77	106.38	Shut-In(1)
61	1253.47	107.02	End Shut-In(1)
62	68.51	106.72	Open To Flow (2)
91	83.23	107.11	Shut-In(2)
121	1245.37	108.19	End Shut-In(2)
123	2065.37	108.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud with show of oil Mud 100%	0.32

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16587

DST#: 4

Test Start: 2011.06.18 @ 17:27:00

Tool Information

Drill Pipe:	Length: 4148.00 ft	Diameter: 3.88 inches	Volume: 60.66 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:	82000.00 lb
			<u>Total Volume: 61.25 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4290.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	43.00 ft				
Tool Length:	72.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-in tool	5.00			4266.00	
Hydraulic tool	5.00			4271.00	
Change over sub	1.00			4272.00	
Jars	6.00			4278.00	
Safety Joint	2.00			4280.00	
Packer	5.00			4285.00	29.00 Bottom Of Top Packer
Packer	5.00			4290.00	
Anchor	38.00			4328.00	
Recorder	1.00	6749	Inside	4329.00	
Recorder	1.00	6748	Outside	4330.00	
Bullnose	3.00			4333.00	43.00 Bottom Packers & Anchor

Total Tool Length: 72.00



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514
ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16587

DST#: 4

Test Start: 2011.06.18 @ 17:27:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 9.59 in³

Resistivity: ohm.m

Salinity: 10000.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud with show of oil Mud 100%	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

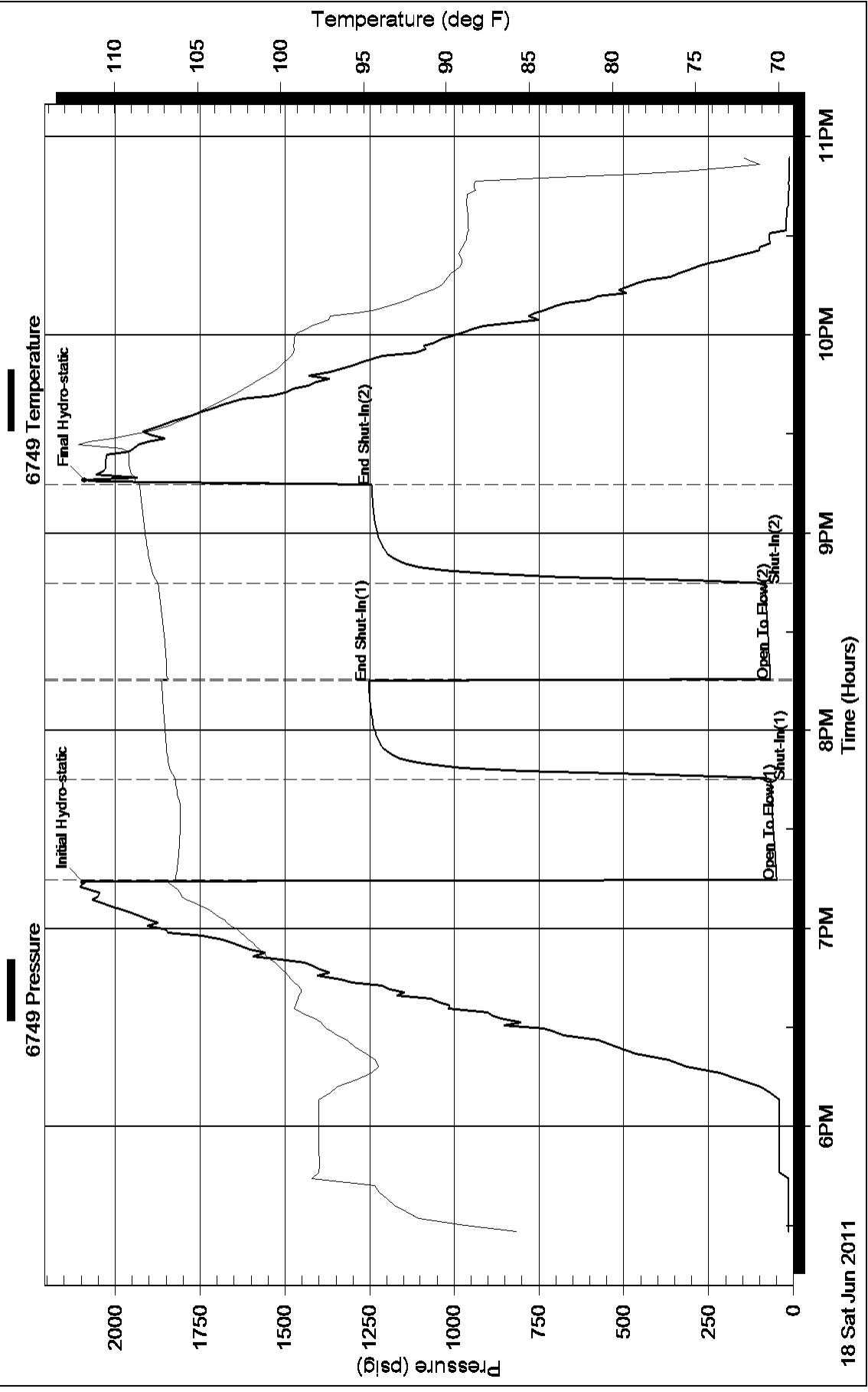
Serial #:

Laboratory Name:

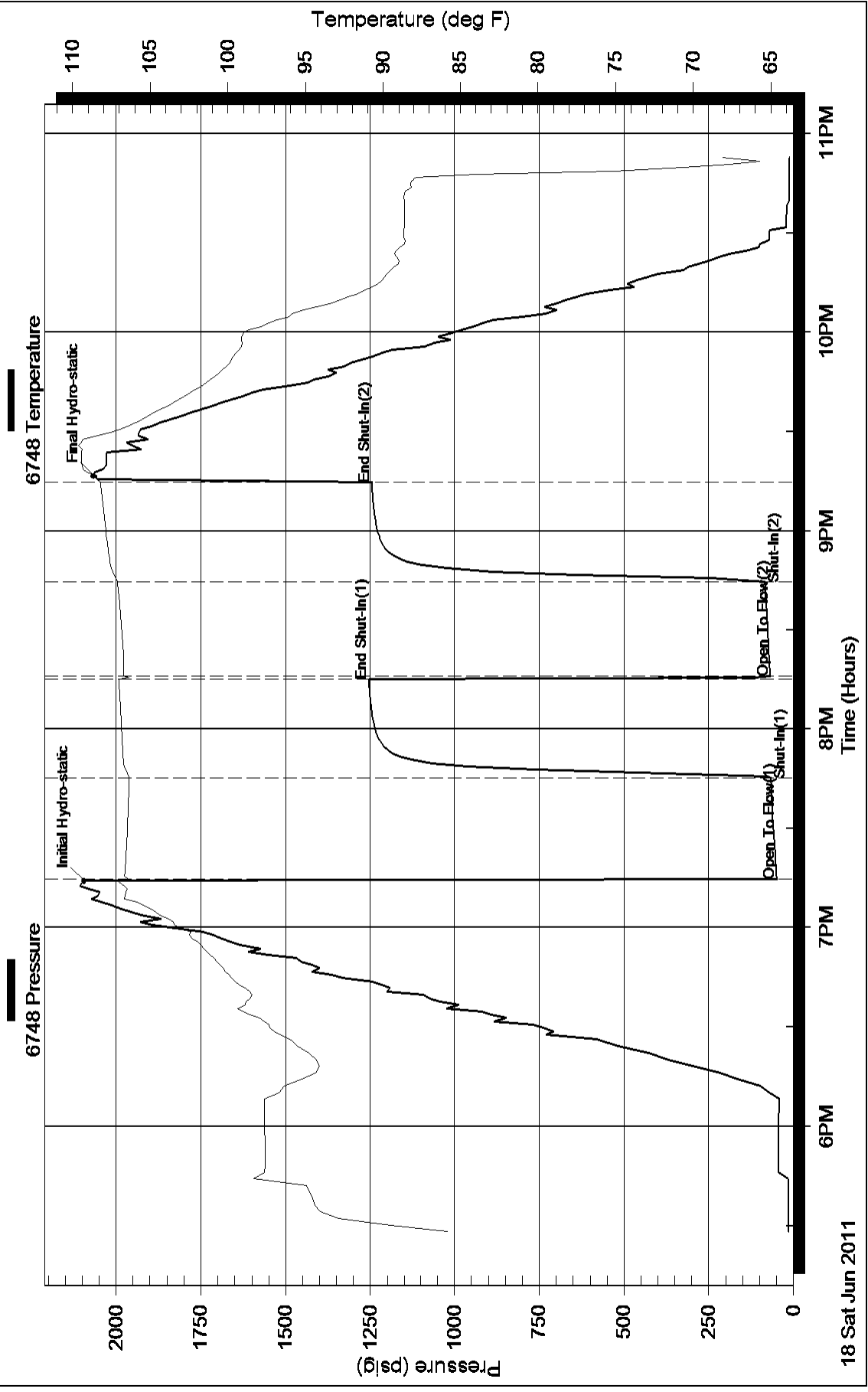
Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.19 @ 10:51:00

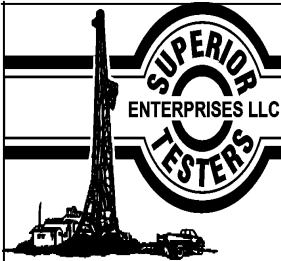
End Date: 2011.06.19 @ 18:48:30

Job Ticket #: 16588 DST #: 5

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

Printed: 2011.06.19 @ 17:10:48

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 5
Lansing zone L/Pleas
2011.06.19



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16588

DST#: 5

Test Start: 2011.06.19 @ 10:51:00

GENERAL INFORMATION:

Formation: **Lansing zone L/Pleas**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:47:30

Time Test Ended: 18:48:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4333.00 ft (KB) To 4395.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4395.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6748 Outside

Press @ Run Depth: 703.17 psig @ 4392.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.19

End Date: 2011.06.19

Last Calib.: 2011.06.19

Start Time: 10:51:00

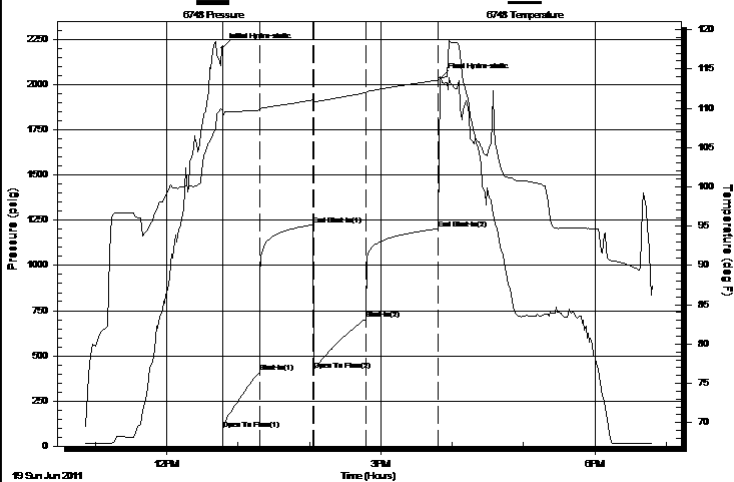
End Time: 18:48:30

Time On Btm: 2011.06.19 @ 12:47:00

Time Off Btm: 2011.06.19 @ 15:50:30

TEST COMMENT: 1ST Open 30 Minutes/Fair blow/Blow built to bottom of bucket in 4 Minutes
 1ST Shut In 45 Minutes/No blow back
 2ND Open 45 Minutes/Fair blow/Blow built to bottom of bucket in 6 Minutes
 2ND Shut In 60 Minutes/No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2204.85	109.90	Initial Hydro-static
1	94.91	108.86	Open To Flow (1)
31	408.57	109.77	Shut-In(1)
76	1225.55	111.05	End Shut-In(1)
77	421.75	110.79	Open To Flow (2)
121	703.17	111.98	Shut-In(2)
182	1202.68	113.57	End Shut-In(2)
184	2037.72	113.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1420.00	Muddy water Mud 30% Water 70%	19.60

Gas Rates

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



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16588

DST#: 5

Test Start: 2011.06.19 @ 10:51:00

GENERAL INFORMATION:

Formation: **Lansing zone L/Pleas**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:47:30

Time Test Ended: 18:48:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4333.00 ft (KB) To 4395.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4395.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6749 Inside

Press @ Run Depth: 1201.69 psig @ 4391.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.19

End Date: 2011.06.19

Last Calib.: 2011.06.19

Start Time: 10:51:00

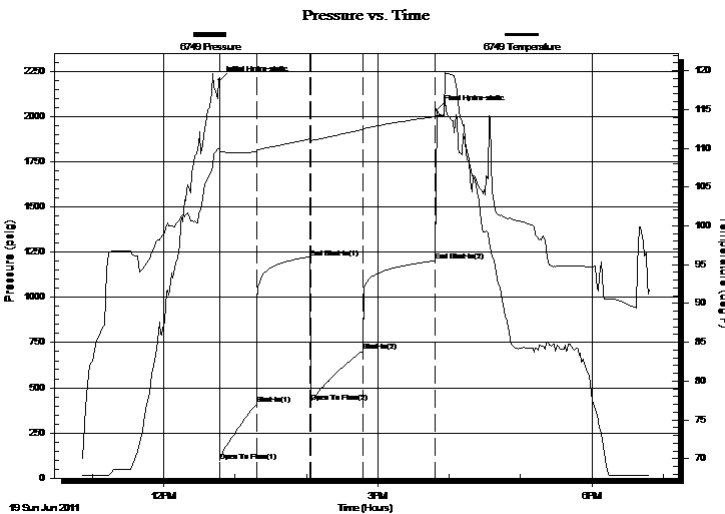
End Time: 18:48:30

Time On Btm: 2011.06.19 @ 12:47:00

Time Off Btm: 2011.06.19 @ 15:49:30

TEST COMMENT: 1ST Open 30 Minutes/Fair blow/Blow built to bottom of bucket in 4 Minutes
 1ST Shut In 45 Minutes/No blow back
 2ND Open 45 Minutes/Fair blow/Blow built to bottom of bucket in 6 Minutes
 2ND Shut In 60 Minutes/No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2199.16	110.01	Initial Hydro-static
1	95.54	109.44	Open To Flow (1)
31	409.28	109.58	Shut-In(1)
76	1219.53	111.20	End Shut-In(1)
77	422.05	111.01	Open To Flow (2)
121	703.10	112.40	Shut-In(2)
181	1201.69	114.07	End Shut-In(2)
183	2036.41	114.32	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
1420.00	Muddy water Mud 30% Water 70%	19.60

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16588

DST#: 5

Test Start: 2011.06.19 @ 10:51:00

Tool Information

Drill Pipe:	Length: 4210.00 ft	Diameter: 3.88 inches	Volume: 61.57 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:	80000.00 lb
			<u>Total Volume: 62.16 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.75 ft			String Weight: Initial	59000.00 lb
Depth to Top Packer:	4333.00 ft			Final	69000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	62.00 ft				
Tool Length:	90.75 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			4309.25	
Hydraulic tool	5.00			4314.25	
Change over sub	0.75			4315.00	
Jars	6.00			4321.00	
Safety Joint	2.00			4323.00	
Packer	5.00			4328.00	28.75 Bottom Of Top Packer
Packer	5.00			4333.00	
Anchor	5.00			4338.00	
change over sub	0.75			4338.75	
drill pipe	30.50			4369.25	
change over sub	0.75			4370.00	
anchor	20.00			4390.00	
Recorder	1.00	6749	Inside	4391.00	
Recorder	1.00	6748	Outside	4392.00	
bull plug	3.00			4395.00	62.00 Bottom Packers & Anchor

Total Tool Length: 90.75



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16588

DST#: 5

Test Start: 2011.06.19 @ 10:51:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 57.00 sec/qt
 Water Loss: 9.19 in³
 Resistivity: ohm.m
 Salinity: 8200.00 ppm
 Filter Cake: 1.00 inches

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

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1420.00	Muddy water Mud 30% Water 70%	19.602

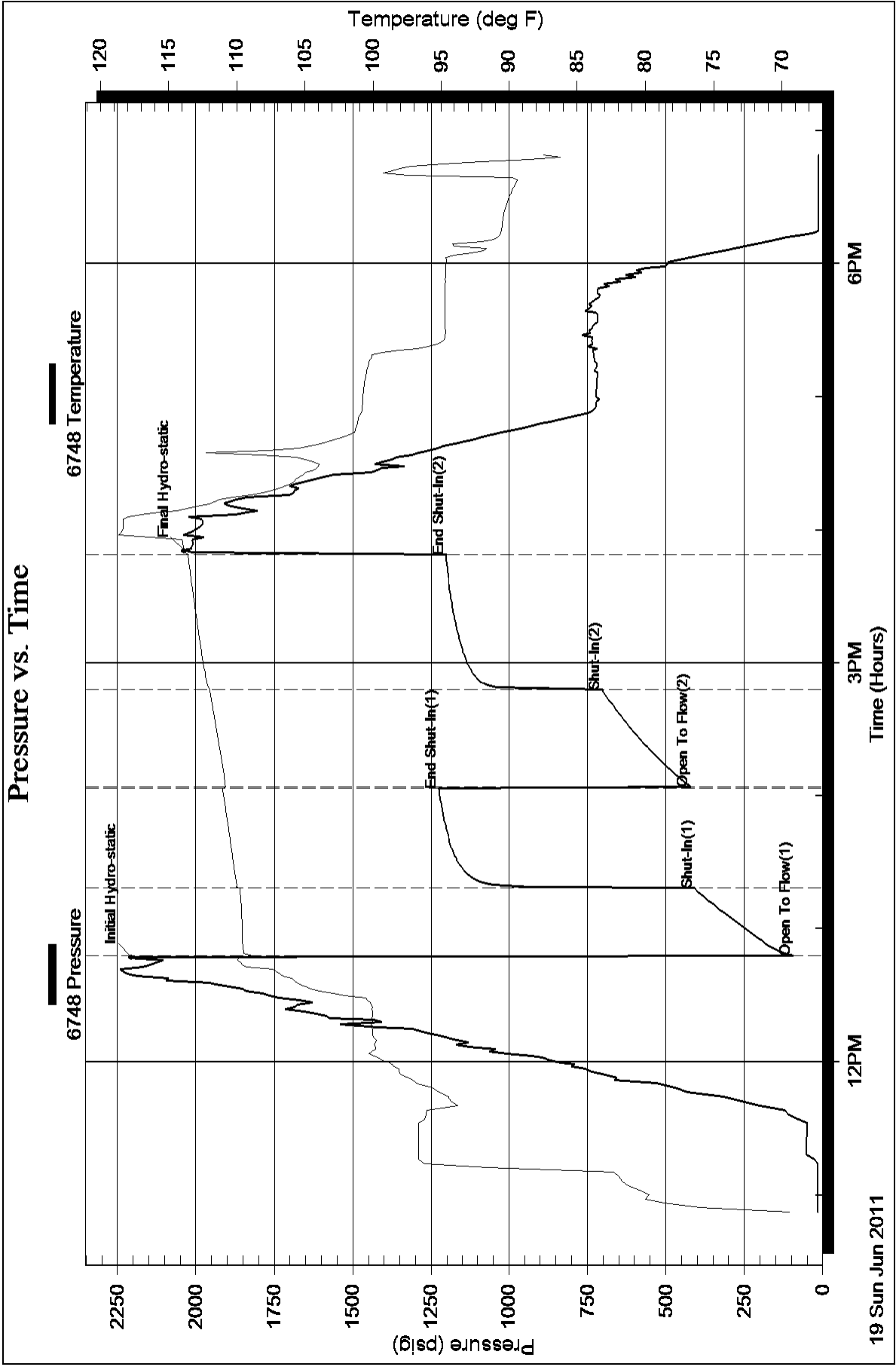
Total Length: 1420.00 ft Total Volume: 19.602 bbl

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

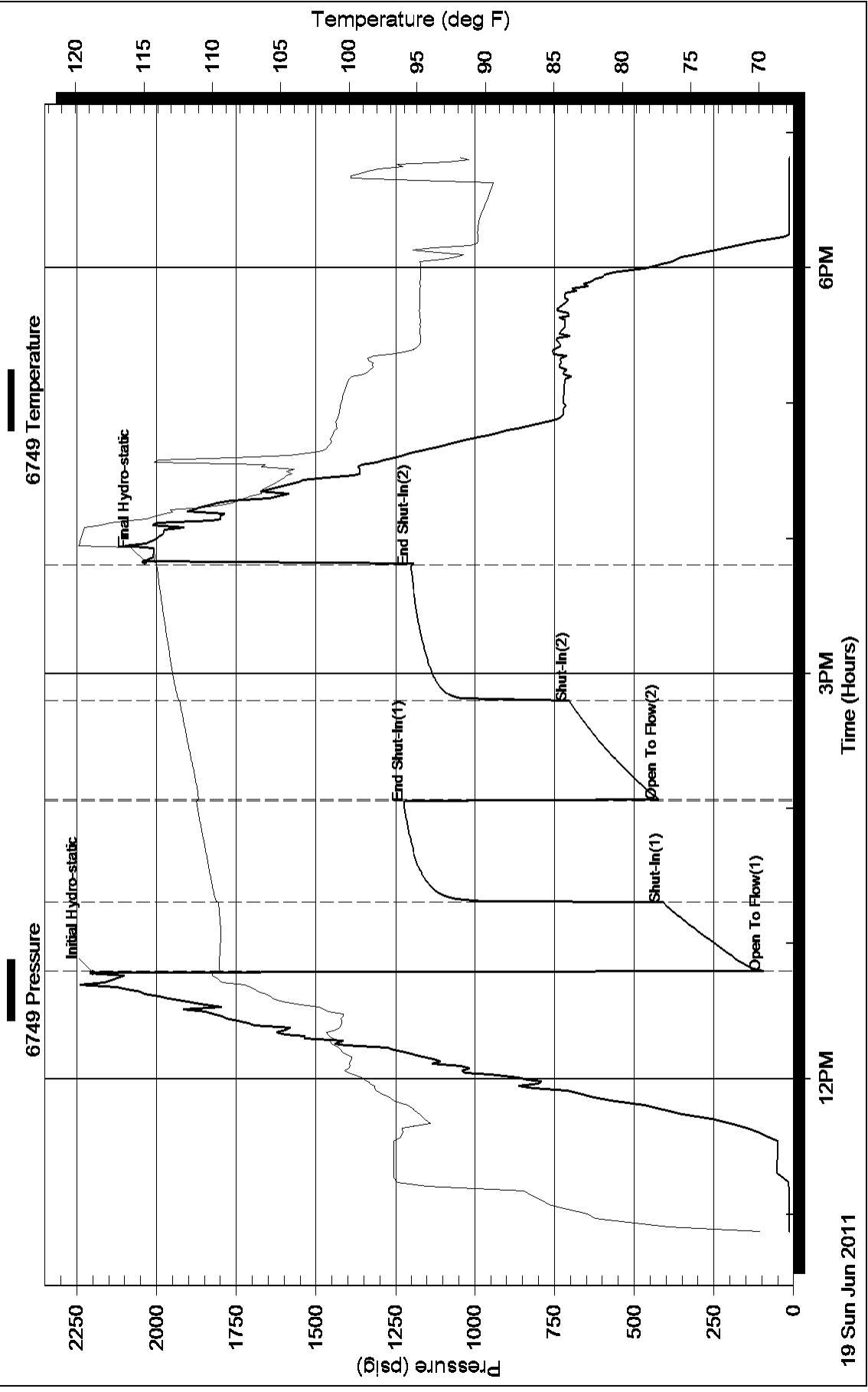
Laboratory Name: Laboratory Location:

Recovery Comments: Circulating Sub Yes
 Recovery Chlorides 29000 ppm

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.20 @ 18:00:00

End Date: 2011.06.21 @ 00:27:30

Job Ticket #: 16589 DST #: 6

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

Printed: 2011.06.20 @ 22:42:40

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 6
Marmaton
2011.06.20



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16589

DST#: 6

Test Start: 2011.06.20 @ 18:00:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:17:30

Time Test Ended: 00:27:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4448.00 ft (KB) To 4590.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4590.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6748 Outside

Press @ Run Depth: 105.48 psig @ 4586.50 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.20 End Date: 2011.06.21

Last Calib.: 2011.06.20

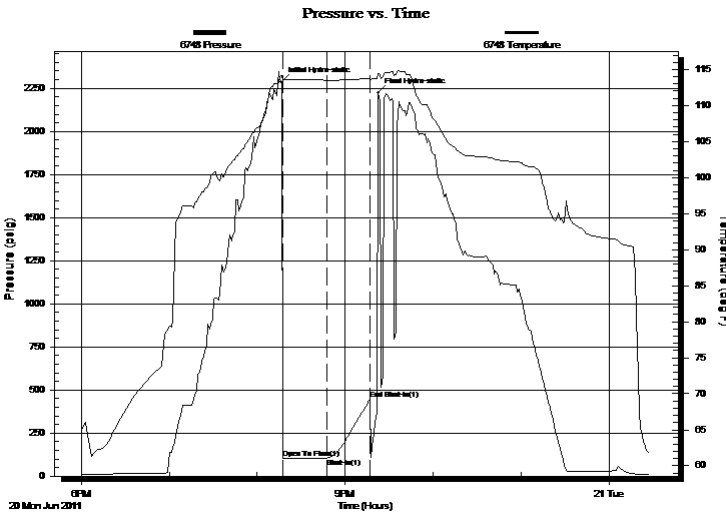
Start Time: 18:00:00 End Time: 00:27:30

Time On Btm: 2011.06.20 @ 20:16:30

Time Off Btm: 2011.06.20 @ 21:22:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1/2 inch
 1ST Shut In 30 Minutes/No blow back
 2ND Open Lost packer seal

PRESSURE SUMMARY



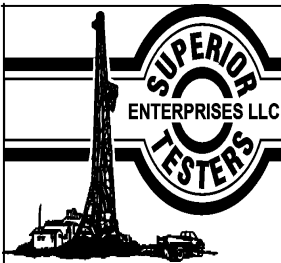
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2286.71	114.15	Initial Hydro-static
1	102.42	113.57	Open To Flow (1)
31	105.48	113.52	Shut-In(1)
61	446.65	113.78	End Shut-In(1)
66	2224.00	114.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%	0.05

Gas Rates

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



DRILL STEM TEST REPORT

Grand Mesa Operating
 1700 N Waterfront Parkw ay
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

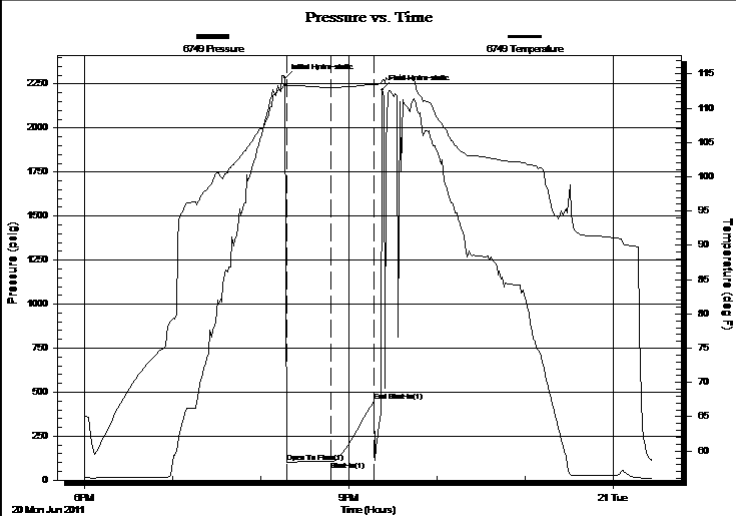
Dirks 1-4
4/16S/33W/Scott
 Job Ticket: 16589 **DST#: 6**
 Test Start: 2011.06.20 @ 18:00:00

GENERAL INFORMATION:

Formation: **Marmaton**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:17:30
 Time Test Ended: 00:27:30
 Interval: **4448.00 ft (KB) To 4590.00 ft (KB) (TVD)**
 Total Depth: 4590.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Sw inney
 Unit No: 3325 Scott City/28
 Reference Elevations: 3068.00 ft (KB)
 3063.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6749 **Inside**
 Press @ Run Depth: 447.40 psig @ 4585.50 ft (KB) Capacity: 5000.00 psig
 Start Date: 2011.06.20 End Date: 2011.06.21 Last Calib.: 2011.06.20
 Start Time: 18:00:00 End Time: 00:27:00 Time On Btm: 2011.06.20 @ 20:16:30
 Time Off Btm: 2011.06.20 @ 21:22:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1/2 inch
 1ST Shut In 30 Minutes/No blow back
 2ND Open Lost packer seal



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2283.03	113.55	Initial Hydro-static
1	102.30	113.24	Open To Flow (1)
32	104.44	113.06	Shut-In(1)
61	447.40	113.52	End Shut-In(1)
66	2215.88	114.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%	0.05

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16589

DST#: 6

Test Start: 2011.06.20 @ 18:00:00

Tool Information

Drill Pipe:	Length: 4306.00 ft	Diameter: 3.88 inches	Volume: 62.97 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:	90000.00 lb
			<u>Total Volume: 63.56 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	6.75 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4448.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	141.50 ft				
Tool Length:	170.25 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			4424.25	
Hydraulic tool	5.00			4429.25	
Change over sub	0.75			4430.00	
Jars	6.00			4436.00	
Safety Joint	2.00			4438.00	
Packer	5.00			4443.00	28.75 Bottom Of Top Packer
Packer	5.00			4448.00	
Anchor	0.00			4448.00	
change over sub	0.75			4448.75	
drill pipe	125.00			4573.75	
change over sub	0.75			4574.50	
anchor	10.00			4584.50	
Recorder	1.00	6749	Inside	4585.50	
Recorder	1.00	6748	Outside	4586.50	
bull plug	3.00			4589.50	141.50 Bottom Packers & Anchor

Total Tool Length: 170.25



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514
ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16589

DST#: 6

Test Start: 2011.06.20 @ 18:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 61.00 sec/qt

Water Loss: 10.39 in³

Resistivity: ohm.m

Salinity: 8500.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud 100%	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

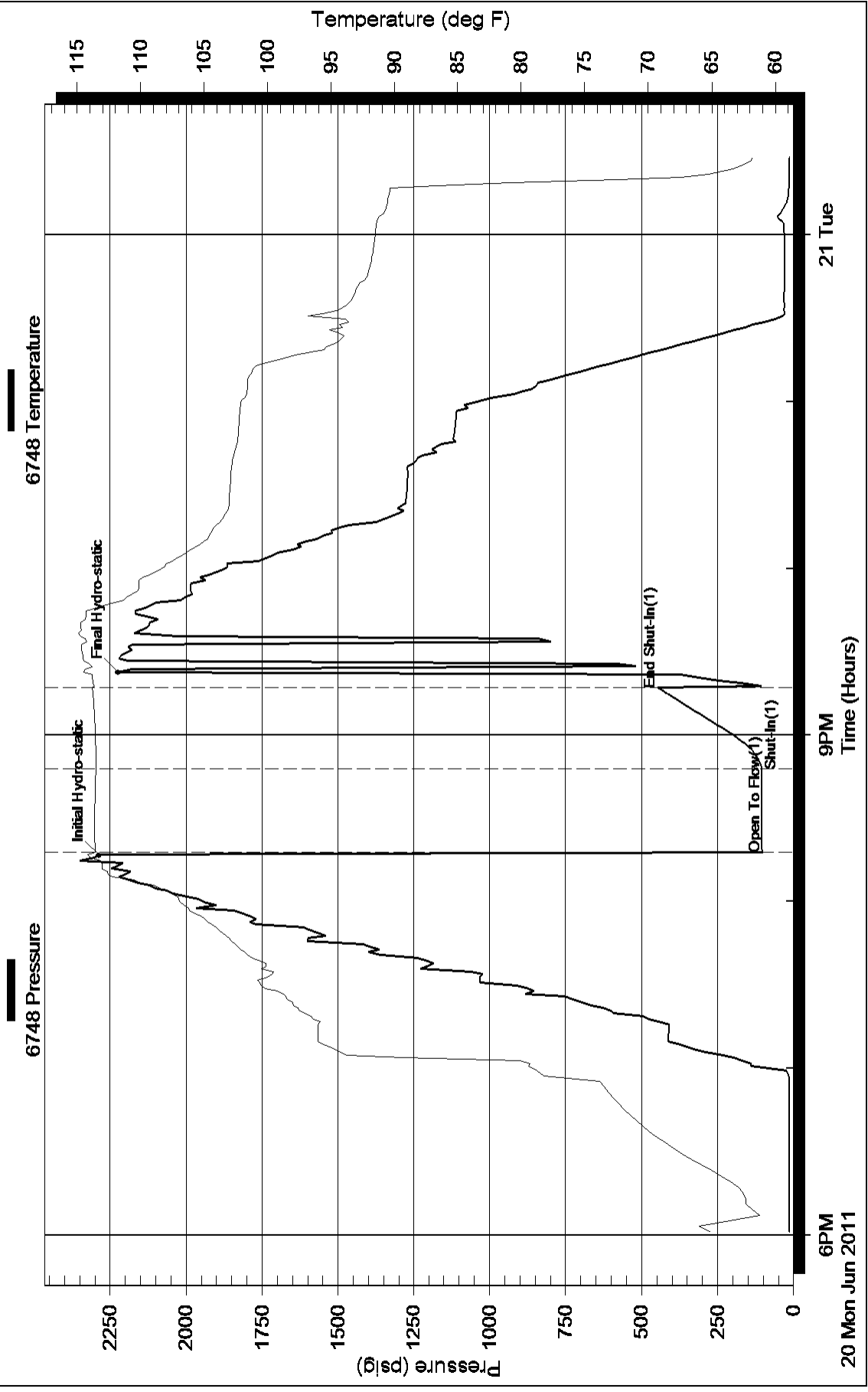
Serial #:

Laboratory Name:

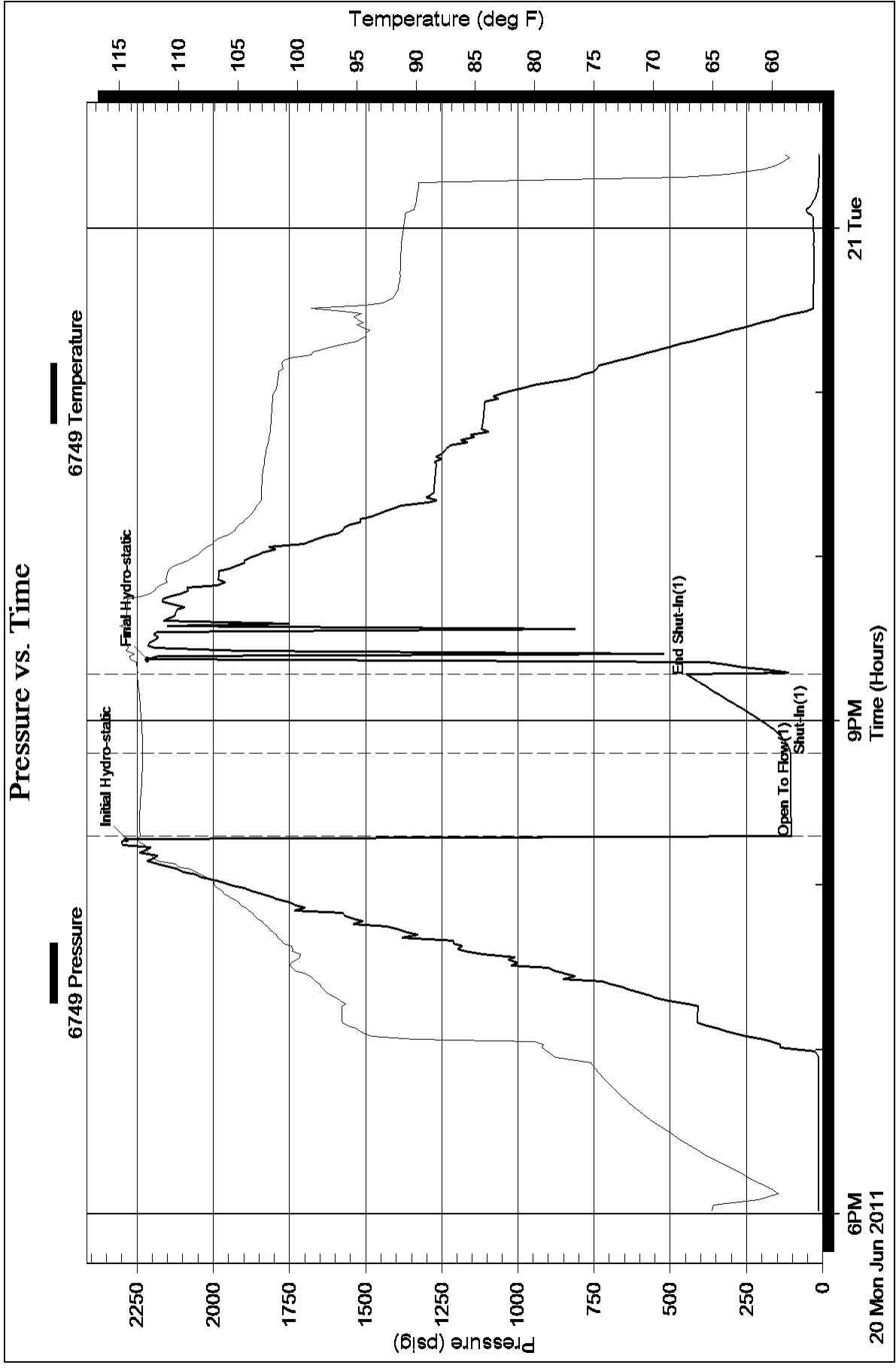
Laboratory Location:

Recovery Comments: Circulating Sub Yes

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.21 @ 13:15:00

End Date: 2011.06.21 @ 18:32:30

Job Ticket #: 16590 DST #: 7

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

Printed: 2011.06.21 @ 16:55:18

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 7
Johnson
2011.06.21



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16590

DST#: 7

Test Start: 2011.06.21 @ 13:15:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:23:30

Time Test Ended: 18:32:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4612.00 ft (KB) To 4660.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4660.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6748 Outside

Press @ Run Depth: 53.90 psig @ 4657.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.21

End Date:

2011.06.21

Last Calib.:

2011.06.21

Start Time: 13:15:00

End Time:

18:32:30

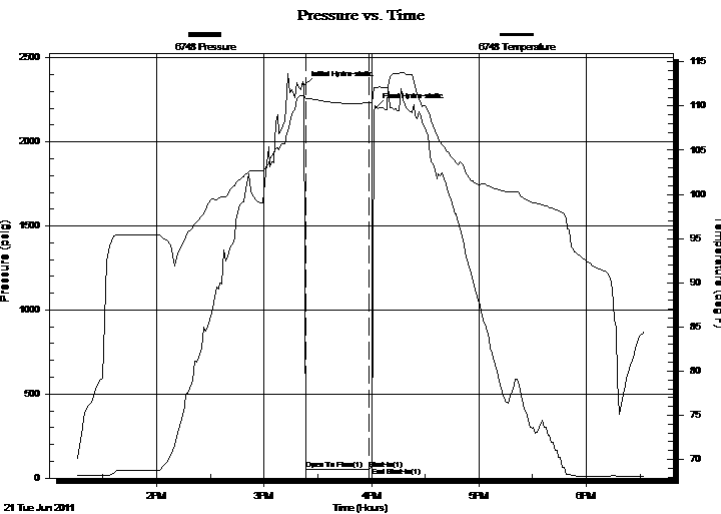
Time On Btm:

2011.06.21 @ 15:22:30

Time Off Btm:

2011.06.21 @ 16:02:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Surface blow/Blow did not build
 1ST Shut In Packer seat failure on shut in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2335.00	111.21	Initial Hydro-static
1	53.40	110.84	Open To Flow (1)
36	53.90	110.37	Shut-In(1)
38	64.87	110.41	End Shut-In(1)
40	2206.46	112.04	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
840.00	Mud 100%	11.12

Gas Rates

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



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16590

DST#: 7

Test Start: 2011.06.21 @ 13:15:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:23:30

Time Test Ended: 18:32:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4612.00 ft (KB) To 4660.00 ft (KB) (TVD)

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4660.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6749

Inside

Press @ Run Depth: 63.99 psig @ 4656.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.21

End Date: 2011.06.21

Last Calib.: 2011.06.21

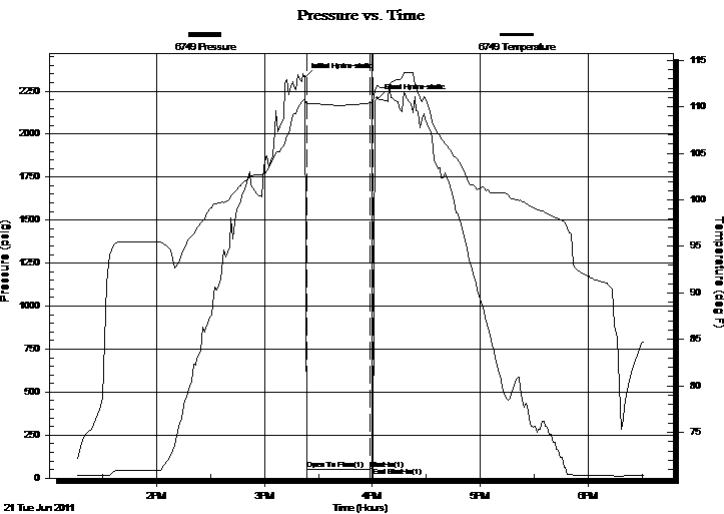
Start Time: 13:15:00

End Time: 18:32:00

Time On Btm: 2011.06.21 @ 15:22:30

Time Off Btm: 2011.06.21 @ 16:03:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Surface blow/Blow did not build
 1ST Shut In Packer seat failure on shut in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2330.73	110.78	Initial Hydro-static
1	52.83	110.38	Open To Flow (1)
36	53.15	110.41	Shut-In(1)
38	63.99	110.47	End Shut-In(1)
41	2208.81	112.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
840.00	Mud 100%	11.12

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16590

DST#: 7

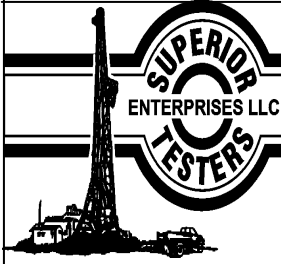
Test Start: 2011.06.21 @ 13:15:00

Tool Information

Drill Pipe:	Length: 4490.00 ft	Diameter: 3.88 inches	Volume: 65.66 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:	70000.00 lb
			<u>Total Volume: 66.25 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.75 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4612.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	76.75 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			4588.25	
Hydraulic tool	5.00			4593.25	
Change over sub	0.75			4594.00	
Jars	6.00			4600.00	
Safety Joint	2.00			4602.00	
Packer	5.00			4607.00	28.75 Bottom Of Top Packer
Packer	5.00			4612.00	
Anchor	0.00			4612.00	
change over sub	0.75			4612.75	
drill pipe	31.50			4644.25	
change over sub	0.75			4645.00	
anchor	10.00			4655.00	
Recorder	1.00	6749	Inside	4656.00	
Recorder	1.00	6748	Outside	4657.00	
bull plug	3.00			4660.00	48.00 Bottom Packers & Anchor

Total Tool Length: 76.75



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514
ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16590

DST#: 7

Test Start: 2011.06.21 @ 13:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: 10.00 in³

Resistivity: ohm.m

Salinity: 7500.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
840.00	Mud 100%	11.120

Total Length: 840.00 ft Total Volume: 11.120 bbl

Num Fluid Samples: 0

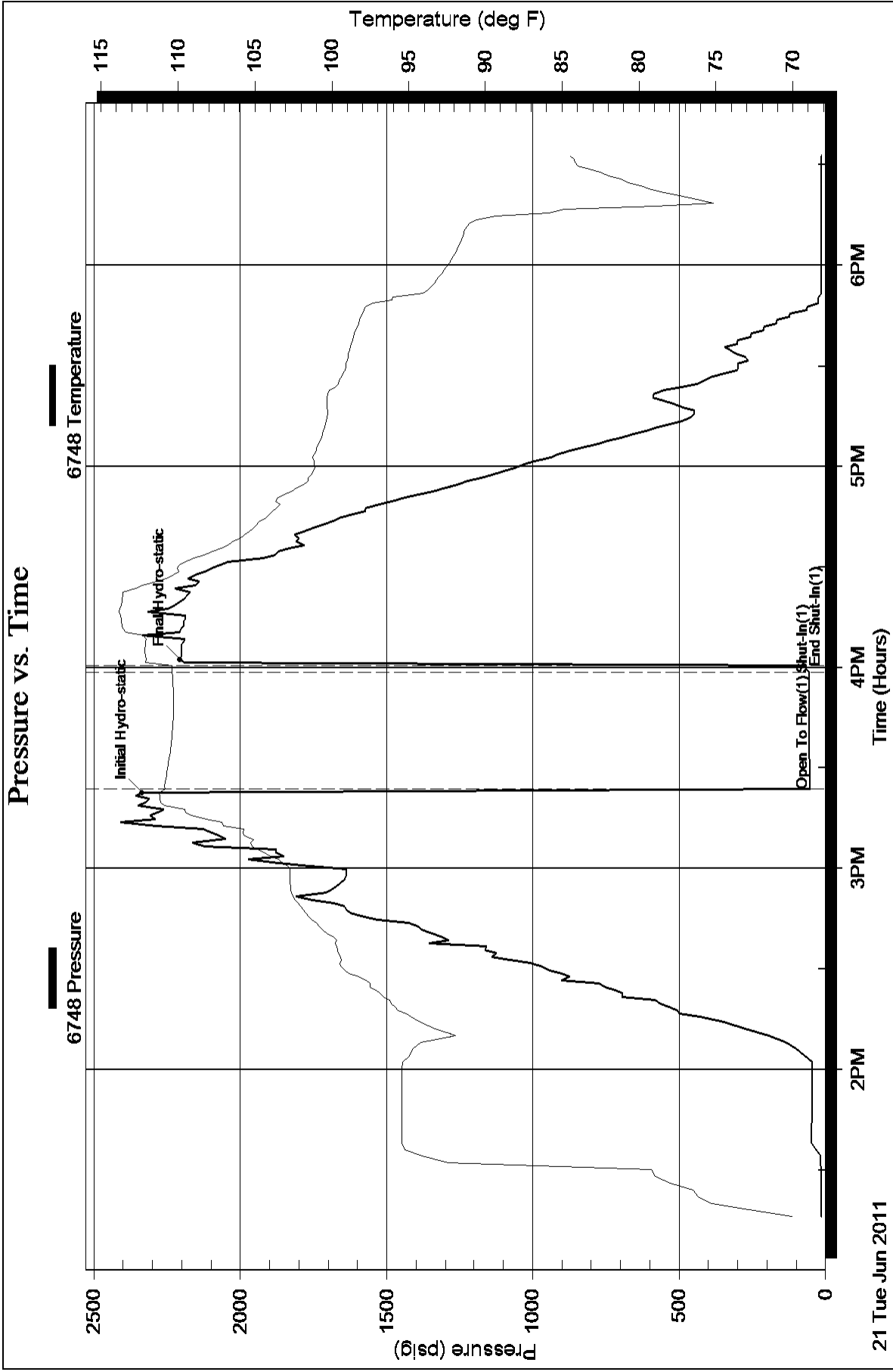
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 6749

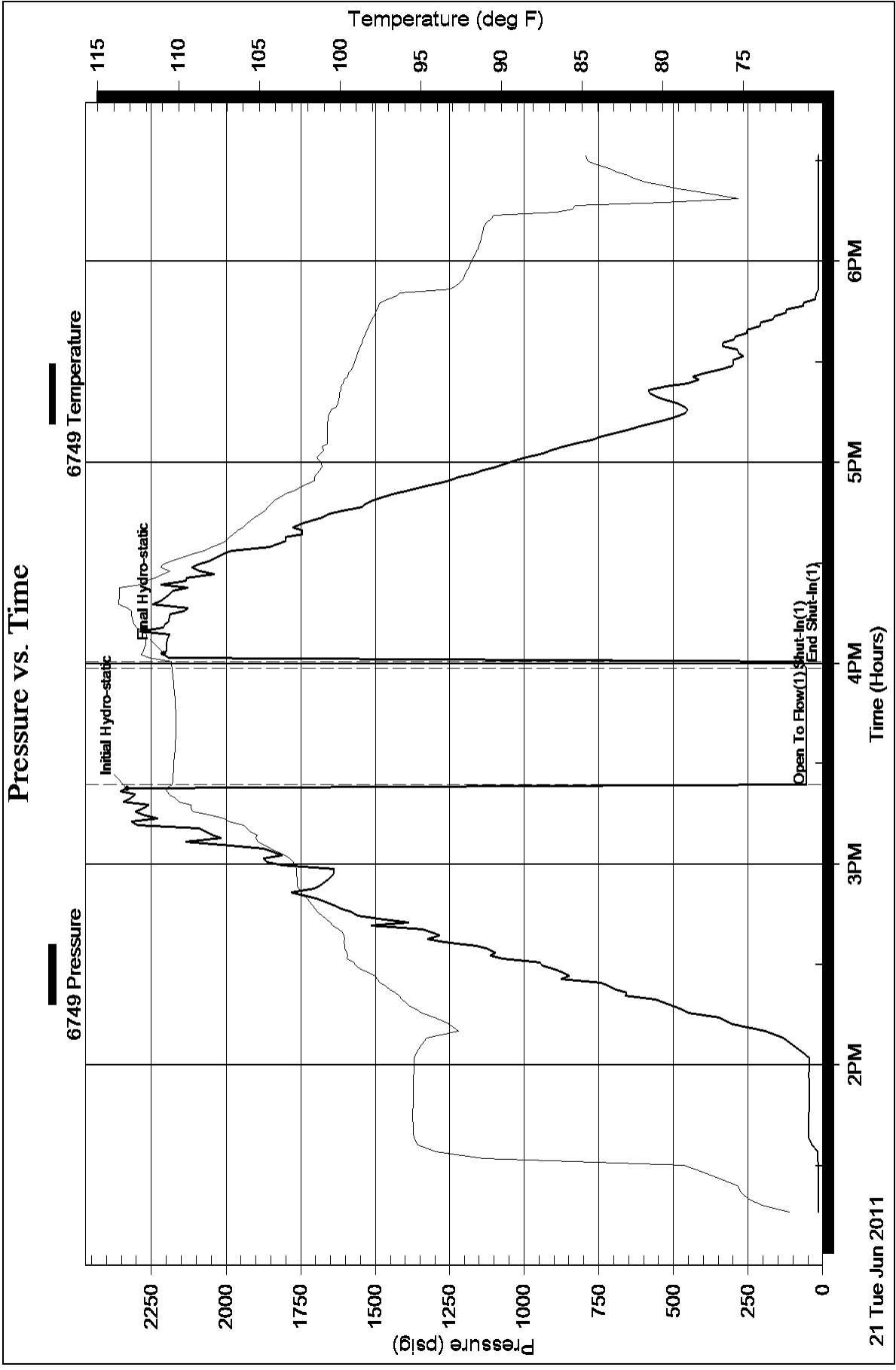
Inside

Grand Mesa Operating

4/16S/33W/Scott

DST Test Number: 7

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.21 @ 19:31:00

End Date: 2011.06.22 @ 00:57:30

Job Ticket #: 16591 DST #: 8

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

Printed: 2011.06.21 @ 23:18:43

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 8
Johnson
2011.06.21



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkw ay
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16591

DST#: 8

Test Start: 2011.06.21 @ 19:31:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:03:30

Time Test Ended: 00:57:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Sw inney

Unit No: 3325 Scott City/28

Interval: **4613.00 ft (KB) To 4660.00 ft (KB) (TVD)**

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4660.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6749 Inside

Press @ Run Depth: 64.74 psig @ 4656.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.21

End Date: 2011.06.22

Last Calib.: 2011.06.21

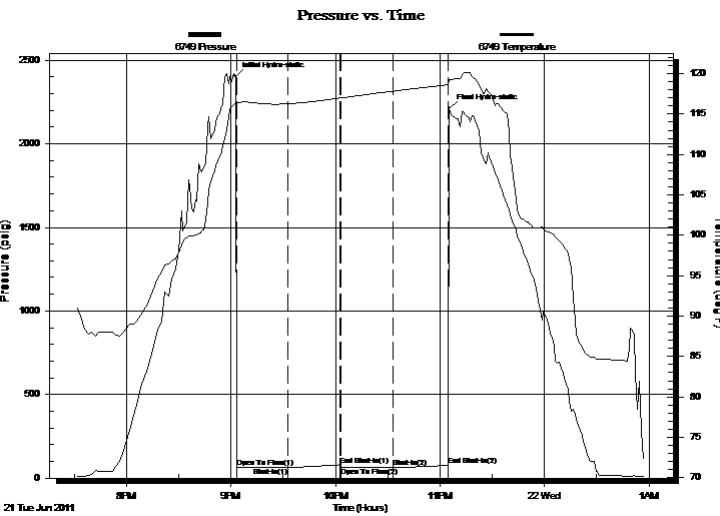
Start Time: 19:31:00

End Time: 00:57:30

Time On Btm: 2011.06.21 @ 21:02:30

Time Off Btm: 2011.06.21 @ 23:05:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow just below surface
 1ST Shut In 30 Minutes/No blow back
 2ND Open 30 Minutes/No blow
 2ND Shut In 30 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2404.66	116.46	Initial Hydro-static
1	64.99	116.25	Open To Flow (1)
30	65.05	116.25	Shut-In(1)
60	80.07	116.97	End Shut-In(1)
61	62.18	116.97	Open To Flow (2)
91	64.74	117.82	Shut-In(2)
122	76.60	118.61	End Shut-In(2)
124	2210.86	119.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.07

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16591

DST#: 8

Test Start: 2011.06.21 @ 19:31:00

Tool Information

Drill Pipe:	Length: 4490.00 ft	Diameter: 3.88 inches	Volume: 65.66 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:	70000.00 lb
			<u>Total Volume: 66.25 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.75 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4613.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	47.00 ft				
Tool Length:	75.75 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			4589.25	
Hydraulic tool	5.00			4594.25	
Change over sub	0.75			4595.00	
Jars	6.00			4601.00	
Safety Joint	2.00			4603.00	
Packer	5.00			4608.00	28.75 Bottom Of Top Packer
Packer	5.00			4613.00	
Anchor	0.00			4613.00	
change over sub	0.75			4613.75	
drill pipe	31.50			4645.25	
change over sub	0.75			4646.00	
anchor	9.00			4655.00	
Recorder	1.00	6749	Inside	4656.00	
Recorder	1.00	6748	Outside	4657.00	
bull plug	3.00			4660.00	47.00 Bottom Packers & Anchor

Total Tool Length: 75.75



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16591

DST#: 8

Test Start: 2011.06.21 @ 19:31:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 57.00 sec/qt
 Water Loss: 10.00 in³
 Resistivity: ohm.m
 Salinity: 7500.00 ppm
 Filter Cake: 1.00 inches

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

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud 100%	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6749

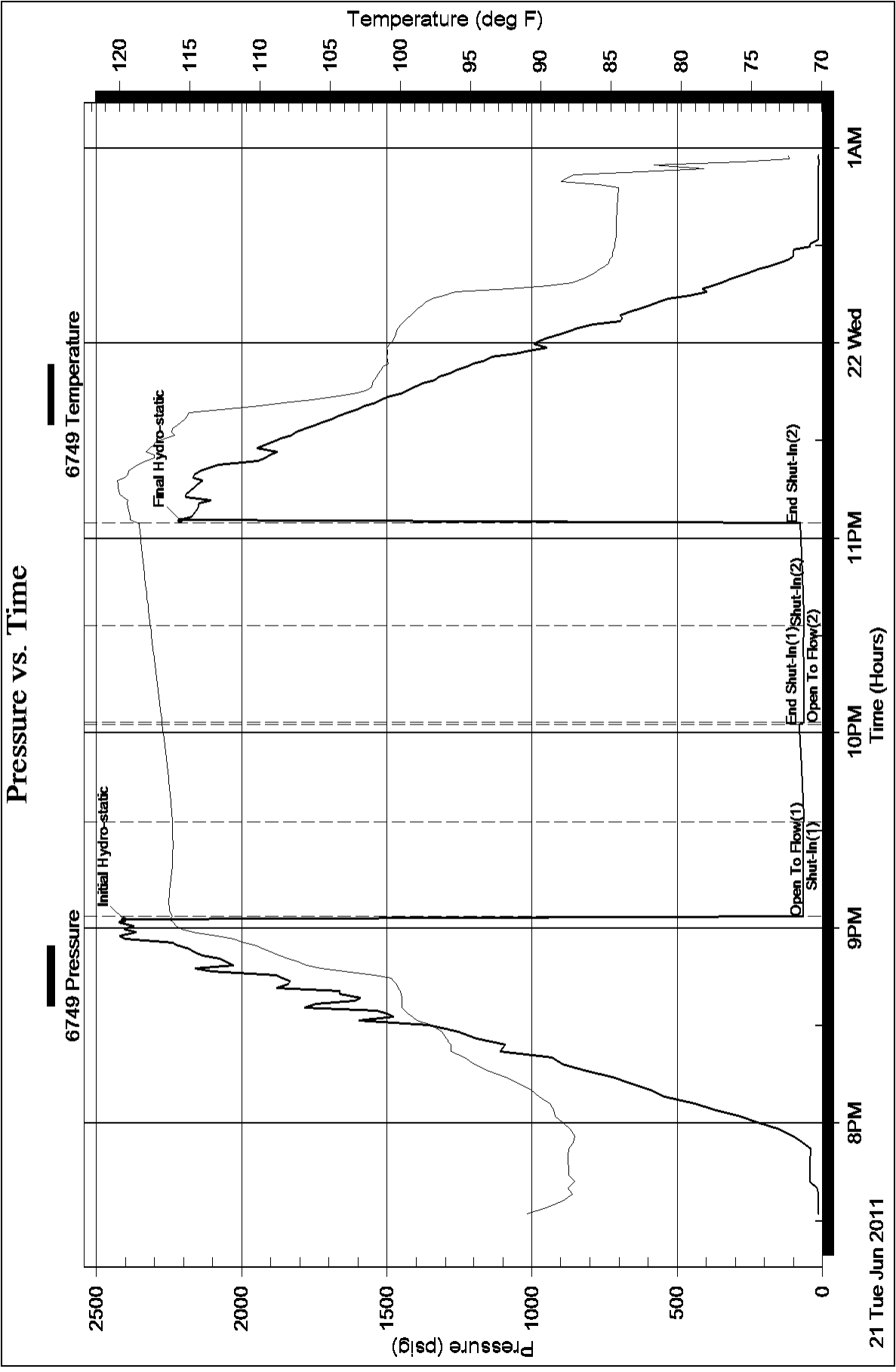
Inside

Grand Mesa Operating

4/16S/33W/Scott

DST Test Number: 8

Pressure vs. Time

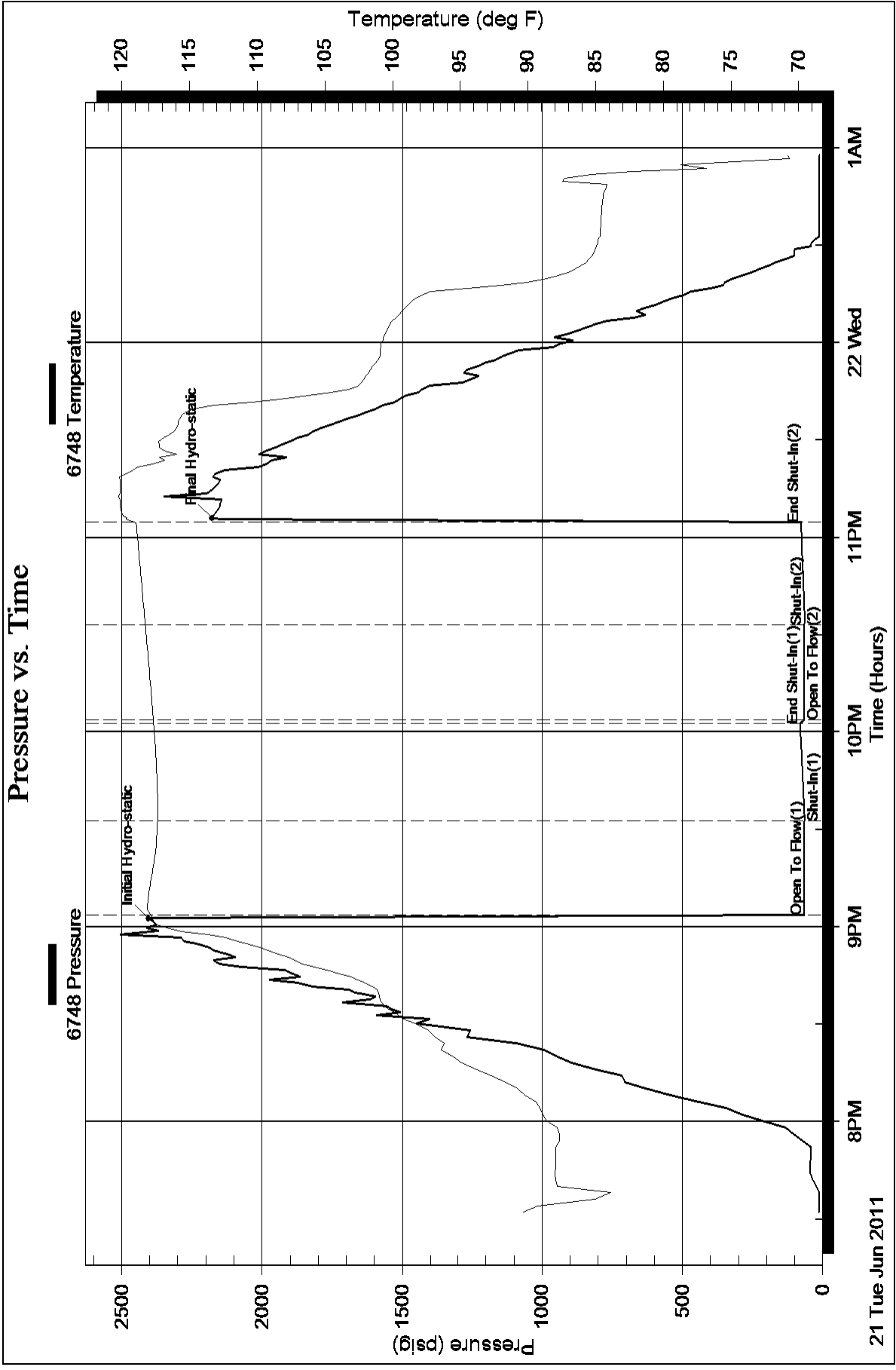


Ref. No: 16591

Superior Testers Enterprises LLC

Printed: 2011.06.21 @ 23:18:45

Pressure vs. Time



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/>

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

July 15, 2011

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

Re: ACO1
API 15-171-20812-00-00
DIRKS 1-4
SW/4 Sec.04-16S-33W
Scott 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

ALLIED CEMENTING CO., LLC. 043370

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Dartley, KS

DATE <u>6-11-11</u>	SEC. <u>4</u>	TWP. <u>16</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION	JOB START <u>10:00pm</u>	JOB FINISH <u>10:30pm</u>
LEASE <u>Dirt</u>	WELL # <u>1-4</u>	LOCATION <u>Pence, KS 4 1/2 E to Grand Rd Scott</u>			COUNTY <u>Scott</u>	STATE <u>K</u>	
OLD OR <u>NEW</u> (Circle one)		<u>2 N 1 E 1/4 N E info</u>					

CONTRACTOR Martin #24

TYPE OF JOB surface

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 ft

PERFS. _____

DISPLACEMENT 13.24 bbl

OWNER same

CEMENT AMOUNT ORDERED 165 sks com 3% cc

220 gel

COMMON	<u>165 sks</u>	@	<u>16.25</u>	<u>2681.25</u>
POZMIX		@		
GEL	<u>39 sks</u>	@	<u>21.25</u>	<u>828.75</u>
CHLORIDE	<u>6 sks</u>	@	<u>59.20</u>	<u>349.20</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>174 sks</u>	@	<u>2.25</u>	<u>391.50</u>
MILEAGE	<u>114 sk/mile</u>			<u>880.44</u>
TOTAL				<u>4326.84</u>

EQUIPMENT

PUMP TRUCK CEMENTER LaRone

431 HELPER Darren

BULK TRUCK DRIVER Ethan/Earl

396/306

BULK TRUCK DRIVER _____

REMARKS:

mix cement at 15 #

Displace with 13.24 bbl water

Cement did circulate

Thank You

CHARGE TO: Grand Mesa

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>222'</u>		
PUMP TRUCK CHARGE			<u>1125.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>45 x 2</u>	@	<u>2.00</u>
MANIFOLD <u>swedge</u>		@	<u>325.00</u>
<u>light vehicle mileage</u>		@	<u>4.00</u>
		@	
TOTAL			<u>2470.00</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

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

ALLIED CEMENTING CO., LLC. 040893

Federal Tax I.D.# 20-5976804

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

SERVICE POINT: Dallas, KS

DATE <u>6-23-11</u>	SEC. <u>4</u>	TWP. <u>16</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION	JOB START <u>8:30am</u>	JOB FINISH <u>2:30pm</u>
LEASE <u>Dirt</u>	WELL # <u>1-4</u>	LOCATION <u>Penue K9 4 1/2 E 2 N</u>			COUNTY <u>Scott</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one) <u>NEW</u>				<u>1 E 1/4 N E into</u>			

CONTRACTOR Marvin 24

TYPE OF JOB PTA

HOLE SIZE 278" T.D.

CASING SIZE _____ DEPTH _____

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2 DEPTH 2460'

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT 27.87 bbl

EQUIPMENT _____

OWNER same

CEMENT AMOUNT ORDERED 290 sks 60/40 4 bags

1/4 # flo-seal

COMMON	<u>124 sks @ 16.25</u>	<u>2012.50</u>
POZMIX	<u>116 sks @ 8.50</u>	<u>986.00</u>
GEL	<u>11 sks @ 21.25</u>	<u>233.75</u>
CHLORIDE	@	
ASC	@	
<u>flo-seal 72#</u>	@ <u>2.70</u>	<u>194.40</u>
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING	<u>384 sks @ 2.25</u>	<u>864.00</u>
MILBAGE	<u>118 sks/mile</u>	<u>1538.24</u>
TOTAL		<u>6463.89</u>

PUMP TRUCK # 431 CEMENTER Lakene HELPER Darren

BULK TRUCK # 396/306 DRIVER Ethan (Earl)

BULK TRUCK # _____ DRIVER _____

REMARKS:

Mix 50 sks at 26.40'

Mix 80 sks at 16.80'

Mix 30 sks at 8.90'

Mix 40 sks at 2.40'

Mix 20 sks at 6.0'

plug Mouschete w/ 20 sks

plug rest hole w/ 20 sks

Thank K you

CHARGE TO: Grand Mesa

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>2460'</u>	
PUMP TRUCK CHARGE		<u>1230.00</u>
EXTRA FOOTAGE	@	
MILEAGE	<u>46 x 2 @ 2.50</u>	<u>230.00</u>
MANIFOLD	@	
<u>Light Vehicle</u>	@ <u>4.00</u>	<u>368.00</u>
	@	
TOTAL		<u>2262.00</u>

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		_____

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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.

SALES TAX (if Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME Anthony Martin

SIGNATURE Anthony Martin