



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1090780
OIL & GAS CONSERVATION DIVISION

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 # _____

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
- Plug Back Conv. to GSW Conv. to Producer
- 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

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical 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

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

1090780

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

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

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

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 <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 Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	S & L 1-14
Doc ID	1090780

All Electric Logs Run

CPDCN Micro Log
AI Shallow Focused Elect. Log
Micro Log
Dual Receiver Cmt Bond Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	S & L 1-14
Doc ID	1090780

Tops

Name	Top	Datum
Stone Corral	2384	+525
Bs/Stone Corral	2413	+496
Heebner	3936	-1027
Lansing	3978	-1070
Muncie Creek	4131	-1222
Stark	4215	-1306
Marmaton	4311	-1402
Little Osage	4438	-1529
Mississippian	4598	-1689
LTD	4700	

**GRAND
MESA****OPERATING COMPANY**

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

1700 N. WATERFRONT PARKWAY
BLDG. 600
WICHITA, KANSAS 67208-5514

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

Well Name: S & L #1-14
Location: 330' FSL, 553' FEL, 14-13S-31W, Gove County, Kansas
License Number: API: 15-063-22003 Region: Wildcat
Spud Date: 6-20-12 Drilling Completed: 6-30-12
Surface Coordinates: Lat: 38.9180527 Long: -100.7250687

Bottom Hole Coordinates: Vertical hole

Ground Elevation (ft): 2904 K.B. Elevation (ft): 2909
Logged Interval (ft): 3600' To: RTD Total Depth (ft): 4698'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

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

GEOLOGIST

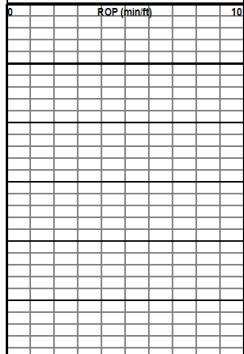
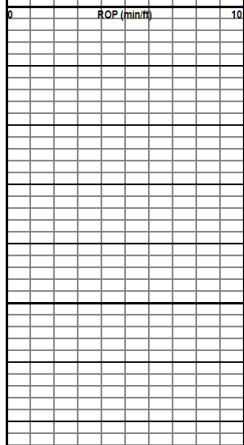
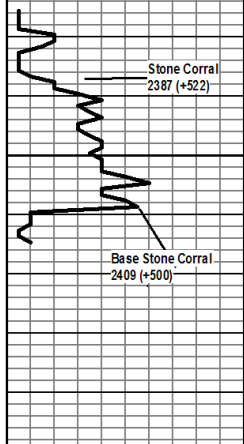
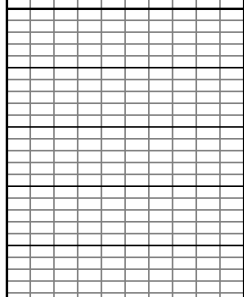
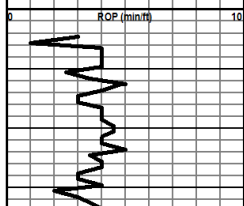
Name: Bob Schreiber
Company: Independent
Address: 268 NE 220 Rd
Hoisington, KS 67544

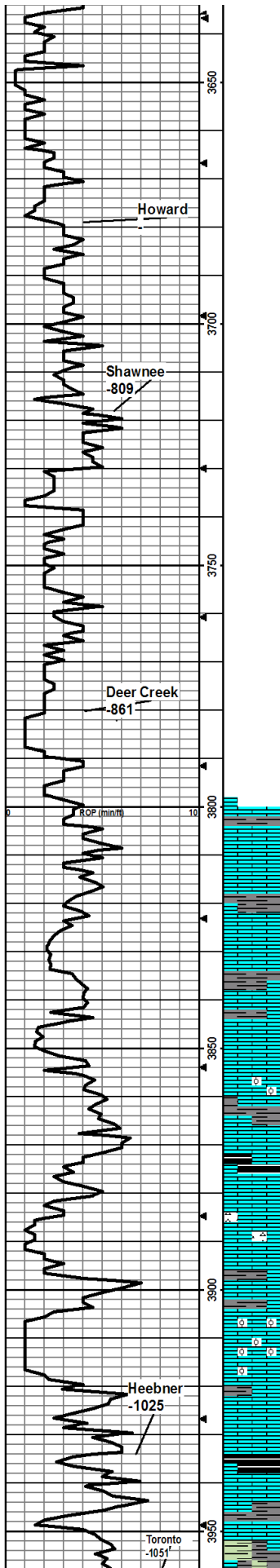
COMMENTS

Contractor: Murfin Drilling Company Rig #24
Pusher: Tony Martin
Surface Casing: 8 5/8" set at 212'
Production Casing: 5 1/2" set at 4696'
Mud by: MudCo
DST's by: Trilobite Testing
Logs by: Weatherford (DIL, CN-CD, ML)
RTD='
LTD='

FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Stone Corral	2386'	+523	2386'	+523
B/Stone Corral	2409'	+500	2408'	+500
Heebner Shale	3934'	-1025	3935'	-1026
Lansing	4978'	-1069	3977'	-1068
Muncie Creek Shale	4131'	-1222	4130'	-1221
Stark Shale	4216'	-1307	4216'	-1306
Hushpuckney Shale	4251'	-1342	4251'	-1340
Marmaton	4310'	-1401	4311'	-1402
Upper Fort Scott	4415'	-1505	4416'	-1506
Little Osage Shale	4438'	-1529	4438'	-1529
Excello Shale	4469'	-1560	4468'	-1559
Johnson Zone	4550'	-1641	4551'	-1642
Morrow	4570'	-1661	4572'	-1663
Mississippian	4598'	-1689	4598'	-1689
RTD	4698'	-1789		
LTD			4700'	-1791

Curve Track 1 ROP (min/ft)	Depth	Lithology	CFS Point	Oil Shows	Geological Descriptions	Remarks
	3350 3400					
	2350 2400				<p>Morning Report Depth/Activity</p> <p>6/20/12: MIRU Rig 24, spud /set 212' S-R 24 8 5/8", cmnt w/ 165 sxs, PD @ 7:45AM, Survey 2 1/2 deg 6/21/12: Drig @ 455' 6/22/12: Drig @ 2698' 6/23/12: Drig @ 3620', displace mud 3400-3435' 6/24/12: Drig @ 3990', DST 1 @ 4058', 'E' 6/25/12: Drig @ 4085', DST 2 @ 4189' 'H & I' 6/26/12: Drig @ 4215' CFS 6/27/12: Drig @ 4455', DST3 @ 4497', Fort Scott 6/28/12: Drig @ 4555', DST 4 @ 4568', Johnson 6/29/12: Drig @ 4625' 6/30/12: Logging @ 4698' / run pipe @ 4696', 5 1/2", 15.5#, DV tool @ 2402', rotating ccasing, PD @ 9:30 AM stage 1 and PD @ 12:00PM on stage 2. Cemented w/175 sxsEA2 W/ additives, 12 bbls mud flush, & 20bbl KCL water, open DV too, and circ. 2 hrs & cemented stage 2 w/300 sxs SMD, cementing by Swift Services</p>	
	2450 2500				<p>Stone Corral 2387 (+522)</p> <p>Base Stone Corral 2409 (+500)</p>	
	3600 3650				<p>Bit trip @ 3604' Survey = 3/4 degrees Strap = 1.0' short</p> <p>ROP Data begins @ 3612'</p>	
						<p>MUD @ 3604' WT: 8.7 VIS: 53 WL: 7.6 PH: 11.0 CHL:2200</p>



LS- crm, md hd-hd, fn xln, grny ip, sme fn-m d xln, fn ool ip, tr foss, sli chky ip w/ sme off wh, shrp chrt, NS w/sme sh-gy, mod ind, blk, sli calc grd arg ls

Sh- dkr gy, sli-mod ind, sli blk

SH- gy, mod ind, sli wxy ip, tr sly,

LS- crm - bntgy- lt br, md hd-hd ip, vfn-fn xln, tr foss, ool ip, tr secxn, NS

SS- crm - off wh, sli-mod ind, sme cly & chky, grd sndy slst, tr fn xln pyr, tr rnbw gas bbl, NSO

SLST- crm -lt gy, sli arg, sndy, grd rsty/br, sli calc mod ind ip, NS, w/tr sh - rsty/br, sli wxy ip

LS- crm - bnt br, hd- tr sfr, vfn xln, tr frct, sli foss ip, NS

LS- crm, md hd-sfr ip, fn xln, foss, ool ip, grny ip, sme pr fn fossct-ooct por, grd off wh, mod chky, sfr, NS

LS- lt br-crm ip, hd- md hd, vfn xln, foss, secxn ip, NS

LS- crm, md hd-hd, vfn xln, tr sli, foss, frct ip, NS

LS- crm-off wh ip, v/sli fri- md hd ip, fn - vfn xln, sli grny ip, chky ip, tr foss, tr gs rnbw bbl, NSO, w/sme chrt- crm- off wh, tr foss, tr sli foss, wthr ip, NS

LS- v/lt br- crm ip, md hd-hd, vfn xln, sli foss,ool ip, tr frct, w/ sme chrt- crm- lt br, shrp, frsh, NS

LS- crm - bnt br ip, md hd- sli sfr ip, vfn- fn xln, foss, sli ool ip, sli sli ip, secxn ip, tr fossct por, NS

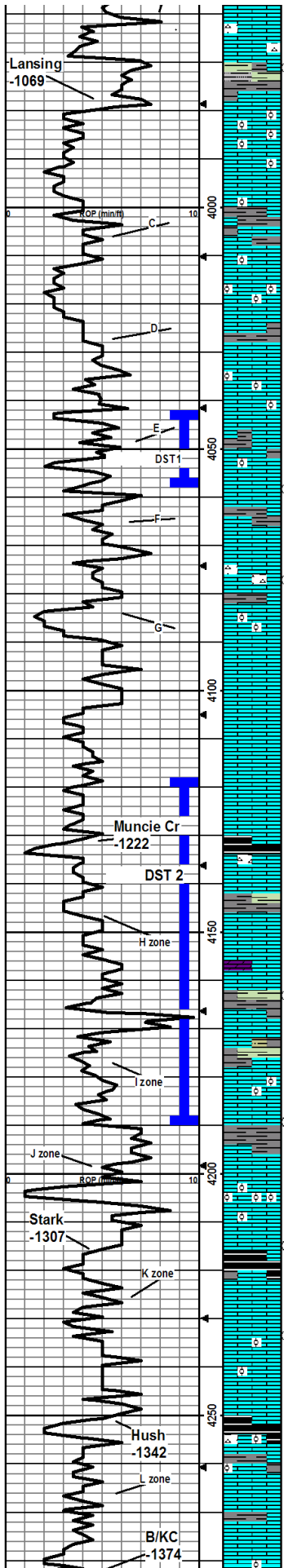
SH- blk, sli ind, carb, sli fss

LS- crm - bnt gy ip, hd, vfn xln, tr sli foss, tr secxn, tr frct, NS

SH- gy- lt gr- tr dkr rsty/br, sli-mod ind, sli wxy, sly ip

LS- lt br- crm- md hd-hd in to vln foss secxn in grny ip, NS

MUD @ 3979'
 WT: 9.1
 VIS: 52
 WL: 6.4
 PH: 10.5
 CHL: 2400



LS- crm - lt br ip, hd-md hd, vfn-fn xln, sli chiky ip, foss ip, tr pr fossost por, NS, wsme chrt- lt br-crm, foss, frsh, NS

SH- ltr gy- gy- bnt gr, mod ind, blkly ip, sli lmy ip

LS- crm, m d hd -hd ip, vfn xln, mod ool, tr introol por, NS, grd off wh, mod- vchiky, sfrtr LS NS

LS- crm, m d hd, vfn xln, tr ool, w/sme off wh, mod chiky ,sfr, ls, NS

LS- crm, m d hd- tr hd, vfn xln- fn ip xln, sli foss ip, tr ool, frct ip, tr ool, frct ip, tr sli chiky, NS

LS- crm, m d hd- tr hd- tr sfrtr ip, vfn- tr fn xln, tr ool, sli foss ip, tr frct, NS

LS- crm, m d hd- hd ip, vfn -fn xln, ool ip, tr sli chiky, sli grny grd off wh, mod chiky, tr sli ool, sfrtr, NS

LS- crm -vlt br, m d hd- dh, vfn xln, mod ool ip, tr sli frct ip, tr secxin, tr foss, NS

LS- crm - off wh, m d hd, vfn xln, chiky ip, ool ip, tr rnbw gs bbl, NSO, no odr, w/ sme sh- gy- dk gy- bnt dkr gr, mod ind, sli pty- blkly

LS- crm, m d hd- tr sfrtr, vfn xln, fn secxin ip, sli foss, tr frct, tr prt stn/ sli edh, fnt odr, tr stn, vsfso, lwr grv -sli dd oil

LS- crm- off wh ip, m d hd- tr sfrtr, vfn -fn xln, sli foss, tr ool, fw pcs fr vug-fossost por, sso, lwr grv, stn, grd to fn xln, mod ch, sli dol, sli sfrtr, pp intrxin por, sli- fr sfo, few pcs stn and gld br sat, fnt odr- sli fr, lwr grv, sli dd oil res oil

LS- lt br, hd, vfn xln, foss frm, NS, grd off wh, sfrtr chiky ls ,NS

LS- lt br, hd -tr md hd, vfn xln ,ool, sli foss, grd crm, sli sfrtr, sli chiky ip, decrool, NS

LS- crm - bnt br, m d hd- hd, vfn xln, sli foss ip, gr sli chiky ip, w/sme chrt- off wh- tr lt br, sli foss, NS w/ sh- blk, mod ind, sli brttl

LS- lt br -crm ip, m d hd- vsli fri, ool, sme fr -tr go oocst por, mod ch, grd to incr chiky, and dcr ool, NS

LS- crm , hd -m d hd, vfn-fn xln, subchiky ip, sli ool ip, tr foss sli frct ip, tr secxin, NS

LS- crm - off wh ip, m d hd- hd, vfn xln, subchiky ip, sli ool ip, tr foss, sli frct ip, tr secxin, NS

LS- off wh- crm, hd, vfn xln, sli foss ip, sli chiky, NS

SH- blk, sli- mod ind, sli carb, w/sme chrt- lt gy- sli m lky, frsh, foss

LS- lt br- br ip, hd dns- tr md hd, vfn -m icroxln, sli frct, sli foss, grd sli chiky ,fn xln, sfrtr, fw pcs stn- mst sat, vsfso, vs sli dd- dd oil, md br oil, tr wk cut, tr lt br chrt, v/fnt odr

LS- cr- off wh, hd- m d hd ip, vfn fn ip xln, subchiky ip, tr foss, no vis por, ?sli frct, tr fr flo, prob in place vsfso/ sli dd oil, no odr, w/ sme doll/ ls, hd fn xln, NS

SH- gy- mrr- lt gr, wxy, sli ind, tr sity

LS- lt br- br ip, hd dns- m d hd ip, micro- vfn xln, sli foss ip, sli secxin, sli frct ip, tr crm, v/sli chiky, sfrtr, no odr, NS

LS- crm - off wh, hd- m d hd ip, vfn xln, sme fn secxin, ool, mod tt, tr- sme pr edge -vug- introol por, sme res stn, tr sat ? por, tr fr cut, fnt odr, vs- sso lwr grv, sme shw dd- sli dd oil, tr wk flo ?

LS- crm - bnt lt gy ip, m d hd- sli fri, vfn xln, mod ool, sme gd oocst por, v/fnt odr, pred brn por, 2 pcs sli dd- lw grv, 1 pc sfo, wk flo, w/ tr chrt, ool, tr oocst por, NS

LS- crm , m d hd- hd, vfn xln, sli foss, tr ool, sli frct, no odr, NS

SH- blk, sli- mod ind, carb, sli fies

LS- br- lt br, hd dns, microxin, foss, sli frct tr secxin, grd off wh, sfrtr, sli chiky, tr foss, ls , NS

LS- crm , hd- tr md hd, vfn xln, frct ip, tr ool, grd v/sli chiky, 1 pc prt live stn? in place, no odr, NSFO, w sme sh- ltr gy- lt gr, sli- mod ind, sli wxy- sli dull

LS- crm - off wh, hd- m d hd ip- tr sfrtr, vfn xln- tr fn xln, sli ool, foss ip, tr chiky mtrx, sli chiky ip, grd sli- mod chiky, fn xln, sli grny ip, 1 pc sli dd- dd oil, nfo, fnt odr

SH- blk, sli- mod ind, sli fies- sli blkly, carb, w/sme chrt- opq- lt gy, frsh, sli foss, NS

LS- lt br- br- tr mott gy, hd -tr md hd, sli foss, tr ool, sme mod secxin, tr frct, grd gy, m d hd, sli frct, sli arg, ls ,NS

LS- crm , m d hd- hd, fn -vfn xln, ,subchiky ip, sli foss ip, NS

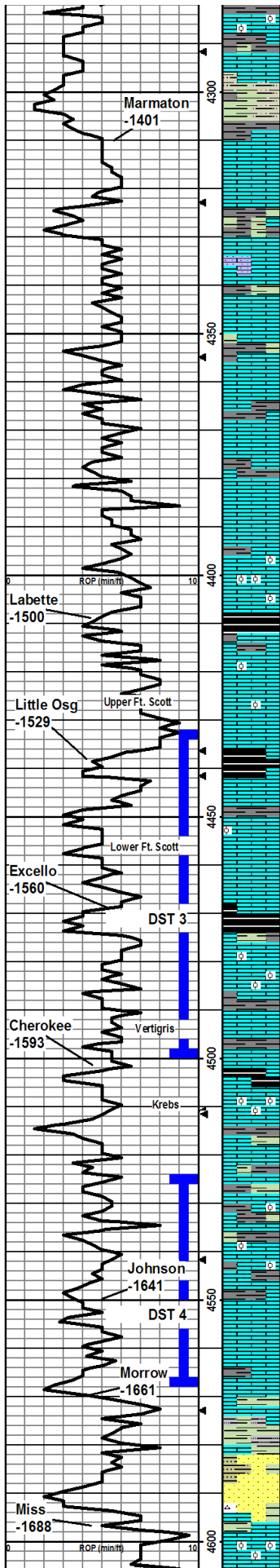
LS- crm - lt gy, m d hd, vfn xln, sli wthrd, frct ip, subchiky, tr sli arg, sli foss, NS w/lt br, hd , sli frct ,tr foss, ls NS

DST1) E,
30-30-30-30
4242-4258'
1st:wk SB dd
2nd: no blw
Rec: 15' M
IFP: 19-25#
FFP: 26-33#
SIP: 1071-978#
HP: 1991-1948#
BHT: 121 deg

MUD @ 4078'
WT: 9.2
VIS: 57
WL: 7.6
PH: 10.0
CHL:3000

DST 2) H&I
4118-4189'
30-30-30-30
1st)wk blw dd24
2nd)no blw
Rec: 15'm/oil
spks
IFP: 19-28#
FFP: 28-33#
SIP: 275-69#
HP: 2019-1991#
BHT 121 deg

MUD@ 4382'
WT: 9.2
VIS: 50
WL: 7.2
PH: 10.5
CHL:3000



LS- crm - off wh, md hd-hd, vfn xln, ool, sli foss, NS, grd sli - tr mod chiky, sli grny, sli foss, 1 pc res stn, NSFO, no odr

LS- lt br - mott yel, md hd, foss ool ip, sexcin ip, frct ip, secondary sh replacement, sli trshy, NS, w sme sh- dk rsty /br, sli wxy sh

SLST- pale rsty, mod ind, arg ip, w sme sh- lt gy-gy- lt gr, mod-sli ind, sli grny ip, tr sli calc

LS- crm, hd, vfn- fn xln, foss ip, frct ip, sli grny ip, NS

LS- crm - tnt br, hd, vfn xln, tr frct, NS

SH- gy - dk gy, sli- mod ind, sli blkly

LS- lt br- crm, hd, vfn- fn xln, sli chiky ip, sli frct, tr foss, NS w/ sme slst- crm - lt gy ip, sli- mod ind, sndy ip, sme dty/arg, NS

SH- lt gy- lt prp/lt gr-gr-rsty/br, sli- mod ip ind, wxy ip

LS- crm - lt br ip, md hd- hd, fn- vfn xln, vfn grn sndy ip, tr foss ip, NS w/ sme sh- dkr gy, mod ind, blkly

LS- lt br- crm ip, hd- md hdip, vfn xln, sli foss, tr frct, NS

SH- lt gy- tr dkr gy, mod ind, sli pty

LS- lt br- lt gy ip, hd, fn xln, sli foss, sli wthrd, sli arg i, NS

LS- crm hd- md hd ip, vfn xln, foss ip sme mod ool, NS

SH- blk, sli- mod ind, blkly ip, sli carb

SH- gy dk gy, mod ind, blkly, sli calc ip

LS- cr - tnt br ip, hd dns- md hd ip, microxln, tr frct, tr foss, sexcin, tr m n flo, NS

LS- lt br- br, vfn- fn xln, hd, sli rgh ip, foss, sli ool ip, w/ tr chrt- mky wh, frsh shrp, NS

SH- blk, sli- mod ind, carb ip

LS- br, hd dns, vfn xln, foss, tr sexcin, tr mn/edg flo, NSO

LS- br- sli dkr br ip, hd- dns ip, foss, grd ltr br, hd, vfn xln, foss ip tr frct, grd sli chiky, crm sli sfr tr ool, sli grny, 2 pcs sat w/ fr cut, fr flo, ? vsfo

LS- crm - off wh, md hd - hd, vfn xln, tr- sme sli w/ fn grn sndy, sli chiky ip, sli foss, tr fr flo, ? fnt odr, tr prt stn, tr prt stn, vsfo, vss sli dd filmy oil, w/ sme flo

SH- blk, sli ind, sli- mod carb, sli carb

LS- lt br- br, hd, vfn xln, mod ool ip, tr frct, NS, grd crm - mott lt gy, md hd- hd, vfn xln, ool ip, sli chiky ip, NS

LS- crm - lt br ip, hd - tr md hd, vfn xln, tr ool, subchiky ip, tr sli frct, tr m n flo, NS

SH- blk, sli- mod ind, sli carb, sli blkly

LS- lt br- crm ip, md hd- hd, vfn xln, mod ool ip, sli chiky/cly m tr x ip, NS, w/ sme sh- dkr gy, mod ind

LS- crm - tr off wh, md hd- hd, vfn xln, tr sli chiky, sli foss ip, NS

SH- gy- lt gy- lt gr, mod - sli ind sli blkly

LS- lt br- br ip, hd, vfn xln, ool ip, tr foss, sli frct NS

LS- lt br, hd - tr md hd, vfn xln, tr ool, tr frct NS

LS- crm - off wh ip, md hd - tr hd, tr sfr, vfn xln, chiky ip, tr ool, NS

LS- lt br- br, hd - tr sfr, vfn xln, foss ip, tr sat, tr prt sat, tr fr flo, sso lwr grv, vsfo m d br

LS- lt br- br- tr crm, md hd- hd ip, vfn- fn xln, sli rgh ip, foss ip, ? sli frct, tr fr- gd vug- foss cst por tr fr flo, tr gd cut, fso, sso, sme lwr grv- sli dd- dd oil

LS- crm - tn, md hd- dh, vfn xln, vsli chiky ip, sli foss, tr ool, sme sli frct, ? fnt odr, sso, sli dd- tr dd oil

SH- ltr gr- tnt gy, mod ind, blkly ip, tr sndy

LS- br, hd, dns, vfn xln, tr sexcin, tr foss, NS w/ sme sh- ltr gr -yel- sli- mod ind, vfn grn sndy ip, w/ sme SS- off wh- tnt gr & gy, vfn -fn grn, sli arg ip, NS

SS- crm - off wh- tnt gr ip, mod tt- tt, fn- vfn xln, mod w srt d, sli frst grn, tr dk mn spks, w/ sme fn grn vsli frr, mod chn, -off wh, NS, w/ tr chrt- orn g

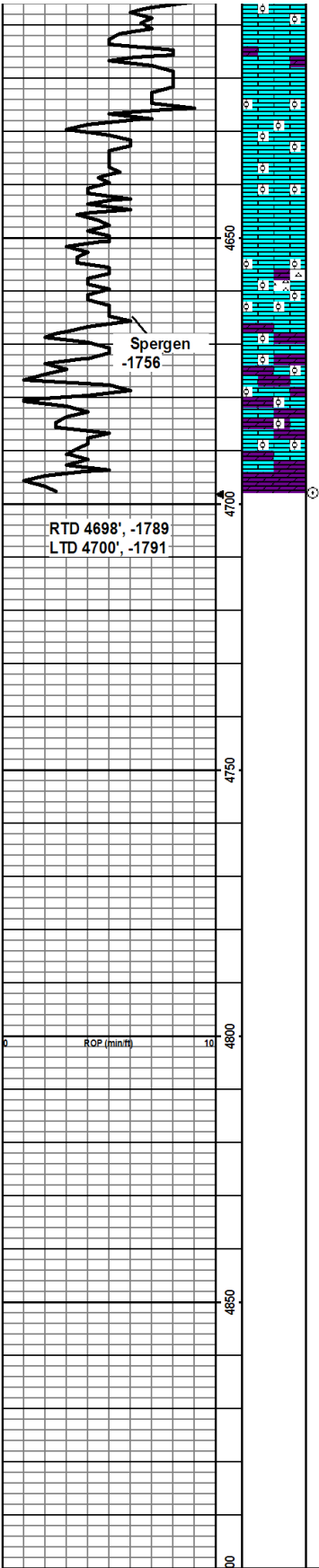
SH- pale gr- yel- tnt prpl, sli ind, tr sndy, wxy ip, w/ sme LS- crm - lt br, hd, fn- md ip xln, ool, sli sndy ip, NS

LS- lt br, hd dns, microxln, tr sexcin, tr frct, NS w/ sme ls- lt br- crm,

DST 3) Fort Sct
30-30-30-30
4433-4497'
1st) wksb dd 11"
2nd) no blw
Rec: 10' m/ o spt
IFP: 20-23#
FFP: 22-24#
SIP: 71-38#
HP: 2160-2134#

DST 4 Johnson
4525-4568'
30-45-60-90
1st) BOB 2"
SI: BOB 10"
2nd) instant BOB
SI: BOB 14"
Rec: 3410' gip
186' ghocm
945' GO, 31 grv
IFP: 84-194#
FFP: 226-402#
SIP: 1168-1122#
HP: 2251-2191#
BHT 133 deg

MUD @ 4555'
WT: 9.2
VIS: 52
WL: 7.2
PH: 10.5
CHL: 3000



no-mud, wh, xln, mod ool, sli sh chky mlt, sli chky, w/sme chky off wh, sfr, tr gs bbl, tr mn flo NS

LS- lt br- sli crm- bnt gy ip, hd, vfn-fn xln, sli dol ip, sli frct ip, NS w/sme dkr gy sh, dull

LS- lt br-crm, hd, vfn xln, mod ool, grd sfr, crm- off wh ip, fn xln, ool ip, sli chky, NS sh- gy- ltr gr, mod ind, dull

LS- crm- bnt br, md hd-hd, vfn xln, sli chky ip, ool, w/tr imbd qtz frag, opq-sli m lky NS

LS- crm -bnt br, hd, microxln, frct, w/tr chrt-opq- sli m lky, frsh, shrp, NS

LS- lt br-crm, hd, fn xln, ool ip, NS, w/sme chrt pale m lky- tr orng, frsh shrp ip, NS

LS- lt br- crm ip, hd - md hd ip, vfn xln, mod ool ip, m d ool, sli dol, grd sli chky ip, tr fn xln pyr, NS

LS- br, md hd-hd - tr sfr, fn xln, sli dol, ool, sli foss, sme pr-fr vug - oocst por, NS

LMY DOL- crm- lt br ip- mott gy ip (gy ool), fn xln, sli foss, mod ool ip, tr- sme fr oocst- vug por, no odr, 1 pc small spot? res stn, NSFO

DOL- lt br-crm ip- sme mott gy, gy ool, calc ip, fn xln sli sucro., mod ool, tr foss, v/sli chky ip, sme fr- tr gd vug- oocst por, 1 pc spot res stn, w/?fn pp drpits oil, no odr, tr mn flo

MUD @ 4645'
WT:9.3
VIS:54
WL:6.4
PH:11.5
CHL:3400



DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206

ATTN: Bob Schreiber

S&L #1-14

14-13s-31w Gove,KS

Start Date: 2012.06.24 @ 17:55:15

End Date: 2012.06.24 @ 23:26:45

Job Ticket #: 47958 DST #: 1

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

Printed: 2012.07.05 @ 16:28:03

Grand Mesa Operating Co.
14-13s-31w Gove,KS
S&L #1-14
DST # 1
Lansing "E"
2012.06.24



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Grand Mesa Operating Co.
 1700 N. Waterfront Pkwy
 Bldg 600
 Wichita, KS 67206
 ATTN: Bob Schreiber

14-13s-31w Gove,KS

S&L #1-14

Job Ticket: 47958

DST#: 1

Test Start: 2012.06.24 @ 17:55:15

GENERAL INFORMATION:

Formation: **Lansing "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:44:15

Time Test Ended: 23:26:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 4042.00 ft (KB) To 4058.00 ft (KB) (TVD)

Total Depth: 4058.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2909.00 ft (KB)

2904.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8354 Inside

Press @ Run Depth: 33.13 psig @ 4044.00 ft (KB)

Start Date: 2012.06.24

End Date:

2012.06.24

Start Time: 18:05:15

End Time:

23:26:45

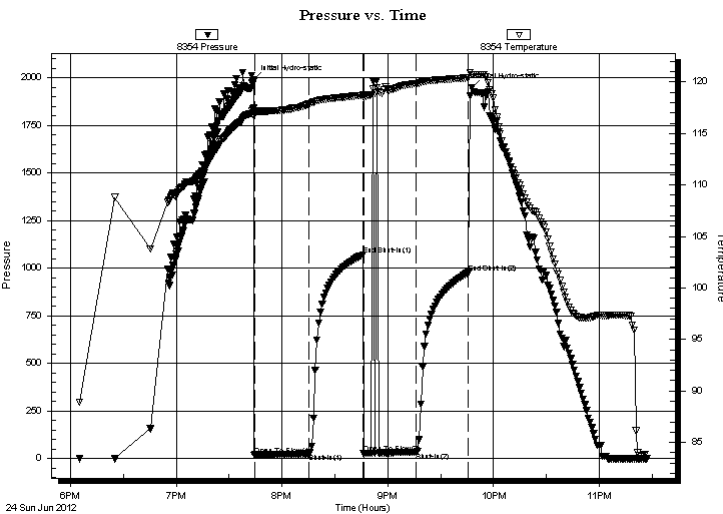
Capacity: 8000.00 psig

Last Calib.: 2012.06.24

Time On Btm: 2012.06.24 @ 19:44:05

Time Off Btm: 2012.06.24 @ 21:47:45

TEST COMMENT: IF-Weak surface blow . Died @ 30 seconds.
 IS-No Return.
 FF-No Blow . Flushed Tool. No Blow .
 FS-No Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1990.58	117.52	Initial Hydro-static
1	18.50	116.76	Open To Flow (1)
32	25.22	117.88	Shut-In(1)
62	1071.04	118.72	End Shut-In(1)
63	25.76	118.50	Open To Flow (2)
93	33.13	119.86	Shut-In(2)
122	977.96	120.41	End Shut-In(2)
124	1948.48	120.72	Final Hydro-static

Recovery

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

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkw y
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47958

DST#: 1

Test Start: 2012.06.24 @ 17:55:15

GENERAL INFORMATION:

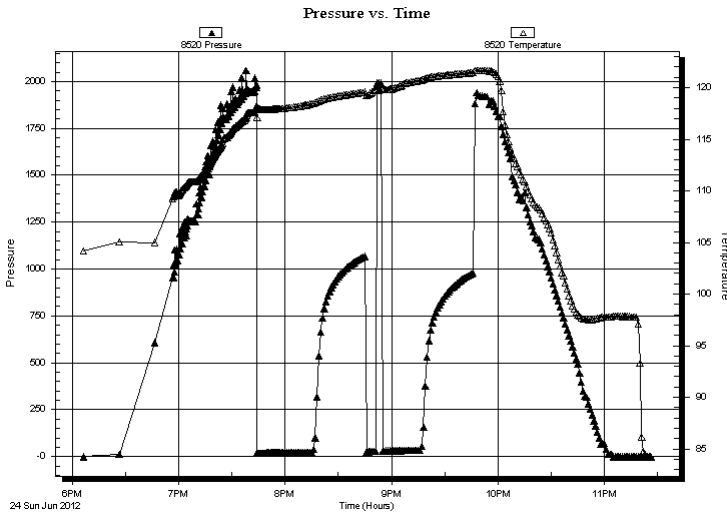
Formation: **Lansing "E"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:44:15
 Time Test Ended: 23:26:45
 Interval: **4042.00 ft (KB) To 4058.00 ft (KB) (TVD)**
 Total Depth: 4058.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Rash
 Unit No: 38
 Reference Elevations: 2909.00 ft (KB)
 2904.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8520

Outside

Press @ Run Depth: psig @ 4044.00 ft (KB)
 Start Date: 2012.06.24 End Date: 2012.06.24
 Start Time: 18:06:25 End Time: 23:26:25
 Capacity: 8000.00 psig
 Last Calib.: 2012.06.24
 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF-Weak surface blow . Died @ 30 seconds.
 IS-No Return.
 FF-No Blow . Flushed Tool. No Blow .
 FS-No Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

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

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47958

DST#: 1

Test Start: 2012.06.24 @ 17:55:15

Tool Information

Drill Pipe:	Length: 3905.00 ft	Diameter: 3.70 inches	Volume: 51.93 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 119.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 52.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4042.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	44.00 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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Change Over Sub	1.00			4015.00	
Shut In Tool	5.00			4020.00	
Hydraulic tool	5.00			4025.00	
Jars	5.00			4030.00	
Safety Joint	3.00			4033.00	
Packer	5.00			4038.00	28.00 Bottom Of Top Packer
Packer	4.00			4042.00	
Stubb	1.00			4043.00	
Perforations	1.00			4044.00	
Recorder	0.00	8354	Inside	4044.00	
Recorder	0.00	8520	Outside	4044.00	
Perforations	11.00			4055.00	
Bullnose	3.00			4058.00	16.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47958

DST#: 1

Test Start: 2012.06.24 @ 17:55:15

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 6.38 in³

Resistivity: ohm.m

Salinity: 2400.00 ppm

Filter Cake: 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
15.00	100%Mud	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 #: 8354

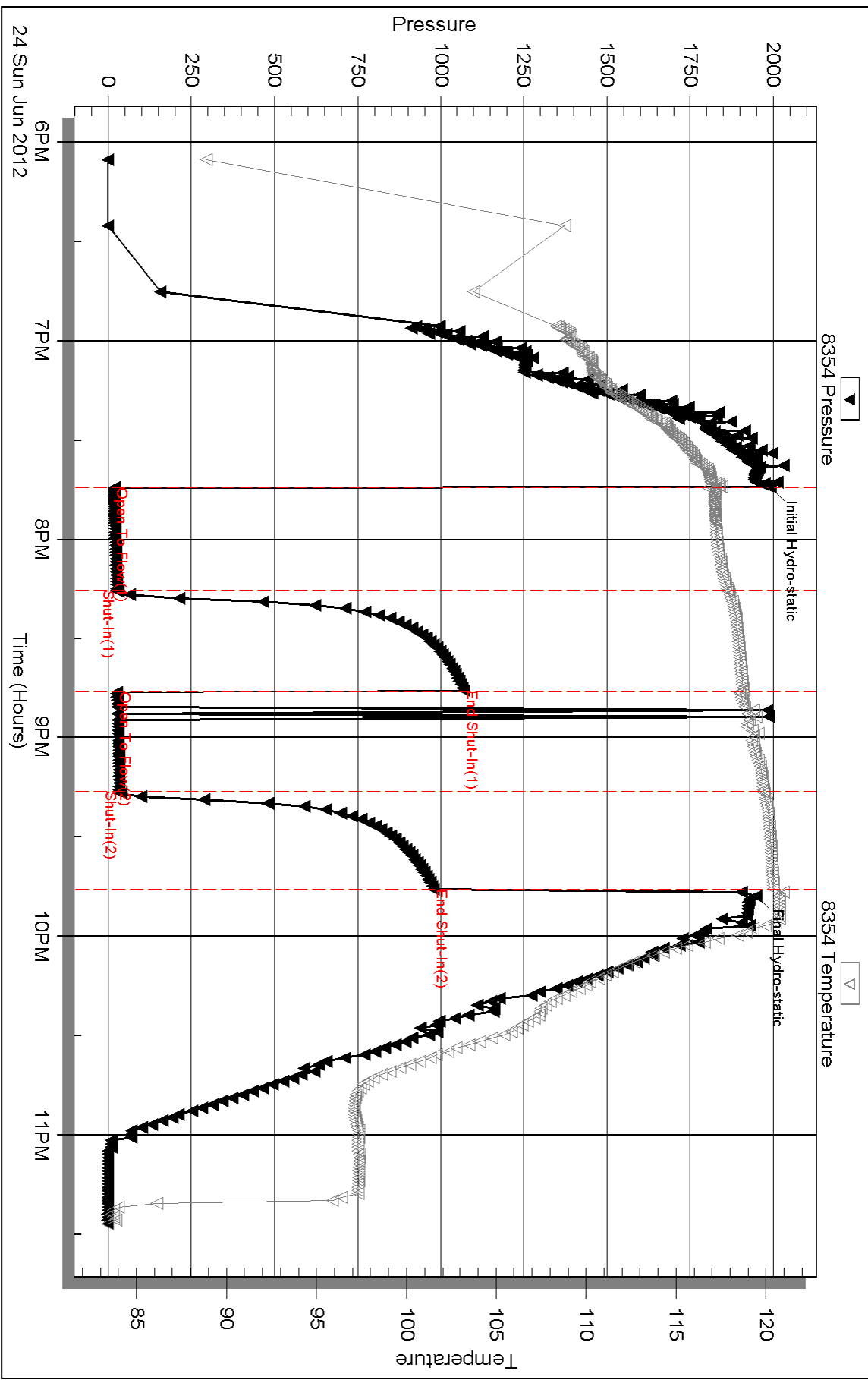
Inside

Grand Mesa Operating Co.

S&L #1-14

DST Test Number: 1

Pressure vs. Time

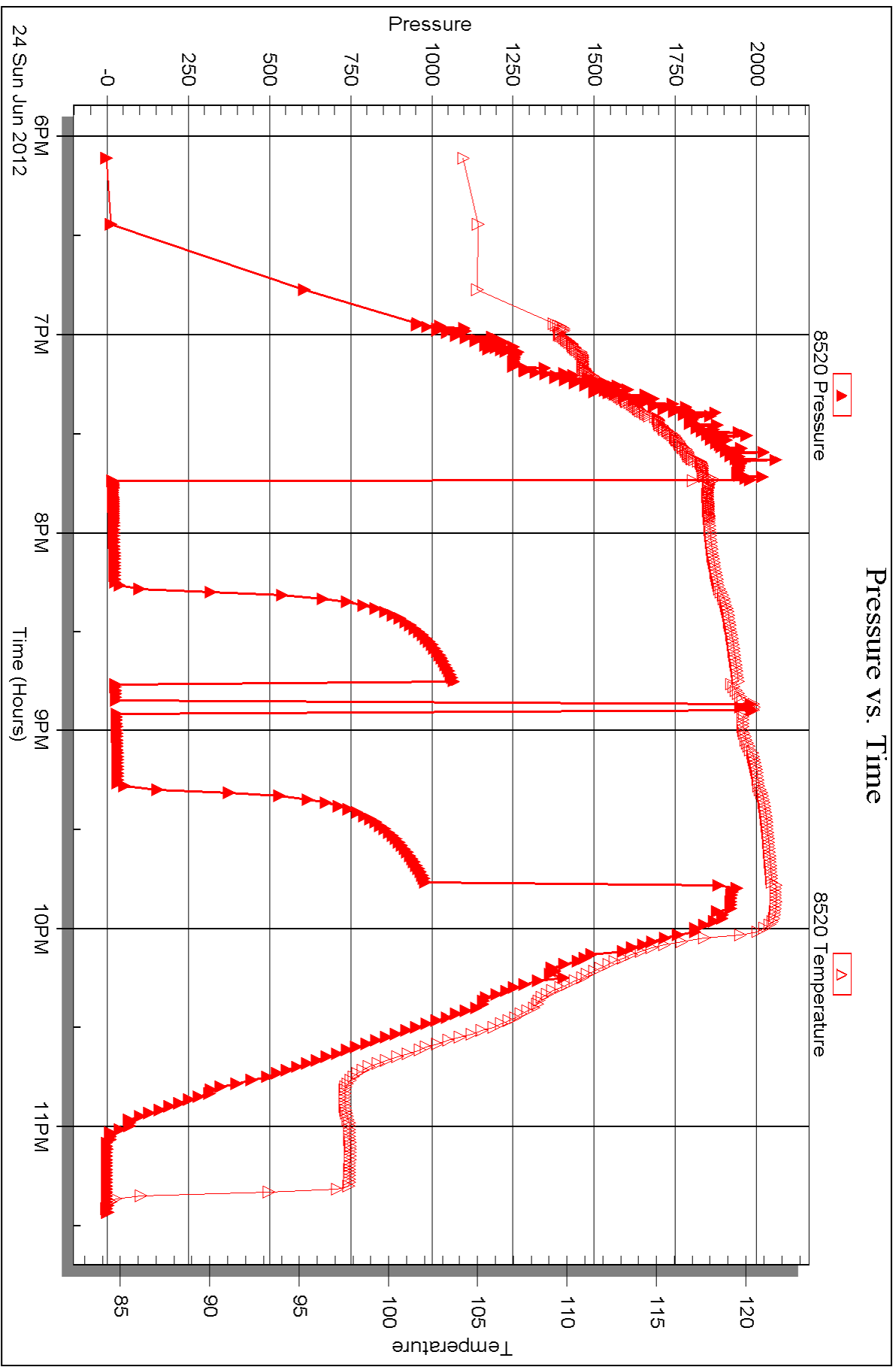


Serial #: 8520

Outside Grand Mesa Operating Co.

S&L #1-14

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206

ATTN: Bob Schreiber

S&L #1-14

14-13s-31w Gove,KS

Start Date: 2012.06.25 @ 18:25:15

End Date: 2012.06.26 @ 00:29:45

Job Ticket #: 47959 DST #: 2

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

Printed: 2012.07.05 @ 16:26:50

Grand Mesa Operating Co.
14-13s-31w Gove,KS
S&L #1-14
DST # 2
LKC "H&I"
2012.06.25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Grand Mesa Operating Co.
1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

14-13s-31w Gove,KS

S&L #1-14

Job Ticket: 47959

DST#: 2

Test Start: 2012.06.25 @ 18:25:15

GENERAL INFORMATION:

Formation: **LKC "H&I"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:34:15
 Time Test Ended: 00:29:45
 Interval: **4119.00 ft (KB) To 4189.00 ft (KB) (TVD)**
 Total Depth: 4189.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Rash
 Unit No: 38
 Reference Elevations: 2909.00 ft (KB)
 2904.00 ft (CF)
 KB to GR/CF: 5.00 ft

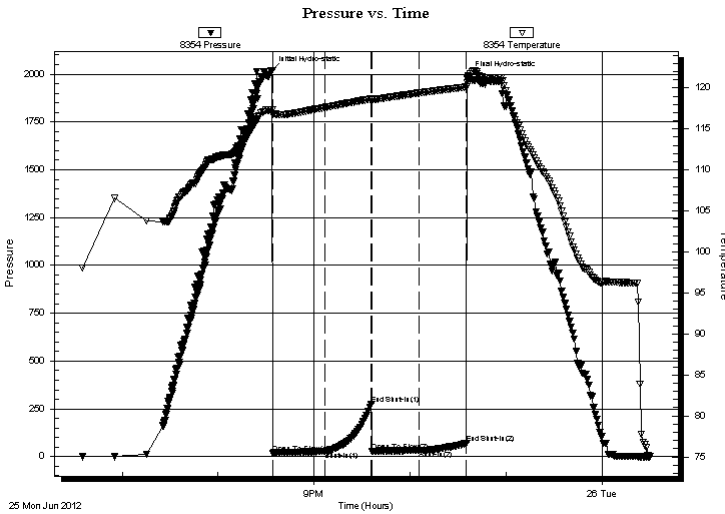
Serial #: 8354

Inside

Press @ Run Depth: 32.51 psig @ 4158.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.06.25 End Date: 2012.06.26 Last Calib.: 2012.06.26
 Start Time: 18:35:15 End Time: 00:29:45 Time On Btm: 2012.06.25 @ 20:33:45
 Time Off Btm: 2012.06.25 @ 22:36:15

TEST COMMENT: IF-Surging surface blow . Died @ 24 minutes.
 ISI-No Return.
 FF-No Blow .
 FSI-No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2019.48	117.36	Initial Hydro-static
1	18.88	116.72	Open To Flow (1)
33	27.72	117.62	Shut-In(1)
62	275.20	118.69	End Shut-In(1)
63	27.73	118.61	Open To Flow (2)
92	32.51	119.39	Shut-In(2)
122	68.81	120.10	End Shut-In(2)
123	1990.99	121.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	2%Oil/98%Mud	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.
1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

14-13s-31w Gove,KS

S&L #1-14

Job Ticket: 47959

DST#: 2

Test Start: 2012.06.25 @ 18:25:15

Tool Information

Drill Pipe:	Length: 4002.00 ft	Diameter: 3.80 inches	Volume: 56.14 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 56.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4119.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	98.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4092.00	
Shut In Tool	5.00			4097.00	
Hydraulic tool	5.00			4102.00	
Jars	5.00			4107.00	
Safety Joint	3.00			4110.00	
Packer	5.00			4115.00	28.00 Bottom Of Top Packer
Packer	4.00			4119.00	
Stubb	1.00			4120.00	
Perforations	5.00			4125.00	
Change Over Sub	1.00			4126.00	
Drill Pipe	31.00			4157.00	
Change Over Sub	1.00			4158.00	
Recorder	0.00	8354	Inside	4158.00	
Recorder	0.00	8520	Outside	4158.00	
Perforations	28.00			4186.00	
Bullnose	3.00			4189.00	70.00 Bottom Packers & Anchor
Total Tool Length:	98.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47959

DST#: 2

Test Start: 2012.06.25 @ 18:25:15

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: 7.58 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	2%Oil/98%Mud	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 #: 8354

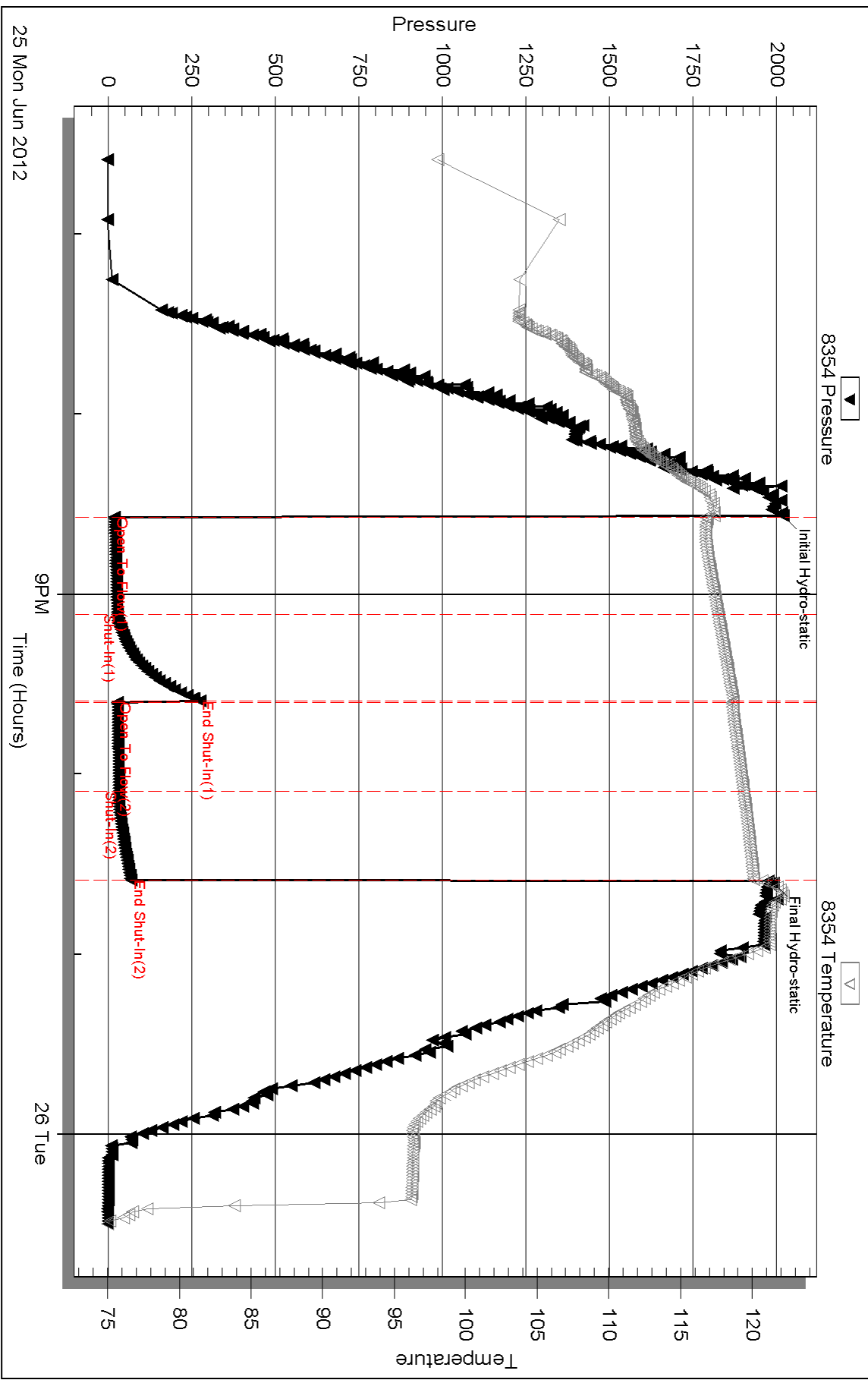
Inside

Grand Mesa Operating Co.

S&L #1-14

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 47959

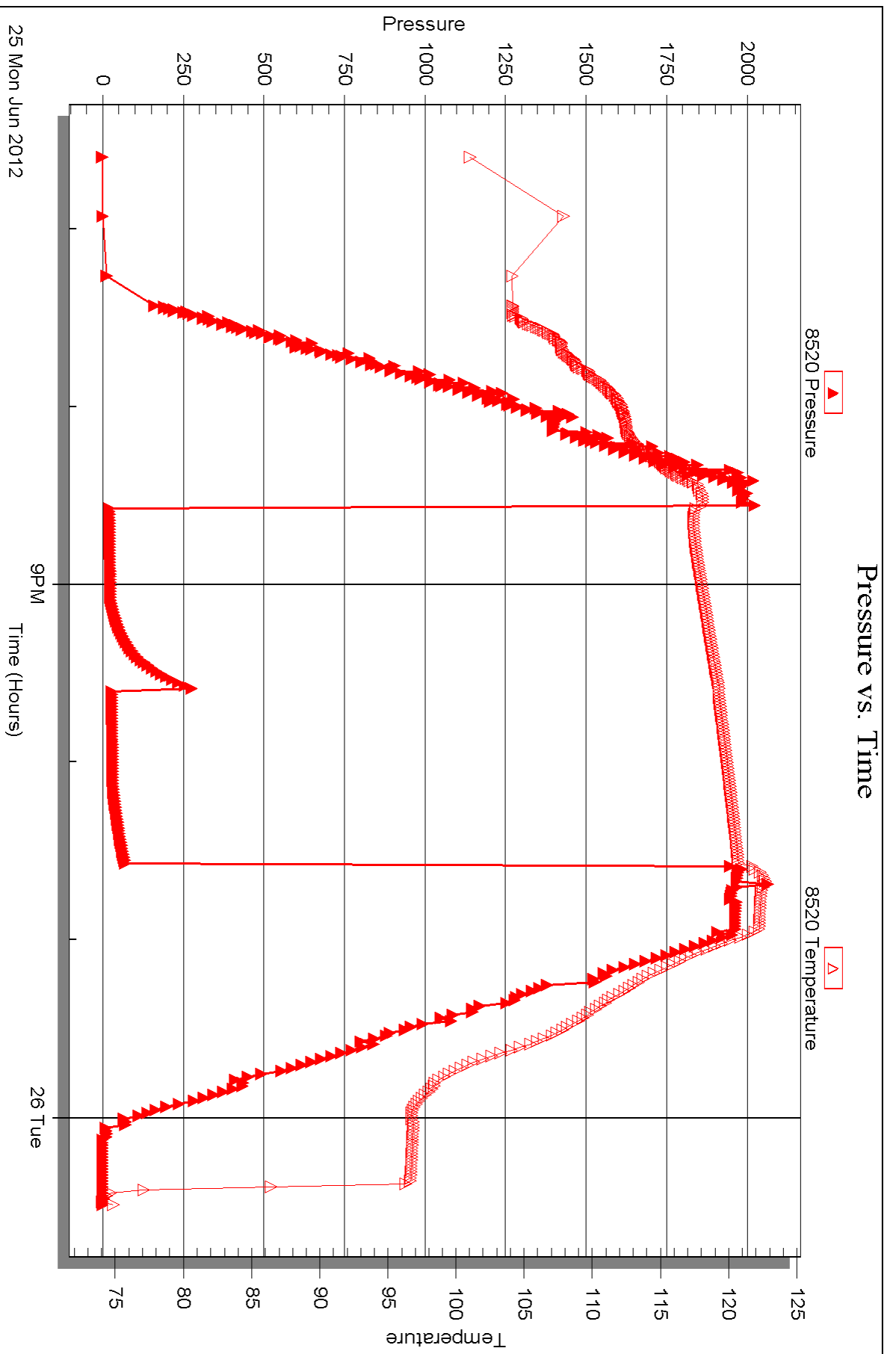
Printed: 2012.07.05 @ 16:26:52

Serial #: 8520

Outside Grand Mesa Operating Co.

S&L #1-14

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206

ATTN: Bob Schreiber

S&L #1-14

14-13s-31w Gove,KS

Start Date: 2012.06.27 @ 16:56:15

End Date: 2012.06.27 @ 22:59:15

Job Ticket #: 47960 DST #: 3

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

Printed: 2012.07.05 @ 16:26:14



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Grand Mesa Operating Co.
 1700 N. Waterfront Pkwy
 Bldg 600
 Wichita, KS 67206
 ATTN: Bob Schreiber

14-13s-31w Gove,KS

S&L #1-14

Job Ticket: 47960

DST#: 3

Test Start: 2012.06.27 @ 16:56:15

GENERAL INFORMATION:

Formation: **Fort Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:15:15

Time Test Ended: 22:59:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: **4433.00 ft (KB) To 4497.00 ft (KB) (TVD)**

Reference Elevations: 2909.00 ft (KB)

Total Depth: 4497.00 ft (KB) (TVD)

2904.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8354 Inside

Press @ Run Depth: 23.66 psig @ 4472.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.27

End Date:

2012.06.27

Last Calib.:

2012.06.27

Start Time: 17:06:15

End Time:

22:59:15

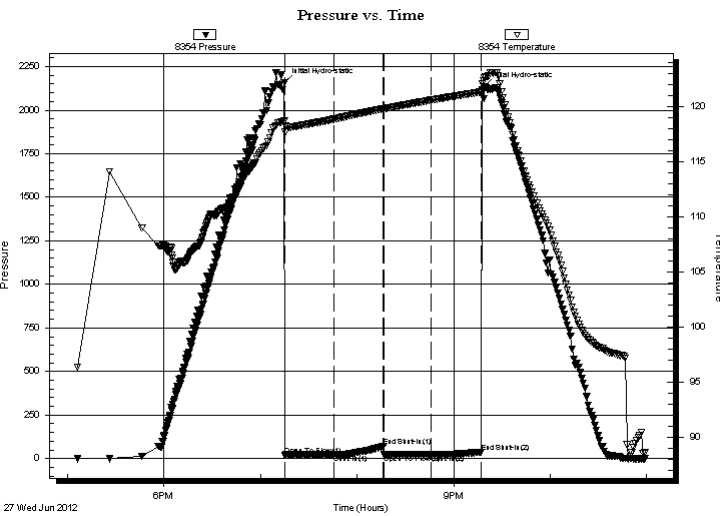
Time On Btm:

2012.06.27 @ 19:14:45

Time Off Btm:

2012.06.27 @ 21:19:15

TEST COMMENT: IF-Weak surface blow . Died @ 11 minutes.
 IS-No Return.
 FF-No Blow .
 FS-No Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2160.02	118.65	Initial Hydro-static
1	19.78	117.64	Open To Flow (1)
31	22.91	118.83	Shut-In(1)
62	71.19	119.79	End Shut-In(1)
62	22.03	119.79	Open To Flow (2)
91	23.66	120.55	Shut-In(2)
123	37.51	121.30	End Shut-In(2)
125	2134.97	122.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	1%Oil/99%Mud	0.05

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkw y
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47960

DST#: 3

Test Start: 2012.06.27 @ 16:56:15

GENERAL INFORMATION:

Formation: **Fort Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:15:15

Time Test Ended: 22:59:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 4433.00 ft (KB) To 4497.00 ft (KB) (TVD)

Reference Elevations: 2909.00 ft (KB)

Total Depth: 4497.00 ft (KB) (TVD)

2904.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8520 Outside

Press @RunDepth: psig @ 4472.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.27

End Date: 2012.06.27

Last Calib.: 2012.06.27

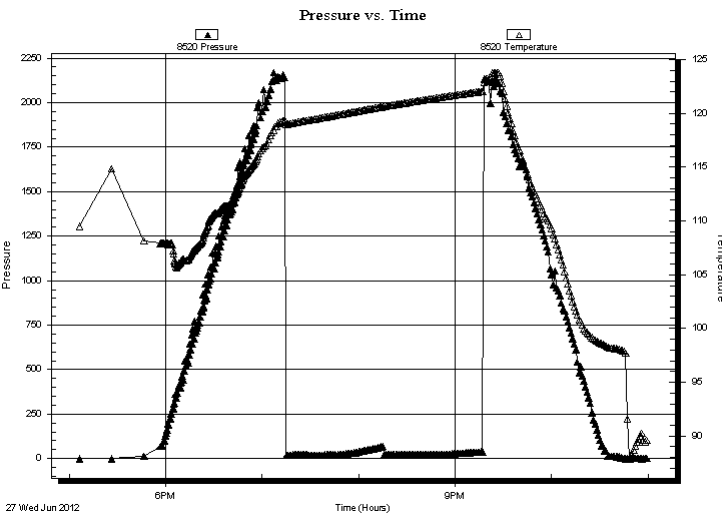
Start Time: 17:06:30

End Time: 22:59:00

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-Weak surface blow . Died @ 11 minutes.
IS- No Return.
FF- No Blow .
FS- No Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
10.00	1%Oil/99%Mud	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47960

DST#: 3

Test Start: 2012.06.27 @ 16:56:15

Tool Information

Drill Pipe:	Length: 4306.00 ft	Diameter: 3.80 inches	Volume: 60.40 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 15000.00 lb
			<u>Total Volume: 60.98 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4433.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Change Over Sub	1.00			4406.00	
Shut In Tool	5.00			4411.00	
Hydraulic tool	5.00			4416.00	
Jars	5.00			4421.00	
Safety Joint	3.00			4424.00	
Packer	5.00			4429.00	28.00 Bottom Of Top Packer
Packer	4.00			4433.00	
Stubb	1.00			4434.00	
Perforations	5.00			4439.00	
Change Over Sub	1.00			4440.00	
Drill Pipe	31.00			4471.00	
Change Over Sub	1.00			4472.00	
Recorder	0.00	8354	Inside	4472.00	
Recorder	0.00	8520	Outside	4472.00	
Perforations	22.00			4494.00	
Bullnose	3.00			4497.00	64.00 Bottom Packers & Anchor
Total Tool Length:	92.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.
1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

14-13s-31w Gove,KS
S&L #1-14
Job Ticket: 47960 **DST#: 3**
Test Start: 2012.06.27 @ 16:56:15

Mud and Cushion Information

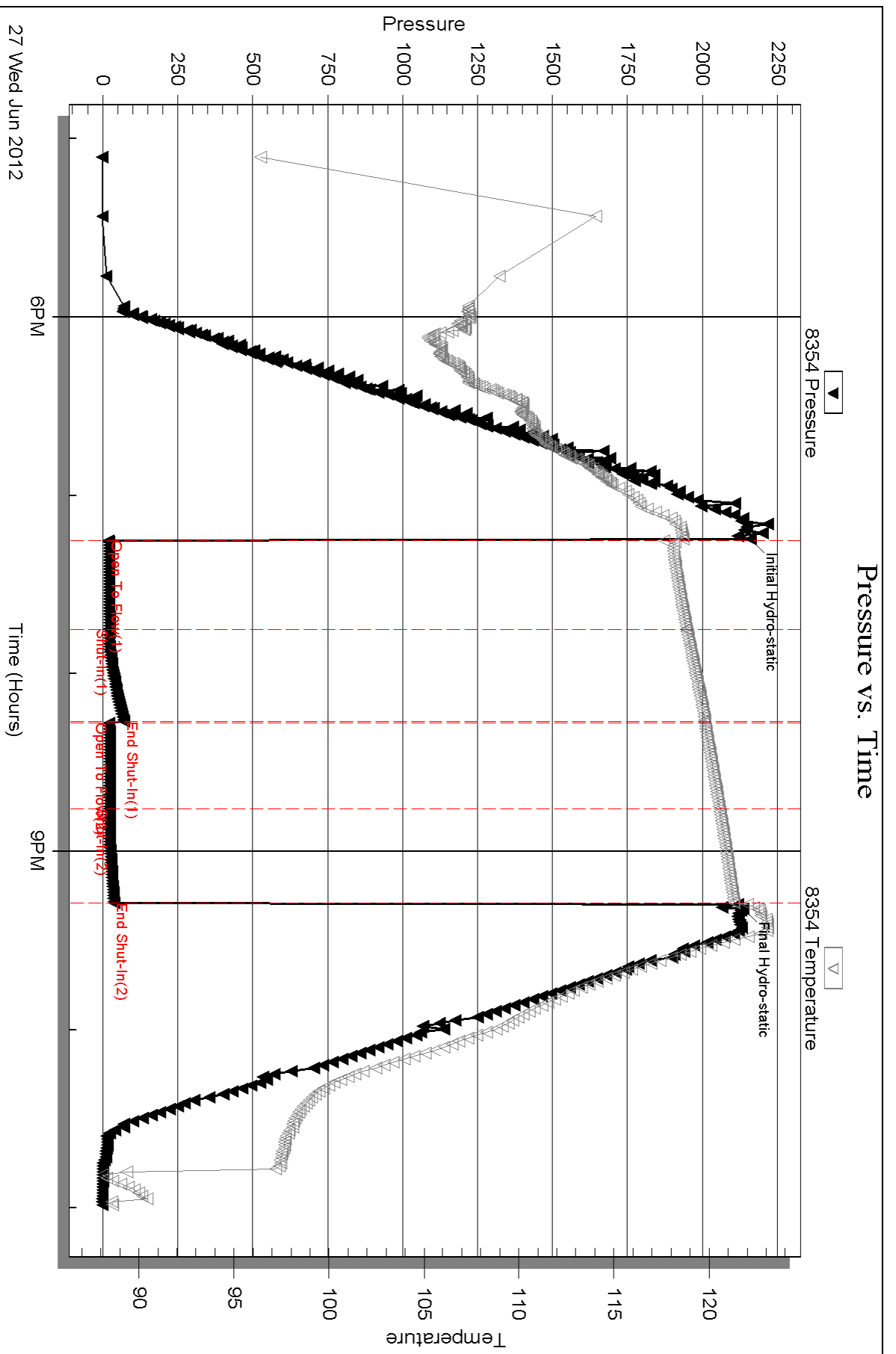
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.37 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3400.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	1%Oil/99%Mud	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:

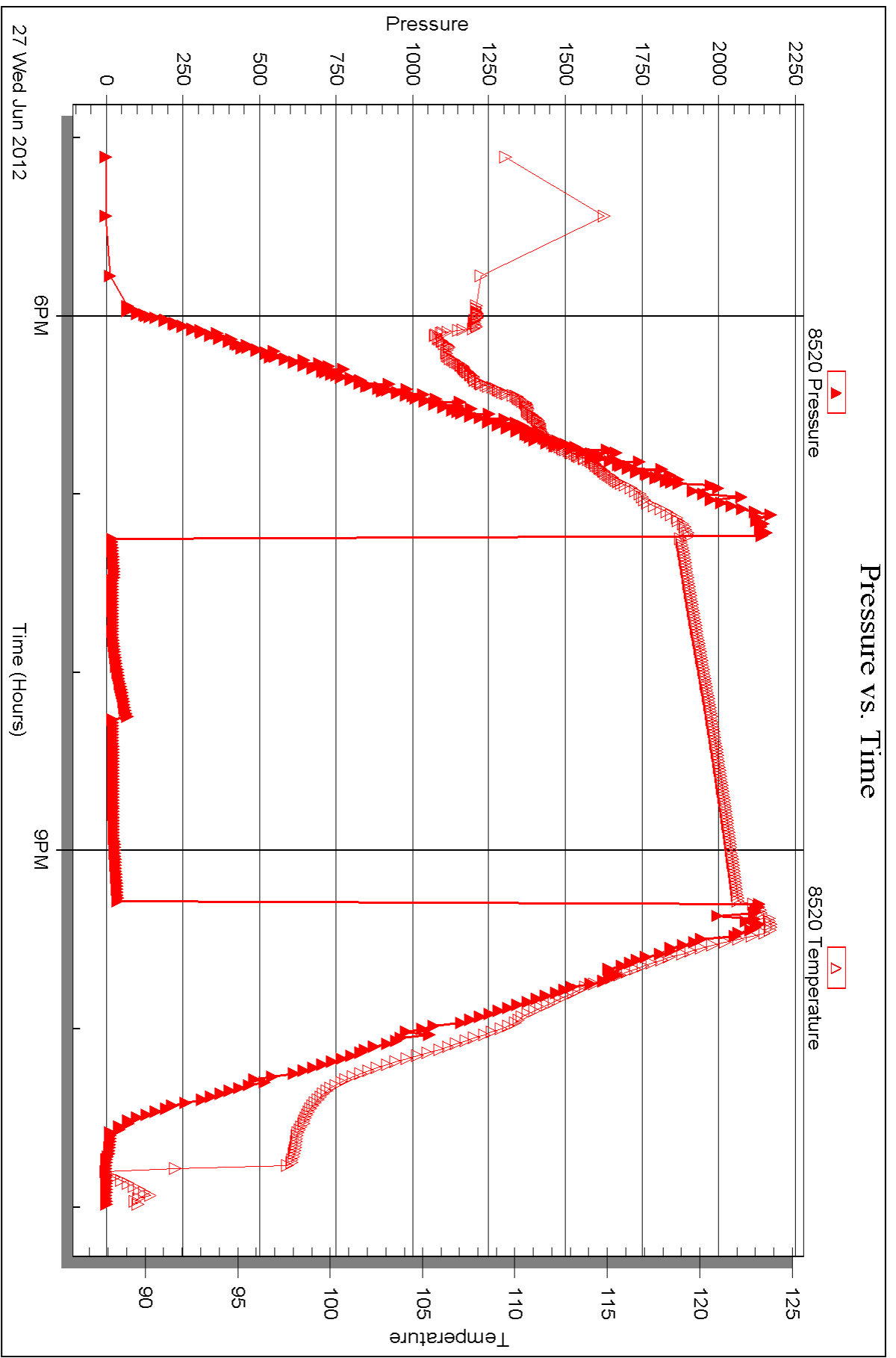


Serial #: 8520

Outside Grand Mesa Operating Co.

S&L #1-14

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 47960

Printed: 2012.07.05 @ 16:26:16



DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206

ATTN: Bob Schreiber

S&L #1-14

14-13s-31w Gove,KS

Start Date: 2012.06.28 @ 12:34:00

End Date: 2012.06.28 @ 21:33:00

Job Ticket #: 47752 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.07.05 @ 16:25:27



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Grand Mesa Operating Co.
 1700 N. Waterfront Pkwy
 Bldg 600
 Wichita, KS 67206
 ATTN: Bob Schreiber

14-13s-31w Gove, KS

S&L #1-14

Job Ticket: 47752

DST#: 4

Test Start: 2012.06.28 @ 12:34:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 14:33:10
 Tester: Cody Bloedorn
 Time Test Ended: 21:33:00
 Unit No: 38
 Interval: **4525.00 ft (KB) To 4568.00 ft (KB) (TVD)**
 Reference Elevations: 2909.00 ft (KB)
 Total Depth: 4563.00 ft (KB) (TVD)
 2904.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 5.00 ft

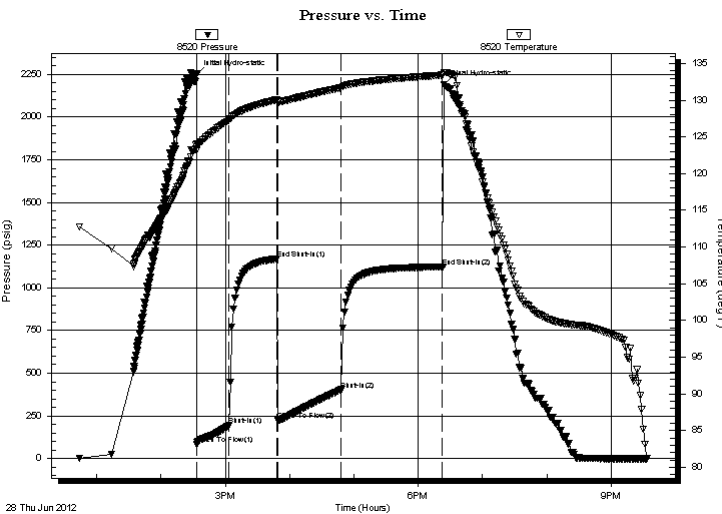
Serial #: 8520

Outside

Press @ Run Depth: 402.83 psig @ 4565.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.06.28 End Date: 2012.06.28 Last Calib.: 2012.06.28
 Start Time: 12:44:00 End Time: 21:33:00 Time On Btm: 2012.06.28 @ 14:33:00
 Time Off Btm: 2012.06.28 @ 18:24:00

TEST COMMENT: 30 - IF- B.O.B. in 2 Min.
 45 - IS- B.O.B. in 10 Min.
 60 - FF- B.O.B. instantly
 90 - FS- B.O.B. in 14 Min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2251.04	124.02	Initial Hydro-static
1	84.89	123.13	Open To Flow (1)
31	194.49	127.25	Shut-In(1)
75	1168.33	130.04	End Shut-In(1)
76	226.91	129.75	Open To Flow (2)
135	402.83	131.69	Shut-In(2)
229	1122.65	133.41	End Shut-In(2)
231	2191.33	133.74	Final Hydro-static

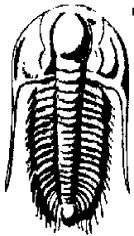
Recovery

Length (ft)	Description	Volume (bbl)
186.00	GHOCM, 10%G, 40%M, 50%O	1.53
945.00	GO, 40%G, 60%O	13.26
0.00	3410' of G.I.P.	0.00

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkw y
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47752

DST#: 4

Test Start: 2012.06.28 @ 12:34:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:33:10

Time Test Ended: 21:33:00

Interval: 4525.00 ft (KB) To 4568.00 ft (KB) (TVD)

Total Depth: 4563.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 38

Reference Elevations: 2909.00 ft (KB)

2904.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8354 Inside

Press @ RunDepth: psig @ 4565.00 ft (KB)

Start Date: 2012.06.28 End Date: 2012.06.28

Start Time: 12:44:00 End Time: 21:33:30

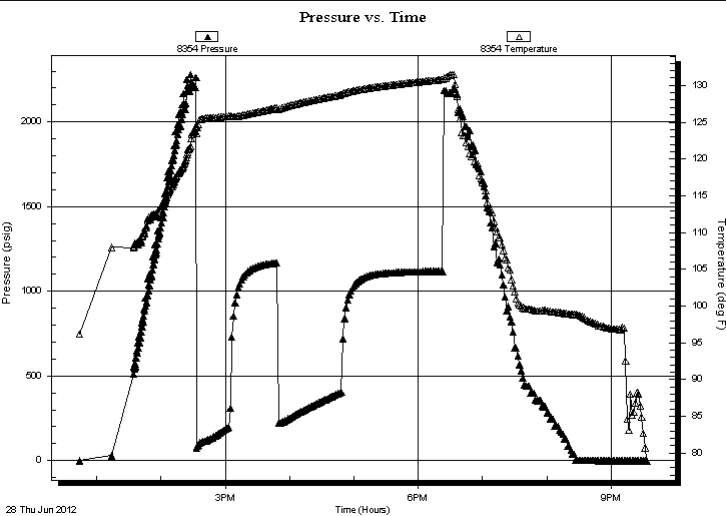
Capacity: 8000.00 psig

Last Calib.: 2012.06.28

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF- B.O.B. in 2 Min.
45 - IS- B.O.B. in 10 Min.
60 - FF- B.O.B. instantly
90 - FS- B.O.B. in 14 Min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
186.00	GHOCM, 10%G, 40%M, 50%O	1.53
945.00	GO, 40%G, 60%O	13.26
0.00	3410' of G.I.P.	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47752

DST#: 4

Test Start: 2012.06.28 @ 12:34:00

Tool Information

Drill Pipe:	Length: 4397.00 ft	Diameter: 3.80 inches	Volume: 61.68 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 62.26 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4525.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Change Over Sub	1.00			4498.00	
Shut In Tool	5.00			4503.00	
Hydraulic tool	5.00			4508.00	
Jars	5.00			4513.00	
Safety Joint	3.00			4516.00	
Packer	5.00			4521.00	28.00 Bottom Of Top Packer
Packer	4.00			4525.00	
Stubb	1.00			4526.00	
Perforations	3.00			4529.00	
Change Over Sub	1.00			4530.00	
Drill Pipe	31.00			4561.00	
Change Over Sub	1.00			4562.00	
Perforations	3.00			4565.00	
Recorder	0.00	8354	Inside	4565.00	
Recorder	0.00	8520	Outside	4565.00	
Bullnose	3.00			4568.00	43.00 Bottom Packers & Anchor
Total Tool Length:	71.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating Co.

14-13s-31w Gove,KS

1700 N. Waterfront Pkwy
Bldg 600
Wichita, KS 67206
ATTN: Bob Schreiber

S&L #1-14

Job Ticket: 47752

DST#: 4

Test Start: 2012.06.28 @ 12:34:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	GHOCM, 10%G, 40%M, 50%O	1.534
945.00	GO, 40%G, 60%O	13.256
0.00	3410' of G.I.P.	0.000

Total Length: 1131.00 ft Total Volume: 14.790 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

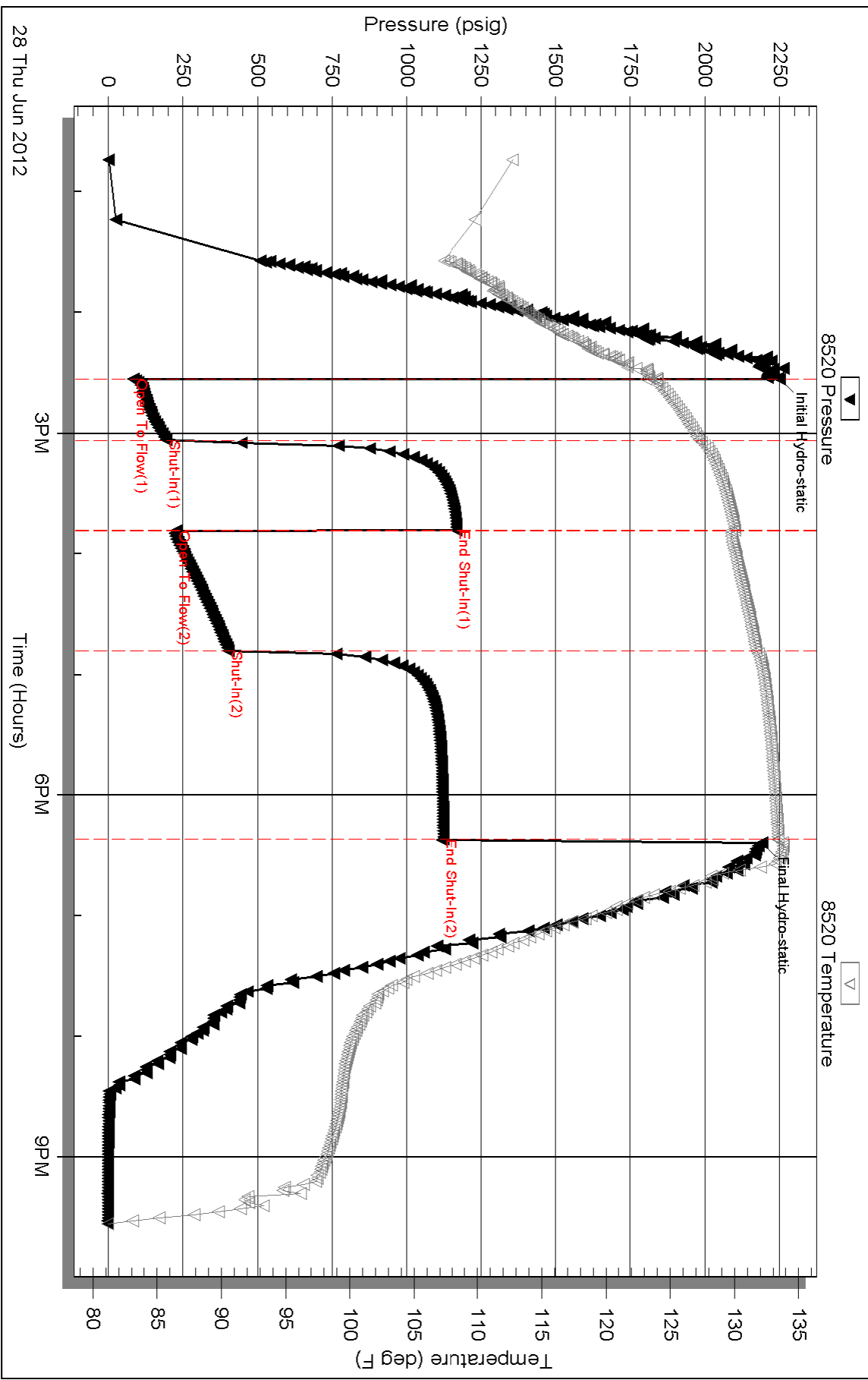
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 28 @ 90 Degrees = 31

Pressure vs. Time



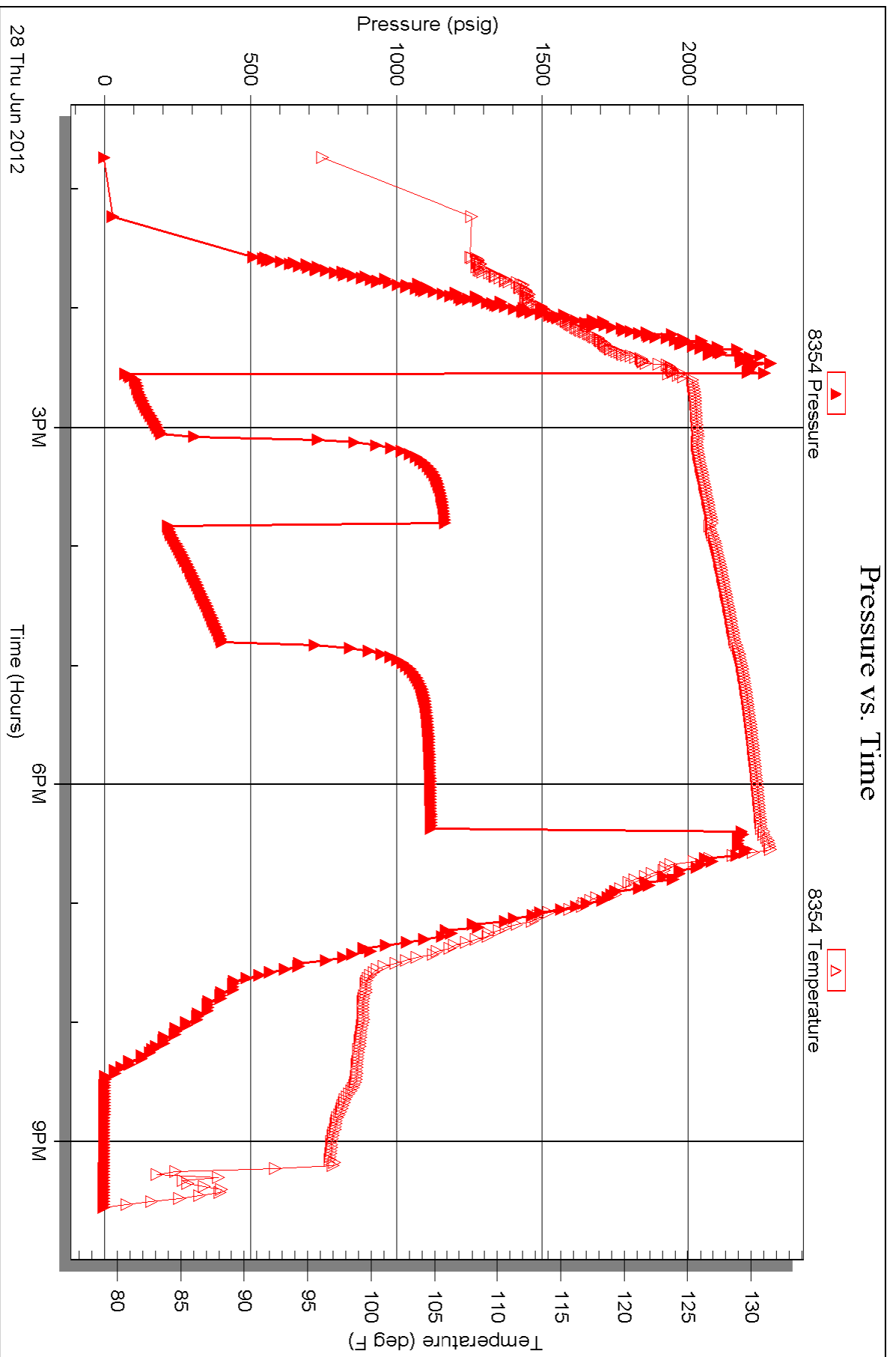
Serial #: 8354

Inside

Grand Mesa Operating Co.

S&L #1-14

DST Test Number: 4





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47958

Well Name & No. Sand L #1-14 Test No. 7 Date 6-24-12
 Company Grand Mesa Operating Co. Elevation 2909 KB 2904 GL
 Address 1700 N. Waverly PKWY Bldg #600 Wichita, KS 67206
 Co. Rep / Geo. _____ Rig Murphy 24
 Location: Sec. 14 Twp. 13S Rge. 31W Co. Gove State KS

Interval Tested 4042-4058 Zone Tested Lansing "E"
 Anchor Length 16' Drill Pipe Run 3905 Mud Wt. 9.1
 Top Packer Depth 4037 Drill Collars Run 118.64 Vis 52
 Bottom Packer Depth 4042 Wt. Pipe Run 0 WL 6.4
 Total Depth 4058 Chlorides 2400 ppm System LCM 5#

Blow Description IF - Weak surface blow. Dried @ 30 seconds.
ISI - No Return.
FF - No Blow. Flushed Tool. No Blow.
FSE - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>Mud</u>			<u>100</u>	
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Rec Total 15 BHT 121 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1991</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>1700</u>
(B) First Initial Flow <u>19</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>1800</u>
(C) First Final Flow <u>25</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>1944</u>
(D) Initial Shut-In <u>1071</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>2145</u>
(E) Second Initial Flow <u>26</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>2330</u>
(F) Second Final Flow <u>33</u>	<input checked="" type="checkbox"/> Mileage 80rt 124	Comments <u>BHT-1753</u>
(G) Final Shut-In <u>978</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1948</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby _____	Total <u>1699</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1699</u>	

Approved By _____ Our Representative [Signature]

TriLOBITE Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47959

Well Name & No. Sand 2 #1-14 Test No. 2 Date 6-25-12
 Company Grand Mesa Operating Co. Elevation 2909 KB 2904 GL
 Address 1700 N. Waterfront Pkwy Bldg #600 Wichita, KS 67206
 Co. Rep / Geo. Bob Scheiber Rig Murphy 24
 Location: Sec. 14 Twp. 13S Rge. 31W Co. Cove State KS

Interval Tested 4119-4189 Zone Tested LKC "H+I"
 Anchor Length 70' Drill Pipe Run 4002 Mud Wt. 9.2
 Top Packer Depth 4114 Drill Collars Run 118.64 Vis 57
 Bottom Packer Depth 4119 Wt. Pipe Run ⊖ WL 7.6
 Total Depth 4189 Chlorides 3000 ppm System LCM 4#

Blow Description IF - Surging surface blow. Died @ 24 minutes.
~~JST - No Return.~~
FF - No Blow.
~~FST - No Return~~

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>Mud w/oil Specs</u>		<u>2</u>		<u>98</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 121 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2019 Test 1250 T-On Location 1800
 (B) First Initial Flow 19 Jars 250 T-Started 1900
 (C) First Final Flow 28 Safety Joint 75 T-Open 2034
 (D) Initial Shut-In 275 Circ Sub _____ T-Pulled 2235
 (E) Second Initial Flow 28 Hourly Standby _____ T-Out 0030
 (F) Second Final Flow 33 Mileage 124 Comments BHT-1825
 (G) Final Shut-In 69 Sampler _____
 (H) Final Hydrostatic 1991 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1699
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 30 Sub Total 1699

Approved By _____ Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47960

Well Name & No. Sand L #1-14 Test No. 3 Date 6-27-12
 Company Grand Mesa Operating Co. Elevation 2909 KB 2904 GL
 Address 1700 N. Waterfront Pkwy Bldg #600 Wichita, KS 67206
 Co. Rep / Geo. Bob Schreiber Rig Muyon 24
 Location: Sec. 14 Twp. 13S Rge. 31W Co. Gove State KS

Interval Tested 4433-4497 Zone Tested Fair Scott
 Anchor Length 64' Drill Pipe Run 4306 Mud Wt. 9.3
 Top Packer Depth 4428 Drill Collars Run 118.64 Vis 54
 Bottom Packer Depth 4433 Wt. Pipe Run 0 WL 10.4
 Total Depth 4499 Chlorides 3400 ppm System LCM 4#

Blow Description IF - Weak surface blow. Dried @ 11 minutes.
IST - No Return.
FF - No Blow.
FST - No Return.

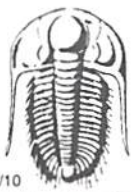
Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Mud w/oil/Spec</u>	<u>1</u>		<u>99</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 123 Gravity API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic <u>2160</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>1430</u>
(B) First Initial Flow <u>20</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>1730</u>
(C) First Final Flow <u>23</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>1915</u>
(D) Initial Shut-In <u>71</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>2115</u>
(E) Second Initial Flow <u>22</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2300</u>
(F) Second Final Flow <u>24</u>	<input checked="" type="checkbox"/> Mileage 124	Comments <u>Bot-1656</u>
(G) Final Shut-In <u>38</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2135</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1699</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1699</u>	

Approved By _____ Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47752

Well Name & No. S & L #14 Test No. 4 Date 6-28-12
 Company Grand Mesa Operating Co Elevation 2909 KB 2904 GL
 Address 1700 N. Waterfront Parkway
 Co. Rep / Geo. Bob Schreiber Rig Murfin 24
 Location: Sec. 14 Twp. 13s Rge. 31 W Co. Gove State KS

Interval Tested 4525 - 4568 Zone Tested Johnson
 Anchor Length 43' Drill Pipe Run 4397' Mud Wt. 9.2
 Top Packer Depth 4520 Drill Collars Run 118' Vis 52
 Bottom Packer Depth 4525 Wt. Pipe Run — WL 7.2
 Total Depth 4568 Chlorides 3,000 ppm System LCM —

Blow Description IF - B.O.B. in 2 Min.
ISI - B.O.B. in 10 Min.
FF - B.O.B. instantly
FBI - B.O.B. in 14 Min.

Rec	Feet of	%gas	%oil	%water	%mud
<u>186</u>	<u>6 HOCM</u>	<u>10%</u>	<u>50%</u>	<u>40%</u>	
<u>945</u>	<u>60</u>	<u>40%</u>	<u>60%</u>		
<u>—</u>	<u>3410' of G.I.P.</u>				

Rec Total 1131' BHT 133° Gravity 31 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2251</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>12:09 pm</u>
(B) First Initial Flow <u>84</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>12:34 pm</u>
(C) First Final Flow <u>194</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2:34 pm</u>
(D) Initial Shut-In <u>1168</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>6:19 pm</u>
(E) Second Initial Flow <u>226</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>9:33 pm</u>
(F) Second Final Flow <u>462</u>	<input checked="" type="checkbox"/> Mileage <u>124</u>	Comments <u>Picked up tools 6-29-12 @ 10:01 pm</u>
(G) Final Shut-In <u>1122</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>2191</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30 45</u>	<input type="checkbox"/> Extra Packer	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Total <u>1699</u>
Final Shut-In <u>90</u>	<input checked="" type="checkbox"/> Day Standby <u>over 24 hrs w/ no test</u>	MP/DST Disc't
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1699</u>	

Approved By _____ Our Representative Cody Plush

TriLOBITE Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

ALLIED OIL & GAS SERVICES, LLC 056286

Federal Tax I.D.# 20-5975804

SHIP TO: P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Oakley

DATE <u>6-20-12</u>	SEC <u>74</u>	TWP. <u>13</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION	JOB START <u>7:30am</u>	JOB FINISH <u>8:45am</u>
EASE <u>Sand L</u>	WELL # <u>1-14</u>	LOCATION <u>Oakley 1/2 SE 35</u>			COUNTY <u>Cole</u>	STATE <u>Ks</u>	
OLD OR NEW (Circle one)		<u>1/2 E N 1/2 35</u>					

CONTRACTOR Murfin 24 OWNER same

TYPE OF JOB Surface

COLE SIZE 12 1/4 T.D. 212' CEMENT AMOUNT ORDERED 165 sks coil

casing SIZE 8 7/8 DEPTH 212' 390cc 2 1/2 gals

tubing SIZE DEPTH

drill pipe DEPTH

tool DEPTH

RES. MAX MINIMUM COMMON 165 sks @ 16.25 2681.25

CEAS. LINE SHOE JOINT POZMIX @

CEMENT LEFT IN CSG. 15' GEL 3 sks @ 21.25 63.75

ERFS. CHLORIDE 6 sks @ 58.20 349.20

DISPLACEMENT 12.54 BBL ASC @

EQUIPMENT @

@

@

PUMP TRUCK CEMENTER Andrew Forlund @

431 HELPER Dane Retzlaff @

TANK TRUCK @

#104 DRIVER Brandon Wilkerson @

TANK TRUCK DRIVER @

@

HANDLING 18.25 @ 15' @ 210 379.23

MILEAGE 2.25 @ 160 360.00 TOTAL 388.83

REMARKS:

SERVICE

Cement Did Circulate

DEPTH OF JOB 212'

PUMP TRUCK CHARGE 1125.00

EXTRA FOOTAGE @

MILEAGE 2.2 miles @ 700 154.00

MANIFOLD - head @ 200.00

light vehicle @ 4.00 88.00

@

TOTAL 1567.00

thank you

CHARGE TO: Grand mesa

TREE#

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

TOTAL

To: Allied Oil & Gas Services, 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 one 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 5,455.83

DISCOUNT IF PAID IN 30 DAYS

PRINTED NAME Anthony Martin

SIGNATURE Anthony Martin

JOB LOG

SWIFT Services, Inc.

DATE 6-30-12 PAGE NO. 7

CUSTOMER Grand Mesa Operating WELL NO. #1-14 LEASE SVL JOB TYPE 2-stage TICKET NO. 21757

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0445							on loc w/ FE
								RTD 4698'
								5 1/2" x 15.5" x 4698' x 23'
								Cent 2, 4, 6, 8, 10, 12, 14, 54
								Basket 2, 55
								DV Tool 55 @ 2402'
	0555							Start FE.
	0800							Break Circ.
	0845	5	0			250		Start Mud Flush 500 gal
		5	12/0			250		Start KCL Flush 20 bbl
		6	20/0			250		Start 175 sks EA-2 Cement
			42					End Cement
								Wash P & L
								Drop LD Plug
		6.5	0			200		Start Displacement w/ 54 bbl
		6.5	60			250		Mud 57 bbl
		5				300		Catch Cement
	0930		111			250 450		Land Plug
								Release Pressure / Float Held
	0931							Drop Opening Plug
	0940					1100		Open DV
								Circ 2 hrs
	1100	2.5	7/5					Plug RH & MH
	1110	5	0			200		Start KCL Flush 20 bbl
		6	20/0			250		Start 265 sks SMD Cement
			147					End Cement
								Drop Closing Plug
		6	0			200		Start Displacement
		5				275		Circ Cement
	1200		57			450 1500		Land Plug + Close DV
								Release Pressure / DV Closed
								Circ 30 sks to pit
								Thank you
								Nick, Don, Isaac + Russ

Pro-Stim Chemicals LLC

67538

Acidizing Report

Date 7-13-12

Customer <i>Grand Mesa</i>	Pro-Stim Chemical Yard <i>Dighton</i>	Pro-Stim Number <i>A6</i>
Well Name & Number <i>54L 1-14</i>	Field	Formation Spot <i>4 barrel</i>
County <i>Gove</i>	State <i>KS</i>	BHT YD Interval <i>4553-4558</i>

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

Job Pumped Via: Tubing Casing Annulus CTU Combination Plug Depth Packer Depth
4508

Casing Size: *5 1/2* GRD WT Depth Tubing Size: *2 7/8* GRD WT Spot
4565 sat

Casing Vol. Tbg Vol Ann Vol OH Vol Total Displacement

Maximum Pressure Tubing Casing Proposed Pump Time AOL Leave Loc

Special Instructions: *750 gals HC-1 15% Acid*

Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure		Observations
					Tubing	Casing	
							Safety Meeting
							Prs Test to _____ psi
<i>min 1</i>	<i>Acid</i>	<i>5.7</i>		<i>4</i>			
<i>13</i>	<i>Acid</i>	<i>2.7</i>		<i>4.8</i>	<i>40</i>		<i>started job</i>
<i>18</i>	<i>Acid</i>	<i>2.7</i>		<i>18</i>	<i>40</i>		<i>acid gave</i>
<i>23</i>	<i>Flush</i>	<i>.4</i>		<i>29.7</i>	<i>40</i>		<i>loaded</i>
<i>25</i>	<i>Flush</i>	<i>.5</i>		<i>31</i>	<i>600</i>		
<i>28</i>	<i>Flush</i>	<i>.5</i>		<i>32.5</i>	<i>800</i>		<i>max</i>
<i>30</i>	<i>Flush</i>	<i>.3</i>		<i>33.2</i>	<i>700</i>		
<i>40</i>	<i>Flush</i>	<i>.4</i>		<i>37</i>	<i>800</i>		<i>max</i>
<i>48</i>	<i>Flush</i>	<i>.3</i>		<i>40.5</i>	<i>780</i>		
<i>56</i>	<i>Flush</i>	<i>.4</i>		<i>44</i>	<i>620</i>		
<i>1:09</i>	<i>Flush</i>	<i>.4</i>		<i>48</i>	<i>700</i>		<i>Total load</i>

Treatment Synopsis

Avg Inj Rate	Fluid BPM	Total Injected		H2O <i>30</i>	Acid <i>18</i>	Oil
Treating Prs	Max <i>800</i>	Final <i>700</i>	Avg.	ISIP <i>600</i>	#SI <i>VAC</i>	10'SI 15'SI
Customer Representative				Pro-Stim Supervisor	<i>Shanna M.</i>	

Pro-Stim Chemicals, LLC

P.O. Box 25
 Cheyenne Wells, CO 80810

Invoice

JUL 23 2012

Date	Invoice #
7/17/2012	67558

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

Ship To

Requested By	Terms	Ship	Lease
	Net 30	7/13/2012	S & L 1-14

Quantity	Item Code	Description	Price Each	Amount
750	15% HCl ACID	GALLONS	1.78	1,335.00
24	S-3000	GALLONS	23.56	565.44
12	RENAB	GALLONS	17.89	214.68
3	AC-307	GALLONS	18.61	55.83
3	S-262	GALLONS	14.36	43.08
3	AI-150	GALLONS	20.15	60.45
30	KCL BIOCID - 2%	BRLS	3.16	94.80
4	TRUCK TIME	HOURS	95.00	380.00T
1	DUMP JOB		158.00	158.00T
		Sales Tax - GOVE CO.	8.05%	43.31

			Total	\$2,950.59
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Phone #	Fax #	E-mail
719-767-8071	719-767-5925	prostim@hotmail.com

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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
Thomas E. Wright, Commissioner

Sam Brownback, Governor

August 17, 2012

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

Re: ACO1
API 15-063-22003-00-00
S & L 1-14
SE/4 Sec.14-13S-31W
Gove County, Kansas

Dear Production Department:

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

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

Respectfully,
Ronald N. Sinclair