Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1074171

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 9855
Name: Grand Mesa Operating Company
Address 1: 1700 N WATERFRONT PKWY BLDG 600
Address 2:
City: WICHITA State: KS Zip: 67206 + 5514
Contact Person: Ronald N. Sinclair
Phone: (316) 265-3000
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Kent R. Matson
Purchaser: NCRA

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
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

01/04/2012	01/12/2012	01/31/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-135-25336-00-00
Spot Description: 2263' FSL & 2310' FEL S2NWNWSE
S2 - NW - NW - SE Sec. 17 Twp. 17 S. R. 24 ☐ East ☑ West
2263 Feet from ☐ North / ☑ South Line of Section
2310 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Ness
Lease Name: Phelps Well #: 3-17
Field Name: Dickman
Producing Formation: Mississippian
Elevation: Ground: 2461 Kelly Bushing: 2466
Total Vertical Depth: 4626 Plug Back Total Depth: 4614
Amount of Surface Pipe Set and Cemented at: 222 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 1770 Feet
If Alternate II completion, cement circulated from: 1770
feet depth to: 0 w/ 130 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 16200 ppm Fluid volume: 900 bbls
Dewatering method used: Evaporated

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

☑ **Confidentiality Requested**
Date: 02/15/2012
☑ **Confidential Release Date:** 02/14/2014
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 02/16/2012

[redacted] 1074171

Operator Name: Grand Mesa Operating Company Lease Name: Phelps Well #: 3-17

Sec. 17 Twp. 17 S. R. 24 ☐ East ☑ West County: Ness

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	222	Class "A"	165	3% CC; 2% Gel
Production	7.875	5.50	15.5	4624	EA-2	175	

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	0-1770	SMD	130	
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
4	4410-4435	500gals HC-1 Acid w/additives	4410-4435

TUBING RECORD: Size: 2.875 Set At: 4583 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 01/31/2012

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	46	0	50		38

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
4410-4435

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	Phelps 3-17
Doc ID	1074171

All Electric Logs Run

DI Log
CD/N PE Log
Micro Log
Dual Receiver Cement Bond Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	Phelps 3-17
Doc ID	1074171

Tops

Name	Top	Datum
Stone Corral	1740	+726
Bs/Stone Corral	1771	+695
Heebner	3780	-1314
Lansing	3820	-1354
Drum	3983	-1517
Stark	4057	-1591
Marmaton	4158	-1692
Excello	4310	-1844
Mississippian	4406	-1940
LTD	4631	

GRAND MESA OPERATING COMPANY

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

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

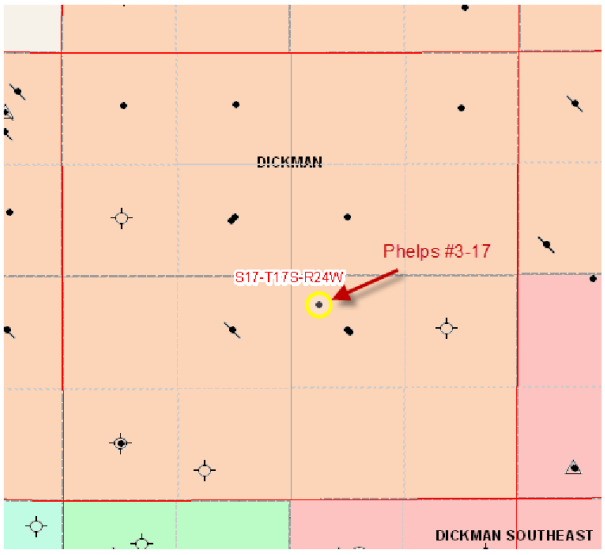
Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name:	PHELPS #3-17		
Location:	2263' FSL, 2310' FEL, 17-17s-24w, NESS County, Kansas		
License Number:	API: 15-135-25336	Region:	NESS County
Spud Date:	01/04/2012	Drilling Completed:	01/12/2012
Surface Coordinates:	Lat: 38.5720329 Long: -100.000096		
Bottom Hole Coordinates:	Vertical hole		
Ground Elevation (ft):	2461'	K.B. Elevation (ft):	2466'
Logged Interval (ft):	3600' To: RTD	Total Depth (ft):	4626'
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: Kent R. Matson
Company: Matson Geological Services, LLC
Address: 33300 W. 15th Street S.
Garden Plain, Kansas 67050
316-644-1975



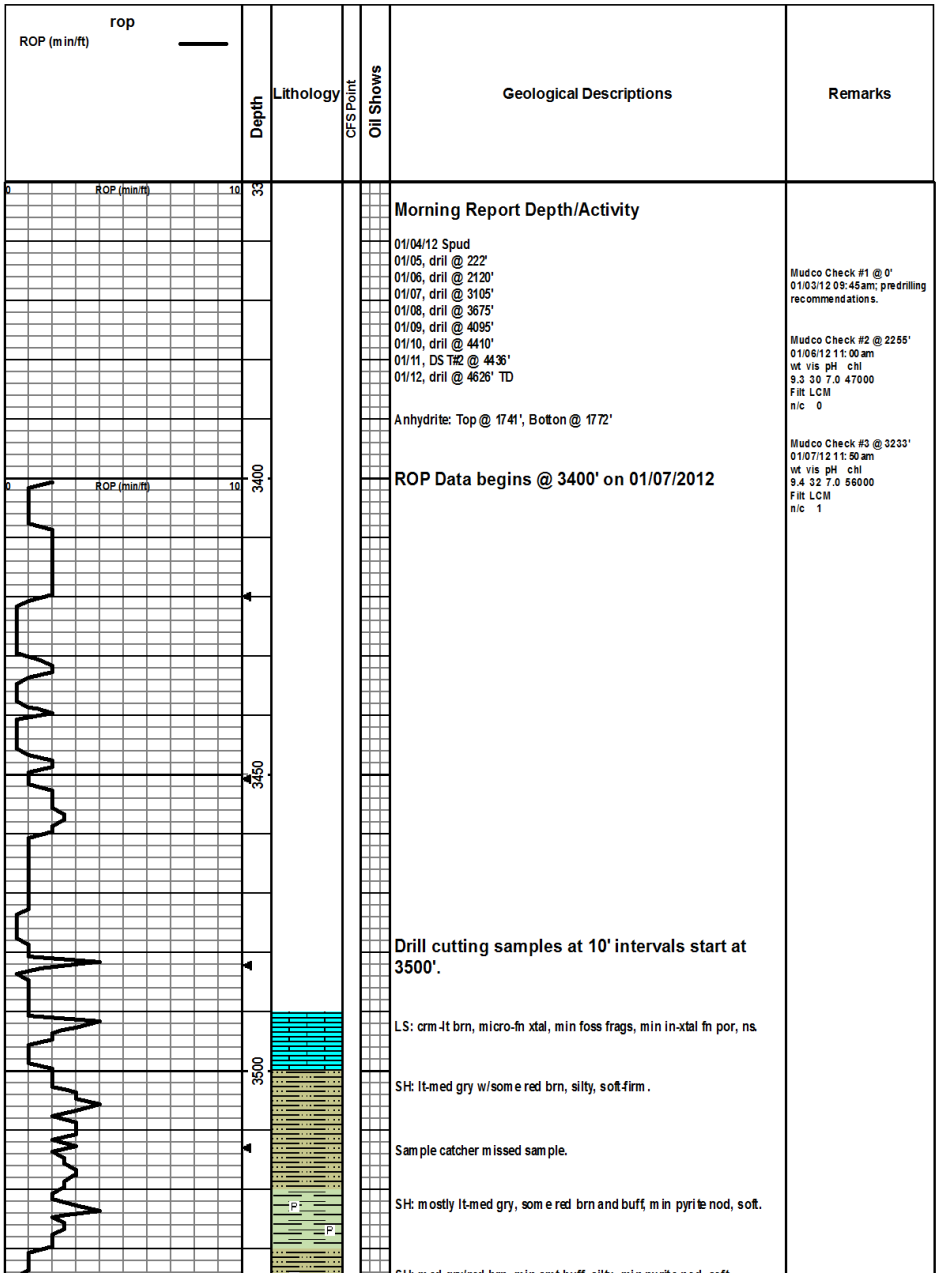
COMMENTS

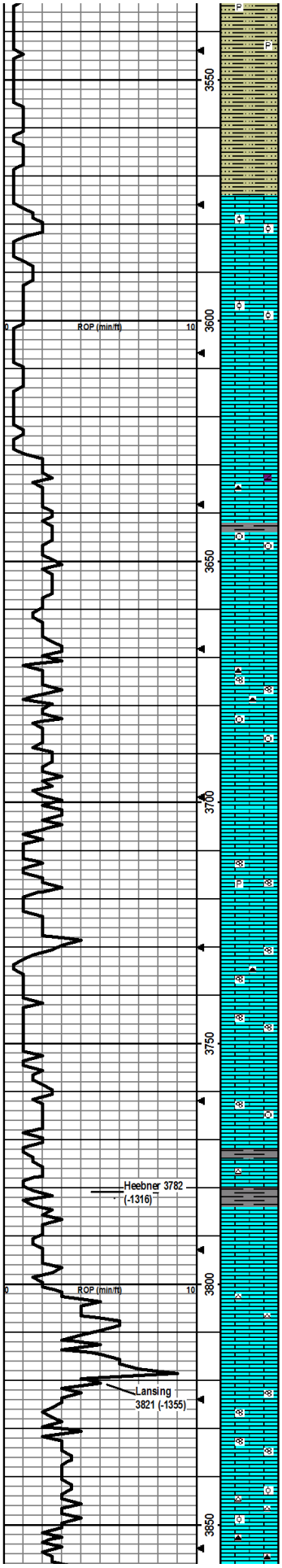
Contractor: Murfin Drilling Company Rig #24
Pusher: Tony Martin
Surface Casing: 8 5/8" set at 222' (KB) w/165sx concrete
Production Casing: Production casing (5 1/2") was installed to RTD.
Mud by: MudCo
DST's by: Trilobite Testing
Logs by: Superior Well Services (DIL, CN-CD, ML)
RTD= 4626'
LTD= 4631'

FORMATION TOPS

FORMATION	SAMPLE TOPS Depth	Datum	LOG TOPS Depth	Datum
Heebner Shale	3782'	-1316	3780'	-1314
Lansing	3821'	-1355	3820'	-1354

Stark Shale	4059'	-1593	4057'	-1591
Hushpuckney Shale	4095'	-1629	4088'	-1622
Marmaton	4161'	-1695	4158'	-1692
Excello Shale	4312'	-1846	4310'	-1844
Fort Scott	4349'	-1853	4316'	-1850
Mississippian	4313'	-1947	4406'	-1940
RTD	4626'	-2160		
LTD			4631'	-2165





SH: med gry/red brn, min amt buff, silty, min pyrite nod, soft.

Drilling fast - skipped sample.

SH: lt-med gry/red brn, silty, soft.

Skipped sample.

LS: lt gry/lt brn, micro-fn xtal, ool nods, silty, some pcs w/good oo-castic vug por, ns.

Skipped sample.

LS: lt gry/crm-lt brn, micro-fn xtal, silty, ool, some pcs w/good oo-castic por, ns.

Skipped sample.

Skipped sample.

LS: lt gry/lt-med brn, micro-fn xtal, min foss frags, min pcs w/ppt-fn por, ns.

LS: med gryish brn - dk brn, micro-fn xtal, foss frags w/fusln, min dk gry/blk chert, min dk brn dolo, min fn in-xtal por, ns.

Note: At 3628' FDC bit plugged. Ran sure-shot. Made bit trip and replaced with button rotary bit. Also strapped drill pipe - 1 ft short.

LS: crm-lt gryish brn, micro-fn xtal, foss frags w/min crin, few pcs med gry soft SH, min frac por, ns.

LS: lt gry/crm-lt brn, micro-fn xtal, foss frags, min frac por, ns.

LS: crm-med brn, micro-fn xtal, foss frags, silty, min frac por, ns.

LS: lt gry/crm-lt brn, micro-fn xtal, foss frags w/min fusln, gry chert, min frac por, ns.

LS: crm-med brn, micro-med xtal, foss frags/crin, stly pyritic, some soft chalky pcs, min frac por, ns.

LS: lt gry/crm, micro-fn xtal, min foss frags, no vis por, ns.

Same as above.

LS: lt-med gryish brn, micro-fn xtal, min foss frags/fusln, stly pyritic, min frac por, ns.

LS: lt gryish brn, micro-fn xtal, min foss frags, min frac por, ns.

LS: lt-med brnish gry, micro-med xtal, min foss frags/fusln, some lt gry chert, min frac por, ns.

LS: lt gry/crm-med brn, micro-fn xtal, foss frags/fusln, min in-xtal/frac por, ns.

LS: crm-lt gryish brn, micro-fn xtal, min foss frags, some lt gry chert, min frac por, ns.

LS: crm-med brn, micro-med xtal, foss frags/crin/fusln, min frac por, ns.

LS: lt gry/crm-med brn, micro-fn xtal, min foss frags, min lt gry chert, some med-dk gry SH, no vis por, ns.

SH: blk, carb, firm, fissile.

LS: lt gryish brn, micro-fn xtal, min foss frag, no vis por, ns.

Mudco Check #4 @ 3784'
01/08/12 11:30am
wt vis pH chl
8.7 60 10.5 7200
Filt LCM
6.0 1

LS: crm-lt brn, micro-fn xtal, min foss frags, min frac por, ns.

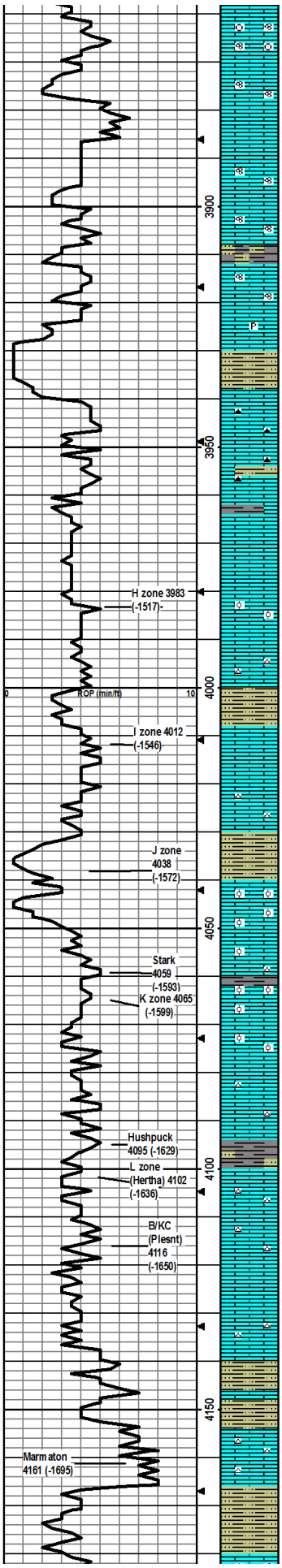
LS: lt gry/crm-lt brn, micro-med xtal, min foss frags, some soft silty, min lt gry chert, no vis por, ns.

LS: crm/lt-med gry, micro-fn xtal, min foss frags/fusln, some wht soft chalky pcs, min frac por, ns.

LS: lt greenish gry/crm-brn, micro-med xtal, foss frags/fusln, slty, pyritic, min frac por, ns.

LS: lt-med gry/crm-med brn, micro-med xtal, foss frags/ool, some wht chert, min in-xtal/frac por, ns.

LS: lt greenish gry/crm-dk brn, micro-med xtal, foss frags, some dk gry/blk chert, min frac por, ns.



LS: lt greenish gry/crm-dk brn, micro-med xtal, foss frags/fusln/crin some pcs abund ool, min in-xtal/frac por, ns.

LS: crm-dk brn, micro-med xtal, foss frags/fusln, some pyritic, min in-xtal/frac por, ns.

LS: lt gry/crm-lt brn, micro-fn xtal, foss frags, some lt gry chert, some med gry SH, no vis por, ns.

LS: crm-lt brn, micro-fn xtal, foss frags/fusln, min in-xtal/frac por, ns.

LS: lt gry/crm-lt brn, micro-med xtal, foss frags/fusln, in-xtal/frac por, ns.

SH: med-dk gry, carb, soft-firm, fissile.

LS: crm-lt brn, micro-med xtal, foss frags/min fusln, some silty pcs, min in-xtal/frac por, ns.

LS: crm-brn, micro-med xtal, foss frags, min pyritic, min in-xtal/frac por, ns.

SH: med-dk gry/mustard yel, carb, silty, firm, fissile.

LS: crm-brn, micro-med xtal, foss frags, brn chert, min in-xtal/frac por, ns.

LS: crm-dk brn, micro-med xtal, foss frags, some silty/chalky - crushes easily, some gry firm silty SH, min brn chert, no vis por, ns.

LS: crm-lt brn, micro-med xtal, foss frags, some gry-dk gry/blk and mustard yel firm silty SH, some fn in-xtal por, ns.

LS same as above.

LS: lt gry/crm-med brn, micro-med xtal, min foss frags w/some pcs of abund ool, mostly min frac por, ool pcs have good ool-castic por, ns.

LS: crm-lt brn, micro-fn xtal, min foss frags, some wht-lt gry chert, no vis por, ns.

SH: lt-dk gry/red-orange brn, silty, firm, fissile.

LS: crm, micro-fn xtal, stly silty, no vis por, ns.

LS: crm-lt brn, micro-fn xtal, min foss frags, wht-lt gry chert, no vis por, ns.

SH: lt gry/lt greenish gry/med-dk gry/blk/red brn, silty, firm, fissile.

LS: crm-lt brn, micro-med xtal, abund ool, good vug ool-castic por, some wht soft chalky pcs, ns.

LS: wht-crm, micro-fn xtal, min foss frags/ool, some wht chert, no vis por, ns.

SH: med-dk gry/blk, carb, firm, fissile.

LS: crm-lt brn, micro-med xtal, abund ool, some wht chalky pcs, good ool-castic vug por, ns.

LS: lt gry/crm-lt brn, micro-med xtal, min foss frags w/abund ool, good ool-castic por, ns.

LS: lt gry/crm, micro-fn xtal, silty, min wht chert, no vis por, ns.

SH: med-dk gry/blk, carb, silty, firm, fissile.

LS: lt gry/crm, micro-xtal, some silty, lt gry chert, no vis por, ns.

LS: crm, micro-fn xtal, min foss frags, lt brn chert, no vis por, ns.

LS: lt gry/crm, micro-fn xtal, min foss frags, no vis por, ns.

LS: crm/dk brn, micro-med xtal, min foss frags, some silty/sandy, some wht-lt brn chert, min frac por, ns.

SH: lt-dk gry/lt greenish gry/red brn, firm-hard, some silty, fissile.

LS: crm, micro-xtal, no vis por, ns.

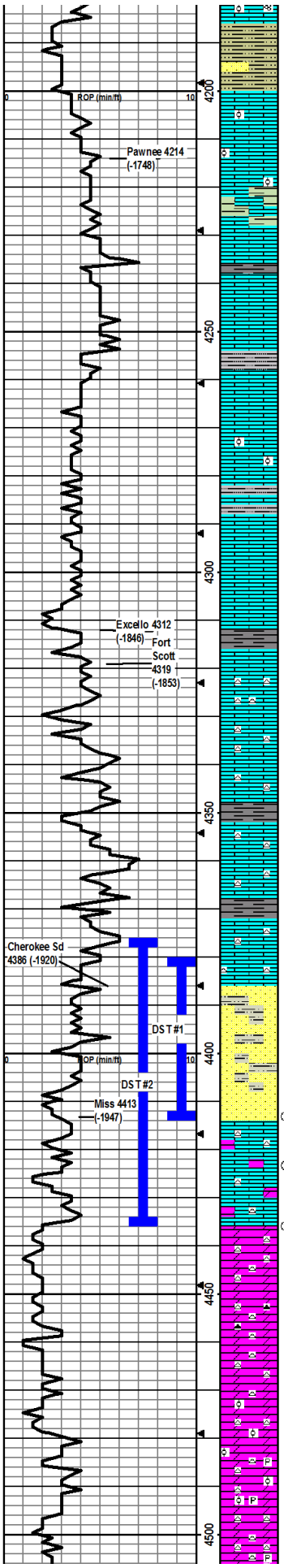
SH same as above.

LS: lt gry/crm, micro-xtal, some wht/lt brn chert, no vis por, ns.

SH: lt greenish gry/lt-med gry/red brn, some v-silty, soft-firm, fissile.

LS: lt gry/crm, micro-fn xtal, some pcs w/foss frags/fusln/ool, min

Mudco Check #5 @ 4152'
01/09/12 11:35am
wt vis pH chl
9.2 52 10.0 6500
Filt LCM
6.4 1



in-xtal por, ns.

SH: lt greenish gry/lt-dk gry/red brn, silty, firm.

SH same as above w/some dk gry vf-f SS, hard but crushes moderately.

LS: crm-lt yel, micro-med xtal, some ool, some ool-castic por, ns.

LS: same as above.

LS/SH mix: SH is lt-dk gry/brn-red brn, soft-firm, carb, fissile; LS is crm-lt brn, micro-xtal, no vis por, ns.

LS as above w/SH; med-dk gry, carb, firm, brittle, fissile.

LS: crm/lt gryish brn, micro-xtal, no vis por, ns.

LS: crm-lt brn, micro-fn xtal, some foss frags, no vis por, ns.

SH: greenish gry/med-dk gry/red brn, firm, fissile.

LS: crm, micro-xtal, dense, no vis por, ns.

LS: wht/crm-brn, micro-med xtal, foss frags some pcs w/abund ool, min ool-castic por, ns.

LS/SH mix: SH is lt-med gry/red brn, silty, firm, fissile; LS is crm/lt gry, micro-med xtal, some pcs w/abund ool w/vug por, ns.

LS: lt-dk gry, micro-xtal, dense, no vis por, ns. Note: smpl is mostly SH.

LS: lt gry/crm, micro-fn xtal, silty which crushes easily, no vis por, ns.

SH: blk, carb, firm, fissile.

LS: lt gry/crm, micro-fn xtal, one pce w/gd vug por w/fo, gd odor, yel flor, sfo.

Note: This Ft Scott top is a local pick and not equivalent to western Kansas.

LS: crm, micro-xtal, some foss frags, abund lt brn chert, min fn in-xtal/frac por, gd odor, yel flor, slow yel cut, fo in sevl pcs that crush easily, sfo.

Same as above.

LS: crm-lt brn, micro-fn xtal, sev ool nod, lt-med brn chert, slt pyritic, min frac por, no odor, ns.

SH: lt greenish gry/lt-med gry/dk brn, carb, soft-firm.

LS: crm-lt brn, micro-fn xtal, vf-fn por, lt-med brn chert, gd odor, 8 pcs in tray w/fo, yel flor w/slow strm cut, gsfo.

DST1) 4380-4413
30/45/45/60
1st) wk to fair surf blow built to 4.25" in 30 min, no BB.
2nd) wk to fair surf blow built to 5" in 45 min,no BB
IFP 20-50#
ISIP 1068# FFP 52-80# FSIP 1028#
HP 2181-2129#
Recvd: 50' O, 55' MCO, 60" HOCM.

LS: same as above w/4 pcs w/fo.

SH: lt green/med-dk gry/blk, firm, carb, fissile.

LS: crm-lt brn, micro-fn xtal, lt-med brn chert, fn in-xtal por, slt odor, yel flor, 4 pcs w/fo, gsfo.

SS: gry-dkgry, pred qrtz, vf-f grnd, sr-wr, carb matrix, hard to crush, 10 pcs w/dk brn fo, gd odor, dull yel flor w/gd strm cut, gsfo.

Mudco Check #6 @ 4410'
01/10/12 10:45am
wt vis pH chl
9.2 50 10.5 6000
Filt LCM
7.2 1

SS as above. Approx 20 pcs w/fo in both 30min and 60min smpls. Appears to be less carb matrix, crushes a little easier than material above.

CFS @ 4413'
30"/60"

LS: lt gry/crm, micro-fn xtal, some lattice structure foss, some silty/sdy, some lt brn chert, some lt gry DOLO, gd fn-vug por, strg odor, yel flor, approx 25% of smpl tray w/vgsfo in both 30" and 60" smpls.

CFS @ 4423'
30"/60"

LS same as above w/vgsfo.

CFS @ 4436'
30"/60"

DOLO: lt gryish crm/crm, micro-fn xtal, some foss frags/lattice struct, lt gry/lt brn chert, fn-vug por, wk eff, strg odor, yel flor, approx 25% of tray w/vgsfo.

Mudco Check #7 @ 4436'
01/11/12 10:45am
wt vis pH chl
9.3 56 10.5 6400
Filt LCM
6.4 1

Same as above w/few pcs of dk gry/blk chert.

DST2) 4376-4436
30/45/45/60
1st) BOB in 3 min, no BB.
2nd) BOB in 7 min, no BB.
IFP 76-238#
ISIP 1096# FFP 242-389# FSIP 1059#
HP 2208-2113#
Recvd: 285' GMCO, 155' MO, 250' GWMCO, 185' MW

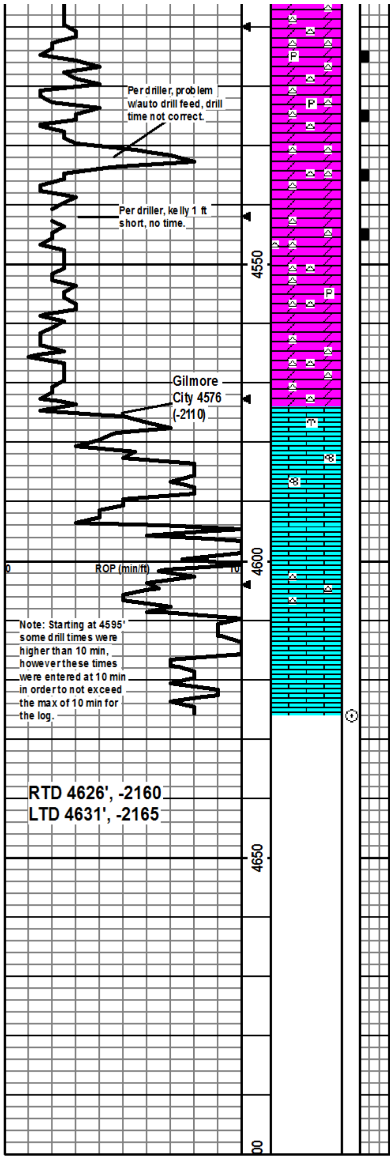
Decrease in the amt of pcs w/vuggy fo, est approx 15%.

DOLO: lt gryish crm/crm, micro-fn xtal, some pcs w/dk green min, wht chert, few ool nods, some wht chalky pcs, mostly min frac por, gd odor, less than 10% pcs w/fo vug por, gsfo.

Same as above w/decrease to 6 tray pcs w/vuggy fo, few dk brn pyritic pcs.

Same as above w/5 tray pcs w/vuggy por fo.

DOLO: wht/crm-lt brn, micro-fn xtal, some pyritic, increase in wht/lt gry chert, some wht chalky pcs, mostly dense w/6 tray pcs w/vuggy



por fo, gd odor, sfo.

3 vuggy pcs w/sfo. Abund wht/lt gry chert.

Same as above 5 vuggy pcs w/sfo.

DOLO: wht/lt gry/crm-med brn, micro-fn xtal, brn pcs are v-silty, wht chalky pcs, abund wht-lt gry chert, fn-vug por, odor, yel flor, few pcs w/fo.

DOLO: wht/lt-med gry/crm-med brn, micro-fn xtal, some vry silty pcs, wht chalky pcs, abund wht/lt brn chert, fn-vug por, slt odor, one pcs w/fo.

DOLO: wht/crm-lt brn, micro-fn xtal, some lattice struct foss, vry silty, abund wht chert, slt pyritic, fn-vug por, ns.

DOLO: wht/crm, micro-fn xtal, vry silty, abund wht chert, vf ppt por, ns.

LS: brn/dk gry, micro-fn xtal, min bryzn foss, silty, no vis por, ns.

LS: lt gry/brn, micro-med xtal, foss frags/fusln, frac por, ns.

LS: lt gryish crm, micro-fn xtal, min in-xtal/frag por, ns.

LS: lt gryish crm/crm/lt brn, micro-fn xtal, abund wht chert, min in-xtal/frac por, ns.

LS: crm-lt brn, micro-med xtal, abund ool, min in-xtal/frac por, ns.

TD at 4626

CFS @ 4626' 30"/60". Cir total of 1.5 hrs to clean hole.

DRILL STEM TEST REPORT

Grand Mesa Operating Company

1700 N Waterfront Pkwy Bldg 600 Wichita, Ks 67206

ATTN: Kent Matson

17-17-24 Ness, Ks

Phelps 3-17

Job Ticket: 46405 **DST#: 1**

Test Start: 2012.01.10 @ 12:23:49

GENERAL INFORMATION:

Formation: **Cherokee Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:39:55
Time Test Ended: 19:41:25

Test Type: Conventional Bottom Hole (Initial)
Tester: Brian Fairbank
Unit No: 41

Interval: 4384.00 ft (KB) To 4417.00 ft (KB) (TVD)
Total Depth: 4417.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

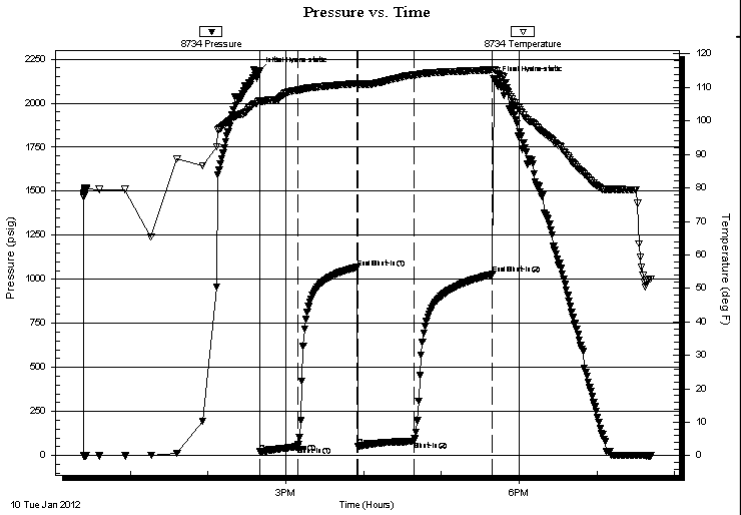
Reference Elevations: 2466.00 ft (KB)
2461.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8734 **Outside**

Press@RunDepth: 80.27 psig @ 4389.00 ft (KB)
Start Date: 2012.01.10 End Date: 2012.01.10
Start Time: 12:23:56 End Time: 19:41:25

Capacity: 8000.00 psig
Last Calib.: 2012.01.10
Time On Btm: 2012.01.10 @ 14:38:55
Time Off Btm: 2012.01.10 @ 17:41:25

TEST COMMENT: IFP - weak to fair blow sur - 4 1/4"
ISI - no blow back
FFP - weak to fair blow sur - 5"
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2181.10	106.08	Initial Hydro-static
1	20.13	105.72	Open To Flow (1)
30	50.08	109.17	Shut-In(1)
76	1067.51	111.18	End Shut-In(1)
77	52.08	110.94	Open To Flow (2)
120	80.27	113.71	Shut-In(2)
181	1028.44	115.31	End Shut-In(2)
183	2129.41	115.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	HOCM 30%O, 70%M	0.30
55.00	MCO 60%O, 40%M	0.27
50.00	FREE OIL 95%O, 5%M	0.40

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Company

1700 N Waterfront Pkwy Bldg 600 Wichita, Ks 67206

ATTN: Kent Matson

17-17-24 Ness, Ks

Phelps 3-17

Job Ticket: 46405 **DST#: 1**

Test Start: 2012.01.10 @ 12:23:49

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	37 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HOCM 30%O, 70%M	0.295
55.00	MCO 60%O, 40%M	0.270
50.00	FREE OIL 95%O, 5%M	0.401

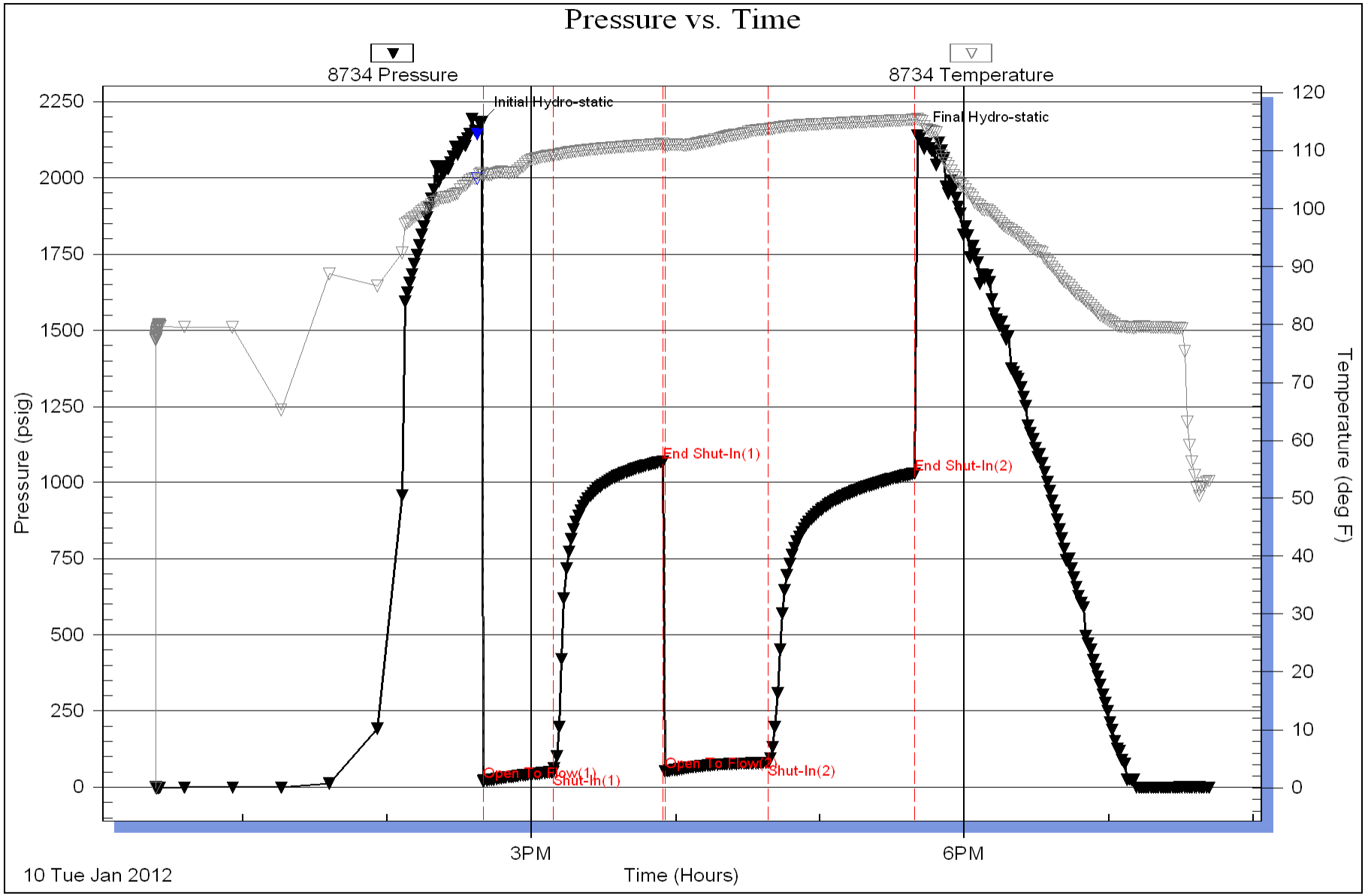
Total Length: 165.00 ft Total Volume: 0.966 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8734 **Outside** Grand Mesa Operating Company Phelps 3-17 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 46405 Printed: 2012.01.11 @ 08:34:46

DRILL STEM TEST REPORT

Grand Mesa Operating Company

1700 N Waterfront Pkw g Bldg 600 Wichita, Ks 67206

ATTN: Kent Matson

17-17-24 Ness, Ks

Phelps 3-17

Job Ticket: 46406 **DST#: 2**

Test Start: 2012.01.11 @ 04:27:18

GENERAL INFORMATION:

Formation: **Cherokee/Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:35:48
Time Test Ended: 12:34:48

Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41

Interval: 4376.00 ft (KB) To 4436.00 ft (KB) (TVD)
Total Depth: 4436.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

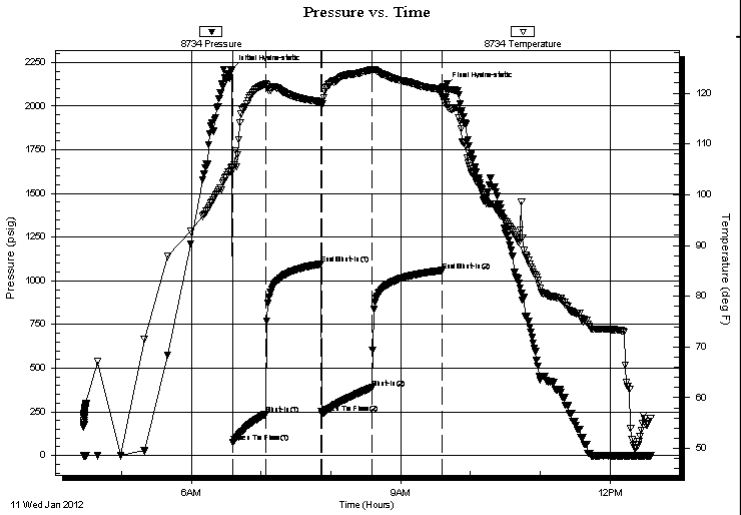
Reference Elevations: 2466.00 ft (KB)
2461.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8734 **Outside**

Press@RunDepth: 388.49 psig @ 4413.00 ft (KB)
Start Date: 2012.01.11 End Date: 2012.01.11
Start Time: 04:27:19 End Time: 12:34:48

Capacity: 8000.00 psig
Last Calib.: 2012.01.11
Time On Btm: 2012.01.11 @ 06:34:18
Time Off Btm: 2012.01.11 @ 09:37:48

TEST COMMENT: IFP - BOB 3 min
ISI - no blow back
FFP - BOB 7 min
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.99	105.24	Initial Hydro-static
2	76.38	104.92	Open To Flow (1)
30	237.52	121.77	Shut-In(1)
77	1095.71	118.32	End Shut-In(1)
78	241.98	117.96	Open To Flow (2)
121	388.49	124.55	Shut-In(2)
181	1059.36	120.70	End Shut-In(2)
184	2112.65	118.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
185.00	MW 90%W, 10%M	1.78
250.00	GW & MCO 20%G, 55%O, 10%W, 15%M	3.51
155.00	MO 90%O, 10%M	2.17
185.00	GMCO 15%G, 45%O, 40%M	2.60

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Company

1700 N Waterfront Pkwy Bldg 600 Wichita, Ks 67206

ATTN: Kent Matson

17-17-24 Ness, Ks

Phelps 3-17

Job Ticket: 46406 **DST#: 2**

Test Start: 2012.01.11 @ 04:27:18

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	38 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	31000 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.18 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
185.00	MW 90%W, 10%M	1.784
250.00	GW & MCO 20%G, 55%O, 10%W, 15%M	3.507
155.00	MO 90%O, 10%M	2.174
185.00	GMCO 15%G, 45%O, 40%M	2.595

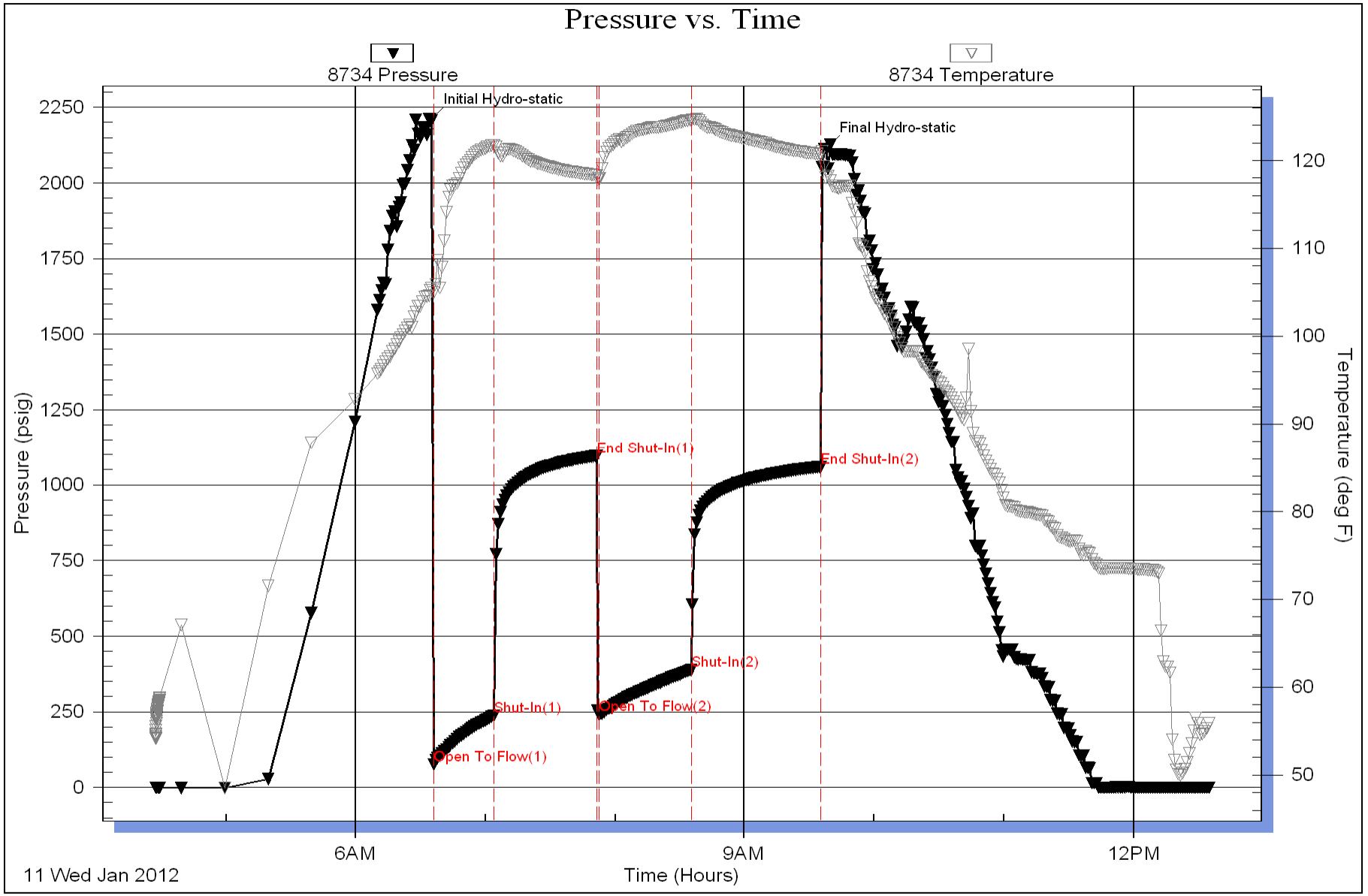
Total Length: 775.00 ft Total Volume: 10.060 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8734 **Outside** Grand Mesa Operating Company Phelps 3-17 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 46406 Printed: 2012.01.12 @ 08:35:07

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

Kansas
Corporation Commission

Phone: 316-337-6200
Fax: 316-337-6211
http://kcc.ks.gov/

February 15, 2012

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

Re: ACO1
API 15-135-25336-00-00
Phelps 3-17
SE/4 Sec.17-17S-24W
Ness 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

CONSOLIDATED
Oil Well Services, LLC

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

TICKET NUMBER 33764
LOCATION Oakley Ks
FOREMAN Walt Dinkel

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1-4-12	3372	Phelps 3-17	17	17 S	24 W	Ness

CUSTOMER: Grand Mesa
MAILING ADDRESS:
CITY | STATE | ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
463	Josh Guckle		
439	Cory Davis		

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 222' CASING SIZE & WEIGHT 8 5/8 - 23#
CASING DEPTH 222' DRILL PIPE TUBING OTHER
SLURRY WEIGHT 15.2 SLURRY VOL WATER gal/sk CEMENT LEFT In CASING 15'
DISPLACEMENT 13 1/4 DISPLACEMENT PSI MIX PSI RATE 5 BPM

REMARKS: Safety Meeting, rig up on Murfin 24, circ casing on bottom mix 165 SKs com, 3% CC- 2% Gel, Displace 13 1/4 BBL H2O @ 150# Shut in

Cement Did Circ

Thank you
Walt Crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	1,085.00	1,085.00
5406	25	MILEAGE	5.00	125.00
11045	165 SKs	Class A Cement	17.65	2,912.25
1102	465 #	Calcium Chlorid.	.89	413.85
1118B	310 #	Bentanite	.25	77.50
5407	7.76	Ton mileage Delivery	1.67	410.00
				5,023.60
		Less 10% Disc	-	502.36
				4,521.24
		246964	SALES TAX	192.98
			ESTIMATED TOTAL	4714.22

Ravin 3737

AUTHORIZTION Brittany Ward TITLE Pusher Rig #24 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.

SWIFT Services, Inc.

JOB LOG

DATE 12 JAN 12 | PAGE NO.

CUSTOMER GRAND MESA | WELL NO. | LEASE PHELPS 3-17 | JOB TYPE 5½ LONGSTRING | TICKET NO. 21539

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	2030							ON LOCATION
	2305							START PIPE 5½-15.5#
								RTD E 4626 LTD E 4631
								SHOE JOINT 10'
								CENTRALIZERS 1,3,5,7,9,11,67
								CEMENT BASKETS 2,68
								PORT COLLAR TOP OF JT # 68 @ 1770
	0156							DROP BALL CIRCULATE
	0210	6	12		↓		300	Pump 500 gal MUD FLUSH
	0212	6	20		↓		300	Pump 20 BBL KCL FLUSH
	0219		7					PLUG RH (30 SX)
	0221	4	35		↓			MIX 145 SX EA2
	0235							WASH OUT PUMPING LINES
	0237	6			↓			RELEASE PLUG START DISPLACEMENT
	0255		110		↓			PLUG DOWN PSI UP LATCH PLUG IN
	0258				↓			RELEASE PSI - DRY
	0300							WASH TRUCK
	0330							JOB COMPLETE
								THANKS # 110
								JASON JEFF DAVID

JOB LOG

SWIFT Services, Inc.

DATE 19 Jan 12 | PAGE NO. 1

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
Grand Mesa	3-17	Phelps	cement port collar	22625

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
								130 ~~130~~ ~~200~~ sk SMD w/ ¼# Flocele
								2⅞ x 5½ port collar - 1770'
	1100							on loc TRK 114
	1135					1000	1000	test to 1000 psi - held
								open port collar
	1150	3	4				300	inj rate
	1155	3¾				200		mix SMD cement @ 11.2 ppg
			12					flush to surface
	1210	3¾	66			500		cement to surface {130 sk mixed 20 to pit}
		3¾	9			500		Displace w/ H2O
	1220							close port collar
	1225					1000	1000	test to 1000 psi - held
	1235		22					Reverse out - 2 cement flags
	1245							wash truck
								pull tool
								Rack up
	1315							Job complete
								Thanks
								Dave, Doug & Brian

Acidizing Report **PRO-STIM CHEMICALS**

Date 1-24-12

Customer Grand Mesa	Pro-Stim Chemical Yard Dighton		Pro-Stim Number A6
Well Name & Number Phelps #3-17	Field		Formation Spot 2.5 barrel
County Ness / State KS	BHT	YD	Interval 4410 TD

Well Type: Completion ☐ Recompletion ☐ Workover ☐ Oil ☐ Gas ☐ Water ☐ Disposal ☐ Perf ☐ OH ☐

Job Pumped Via: Tubing ☐ Casing ☐ Annulus ☐ CTU ☐ Combination ☐ | Plug Depth | Packer Depth 4350

Casing Size:	GRD	WT	Depth	Tubing Size: 2 7/8	GRD	WT	Spot
Casing Vol.	Tbg Vol		Ann Vol	OH Vol	Total Displacement		
Maximum Pressure	Tubing		Casing	Proposed Pump Time	AOL	Leave Loc	

Special Instructions:

Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure Tubing	Pressure Casing	Observations
Minutes							Safety Meeting
	Acid	Spot		25			Prs Test to ____ psi
20	Acid	2.9		4.0	40		start to load Tubing
23	Acid	2.9		12	40		acid gone
29	Flush	0		26.9	70		Hole loaded
30	Flush	.5		27.6	500		
33	Flush	.7		29.5	750		
35	Flush	2.0		32.4	900		mak
37	Flush	2.0		34	870		
39	Flush	2.0		37	880		
40	Flush	2.0		39	880		done

Treatment Synopsis

Avg Inj Rate	Fluid BPM		Total Injected	H20 27	Acid 12	Oil		
Treating Prs.	Max 900	Final 780	Avg.	ISIP 600	[illegible] VAC	10' SI	15' SI	
Customer Representative				Pro-Stim Supervisor		Shannon M.		

1 min

Pro-Stim Chemicals, LLC

P.O. Box 25
Cheyenne Wells, CO 80810

FEB 13 2012

Invoice

Date	Invoice #
1/31/2012	61190

Bill To	Ship To
Grand Mesa Operating Co. 1700 N. Waterfront Pkwy - Bldg 600 Wichita, KS 67206-6614	

Requested By	Terms	Sales Rep.	Ship	Lease
	Net 30	T P	1/24/2012	PHELPS #3

Quantity	Item Code	Description	Price Each	Amount
500	15% HCl ACID	GALLONS	1.78	890.00
10	S-3000	GALLONS	23.56	235.60
10	RENAB	GALLONS	17.89	178.90
2	S-262	GALLONS	14.36	28.72
2	AC-307	GALLONS	18.61	37.22
1.5	AI-150	GALLONS	20.15	30.23
30	KCL BIOCIDE - 2%	BRLS	3.16	94.80
1	DUMP JOB		158.00	158.00T
3	TRUCK TIME	HOURS	95.00	285.00T
		Sales Tax - NESS CO.	6.30%	27.91

Total $1,966.38

Phone #	Fax #	E-mail
719-767-8071	719-767-5925	prostim@hotmail.com