



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1204164
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
-----------------------------------	-----------------	---

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: _____

1204164

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

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
----------------	-------	---------	------------	---

Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 160

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-17-14	34	15	13	Russell	KS		3:30 AM
				Location Russell S to Mechealis Rd 5 1/2 E Sine			

Lease	Grasmick	Well No.	1	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor	Southwind #6			Charge To	RJM
Type Job	Surface	Hole Size	12 1/4	T.D.	389'
Csg.	8 5/8	Depth	389'	Street	
Tbg. Size		Depth		City	State
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg.	30'	Shoe Joint		Cement Amount Ordered 180 com 3% cc 2% Gel	
Meas Line		Displace	22 3/4 bbl		

EQUIPMENT				Common	180
Pumptrk	5	No.	Cementer Helper David	Poz. Mix	
Bulktrk	3	No.	Driver Ryan	Gel.	3
Bulktrk	PU	No.	Driver Brett	Calcium	6

JOB SERVICES & REMARKS		Hulls
Remarks:		Salt
Rat Hole		Flowseal
Mouse Hole		Kol-Seal
Centralizers		Mud CLR 48
Baskets		CFL-117 or CD110 CAF 38
D/V or Port Collar		Sand
		Handling 189
		Mileage

Cement		FLOAT EQUIPMENT	
		Guide Shoe	
		Centralizer	
		Baskets	
		AFU Inserts	
		Float Shoe	
		Latch Down	
		Pumptrk Charge	Surface
		Mileage	22

Signature <i>[Signature]</i>	Tax
	Discount
	Total Charge

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

– **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

– **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

– **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price shall schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

– **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

– **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

– **DEADHAUL, CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

– **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be constructed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 052

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-23-14	34	15	13	Russell	Ks		12:00 PM

Location 281 + Michealis Rd ~ 5 1/4 E, 5 into

Lease	Grasmick	Well No.	1	Owner	
Contractor	Southwind	#6		To Quality Oilwell Cementing, Inc.	
Type Job	Production			You are hereby requested to rent cementing equipment and furnish	
Hole Size	7 7/8"	T.D.	3325'	Charge To	RJM Company
Csg.	15.50# 5 1/2" New	Depth	3324'	Street	
Tbg. Size		Depth		City	State
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg.	21'	Shoe Joint	21'	Cement Amount Ordered	180 Common 10% Salt 5%
Meas Line		Displace	78 1/2 BUS	Gilsonite - 500 gal mud Clear 48	

EQUIPMENT

Pumptrk	16	No.	Cementer		Common	180
			Helper	Billy	Poz. Mix	
Bulktrk	14	No.	Driver	Ryan	Gel.	
			Driver		Calcium	
Bulktrk	p.u.	No.	Driver	Rick		
			Driver			

JOB SERVICES & REMARKS

Remarks:	Salt	16
Rat Hole	Flowseal	
Mouse Hole	Kol-Seal	900#
Centralizers	Mud CLR 48	500 gal
Baskets	CFL-117 or CD110 CAF	38
DV or Port Collar	Sand	
Circulation pump	Handling	205
plug Reathole w/ 30 sx Cement	Mileage	
5 1/2" Casing w/ 150 sx Cement.		

FLOAT EQUIPMENT

shut down wash pump + lines	Guide Shoe	
Released plug + Displaced w/	Centralizer	9 turbo's
78 1/2 BUS of water.	Baskets	2
Released + held.	AFU Inserts	
Lift pressure 700 #	Float Shoe	1
Land plug to 1400 #	Latch Down	1
	Rotating head Assy	
	Pumptrk Charge	prod string
	Mileage	22

X Signature	W. P. P. / J. B.	Tax	
		Discount	
		Total Charge	

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

– **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

– **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

– **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price shall schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

– **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

– **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

– **DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

– **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.



DRILL STEM TEST REPORT

Prepared For: **RJM Company**

P.O. Box 256
Clafin Ks, 67525-0256

ATTN: Jim Musgrove

Grasmick #1

34/15s/13w/Russell

Start Date: 2014.04.20 @ 09:40:00

End Date: 2014.04.20 @ 17:15:00

Job Ticket #: 19231 DST #: 1

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

Printed: 2014.04.20 @ 18:51:31



DRILL STEM TEST REPORT

RJM Company
 P.O. Box 256
 Claflin Ks, 67525-0256
 ATTN: Jim Musgrove

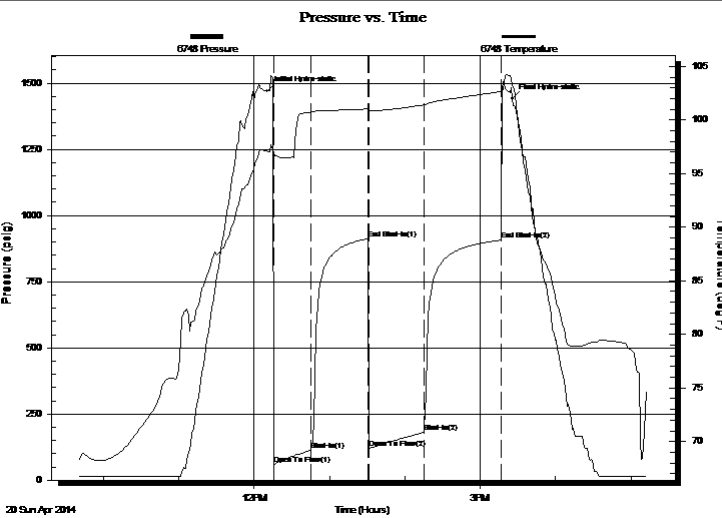
34/15s/13w/Russell
Grasmick #1
 Job Ticket: 19231 **DST#: 1**
 Test Start: 2014.04.20 @ 09:40:00

GENERAL INFORMATION:

Formation: **LKC A-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:16:30
 Time Test Ended: 17:15:00
 Interval: **3060.00 ft (KB) To 3120.00 ft (KB) (TVD)**
 Total Depth: 3120.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzem
 Unit No: 3335/50/Great Bend
 Reference Elevations: 1870.00 ft (KB)
 1862.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6748 Outside
 Press@RunDepth: 907.14 psig @ 3117.41 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.04.20 End Date: 2014.04.20 Last Calib.: 2014.04.20
 Start Time: 09:40:00 End Time: 17:13:00 Time On Btm: 2014.04.20 @ 12:10:30
 Time Off Btm: 2014.04.20 @ 15:25:30

TEST COMMENT: 1st Open/ 30 Minutes. Good blow built to the bottom of 5 gallon bucket in 14 minutes and 45 Seconds.
 1st Shut In/ 45 Minutes. Weak surface blow back.
 2nd Open/ 45 Minutes. Good blow built to bottom of 5 gallon bucket in 15 minutes.
 2nd Shut In/ 60 Minutes. Blow back built to 2 inches into bucket of water.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1471.54	97.06	Initial Hydro-static
5	59.79	96.43	Open To Flow (1)
35	113.95	100.74	Shut-In(1)
80	912.30	101.04	End Shut-In(1)
81	118.98	100.85	Open To Flow (2)
125	181.47	101.40	Shut-In(2)
187	907.14	102.66	End Shut-In(2)
195	1442.39	103.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
31.00	20% mud, 30% water, 40% oil, 10% Gas	0.43
63.00	25% water, 5% Gas, 10% Oil, 60% Mud	0.88
126.00	5% oil, 50% water, 45% Mud	1.77
63.00	25% Water, 75% Mud	0.88
0.00	409 foot gas	0.00
0.00	Chloride recov, 38000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RJM Company

34/15s/13w/Russell

P.O. Box 256
Clafin Ks, 67525-0256

Grasmick #1

Job Ticket: 19231

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.04.20 @ 09:40:00

Tool Information

Drill Pipe:	Length: 3053.00 ft	Diameter: 3.80 inches	Volume: 42.83 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 42.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3060.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.41 ft			
Tool Length:	80.41 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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

Shut-In Tool	5.00			3045.00	
Hydraulic Tool	5.00			3050.00	
Top Packer	5.00			3055.00	
Packer	5.00			3060.00	20.00 Bottom Of Top Packer
Anchor	0.00			3060.00	
Change Over Sub	0.75			3060.75	
Drill Pipe	31.91			3092.66	
Change Over Sub	0.75			3093.41	
Anchor	22.00			3115.41	
Recorder	1.00	6666	Inside	3116.41	
Recorder	1.00	6748	Outside	3117.41	
Bull Plug	3.00			3120.41	60.41 Anchor Tool

Total Tool Length: 80.41



DRILL STEM TEST REPORT

FLUID SUMMARY

RJM Company

34/15s/13w/Russell

P.O. Box 256
Clafin Ks, 67525-0256

Grasmick #1

Job Ticket: 19231

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.04.20 @ 09:40:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 5000.00 ppm
Filter Cake: inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
31.00	20% mud, 30% water, 40% oil, 10% Gas	0.435
63.00	25% water, 5% Gas, 10% Oil, 60% Mud	0.884
126.00	5% oil, 50% water, 45% Mud	1.767
63.00	25% Water, 75% Mud	0.884
0.00	409 foot gas	0.000
0.00	Chloride recov, 38000 ppm	0.000
0.00	resist recov, .22 @ 50 degrees	0.000

Total Length: 283.00 ft Total Volume: 3.970 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

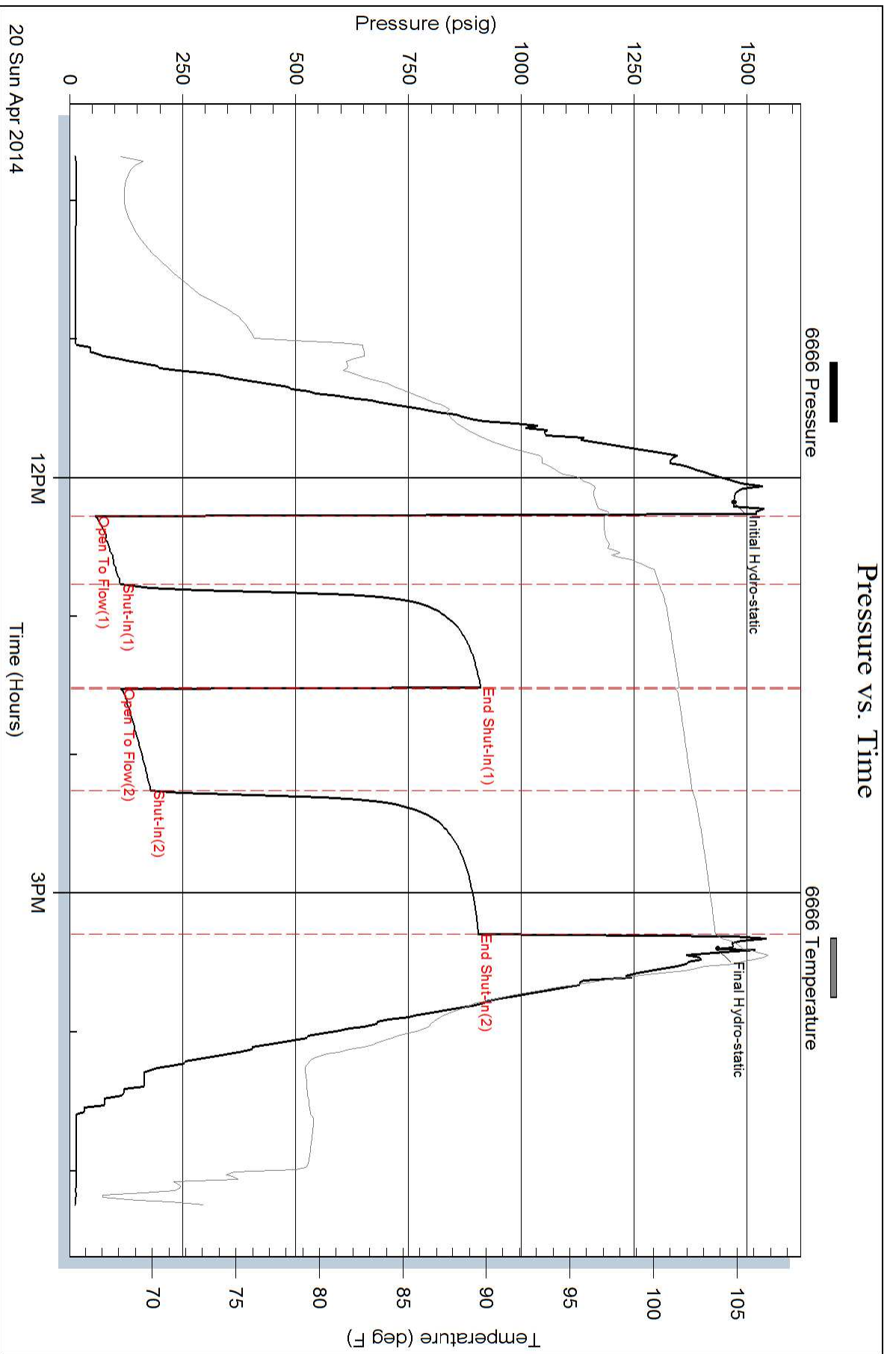
Serial #: 6666

Inside

RJM Company

Grasnick #1

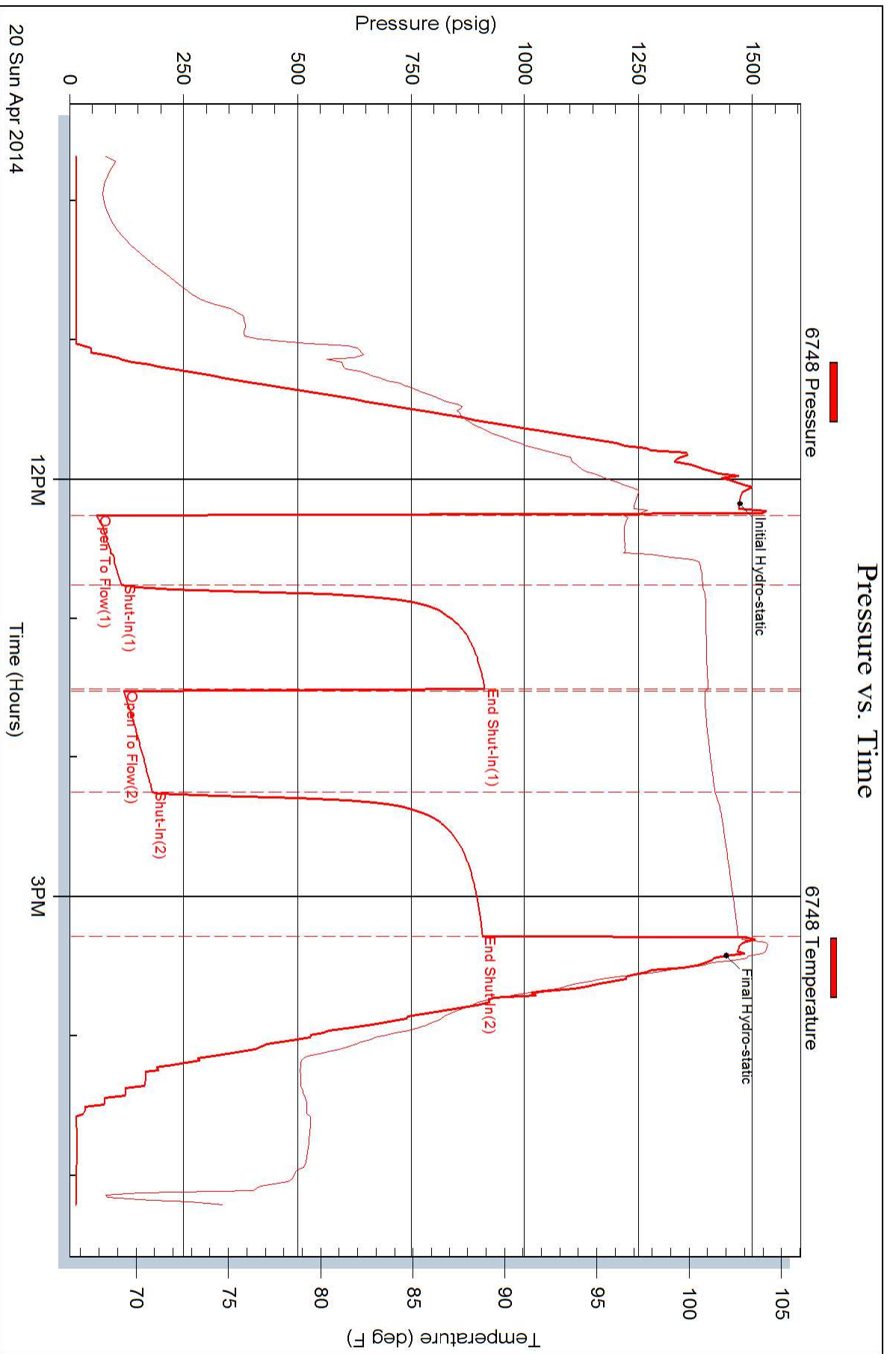
DST Test Number: 1



Superior Testers Enterprises LLC

Ref. No: 19231

Printed: 2014.04.20 @ 18:51:32





DRILL STEM TEST REPORT

Prepared For: **RJM Company**

P.O. Box 256
Clafin Ks, 67525-0256

ATTN: Jim Musgrove

Grasmick #1

34/15s/13w/Russell

Start Date: 2014.04.20 @ 22:50:00

End Date: 2014.04.21 @ 04:20:30

Job Ticket #: 19232 DST #: 2

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

Printed: 2014.04.21 @ 05:59:06

RJM Company
34/15s/13w/Russell
Grasmick #1
DST # 2
LKC "G"
2014.04.20



DRILL STEM TEST REPORT

RJM Company
 P.O. Box 256
 Claflin Ks, 67525-0256
 ATTN: Jim Musgrove

34/15s/13w/Russell
Grasmick #1
 Job Ticket: 19232 **DST#: 2**
 Test Start: 2014.04.20 @ 22:50:00

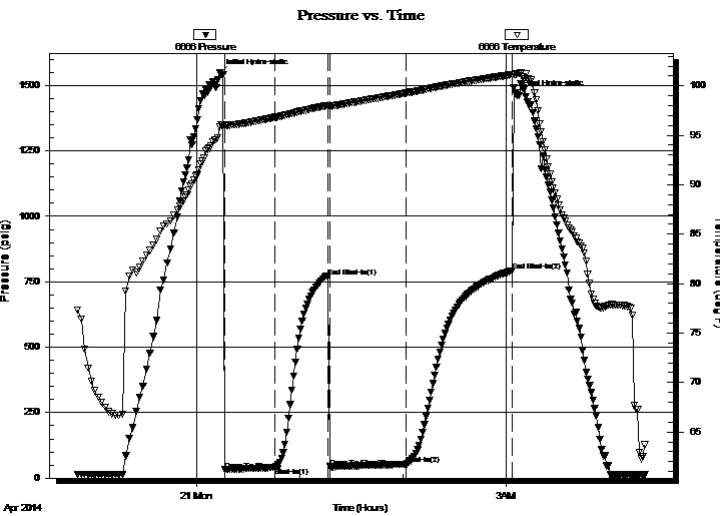
GENERAL INFORMATION:

Formation: **LKC "G"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:16:30
 Time Test Ended: 04:20:30
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzem
 Unit No: 3335/50/Great Bend
 Interval: **3123.00 ft (KB) To 3140.00 ft (KB) (TVD)**
 Reference Elevations: 1870.00 ft (KB)
 Total Depth: 3140.00 ft (KB) (TVD) 1862.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 8.00 ft

Serial #: 6666

Press@RunDepth: 52.72 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.04.20 End Date: 2014.04.21 Last Calib.: 2014.04.21
 Start Time: 22:50:00 End Time: 04:20:30 Time On Btm: 2014.04.21 @ 00:13:30
 Time Off Btm: 2014.04.21 @ 03:06:00

TEST COMMENT: 1st Open/ 30 Minutes. Weak blow built to 3 inches into bucket of water.
 1st Shut In/ 30 Minutes. No blow back.
 2nd Open/ 45 Minutes. Weak blow built to 3 inches into bucket of water.
 2nd Shut In/ 60 Minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1546.90	95.86	Initial Hydro-static
3	31.91	95.92	Open To Flow (1)
32	40.56	96.80	Shut-In(1)
63	767.59	98.02	End Shut-In(1)
64	42.88	97.91	Open To Flow (2)
109	52.72	99.27	Shut-In(2)
170	792.63	101.14	End Shut-In(2)
173	1465.79	101.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100% Mud	0.07

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RJM Company

34/15s/13w/Russell

P.O. Box 256
Clafin Ks, 67525-0256

Grasmick #1

Job Ticket: 19232

DST#: 2

ATTN: Jim Musgrove

Test Start: 2014.04.20 @ 22:50:00

Tool Information

Drill Pipe:	Length: 3116.00 ft	Diameter: 3.80 inches	Volume: 43.71 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 43.71 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3123.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	37.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3108.00	
Hydraulic Tool	5.00			3113.00	
Top Packer	5.00			3118.00	
Packer	5.00			3123.00	20.00 Bottom Of Top Packer
Anchor	12.00			3135.00	
Recorder	1.00	6666	Inside	3136.00	
Recorder	1.00	6748	Outside	3137.00	
Bull Plug	3.00			3140.00	17.00 Anchor Tool

Total Tool Length: 37.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RJM Company

34/15s/13w/Russell

P.O. Box 256
Claflin Ks, 67525-0256

Grasmick #1

Job Ticket: 19232

DST#: 2

ATTN: Jim Musgrove

Test Start: 2014.04.20 @ 22:50:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity: ppm

Viscosity: 48.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	100% Mud	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

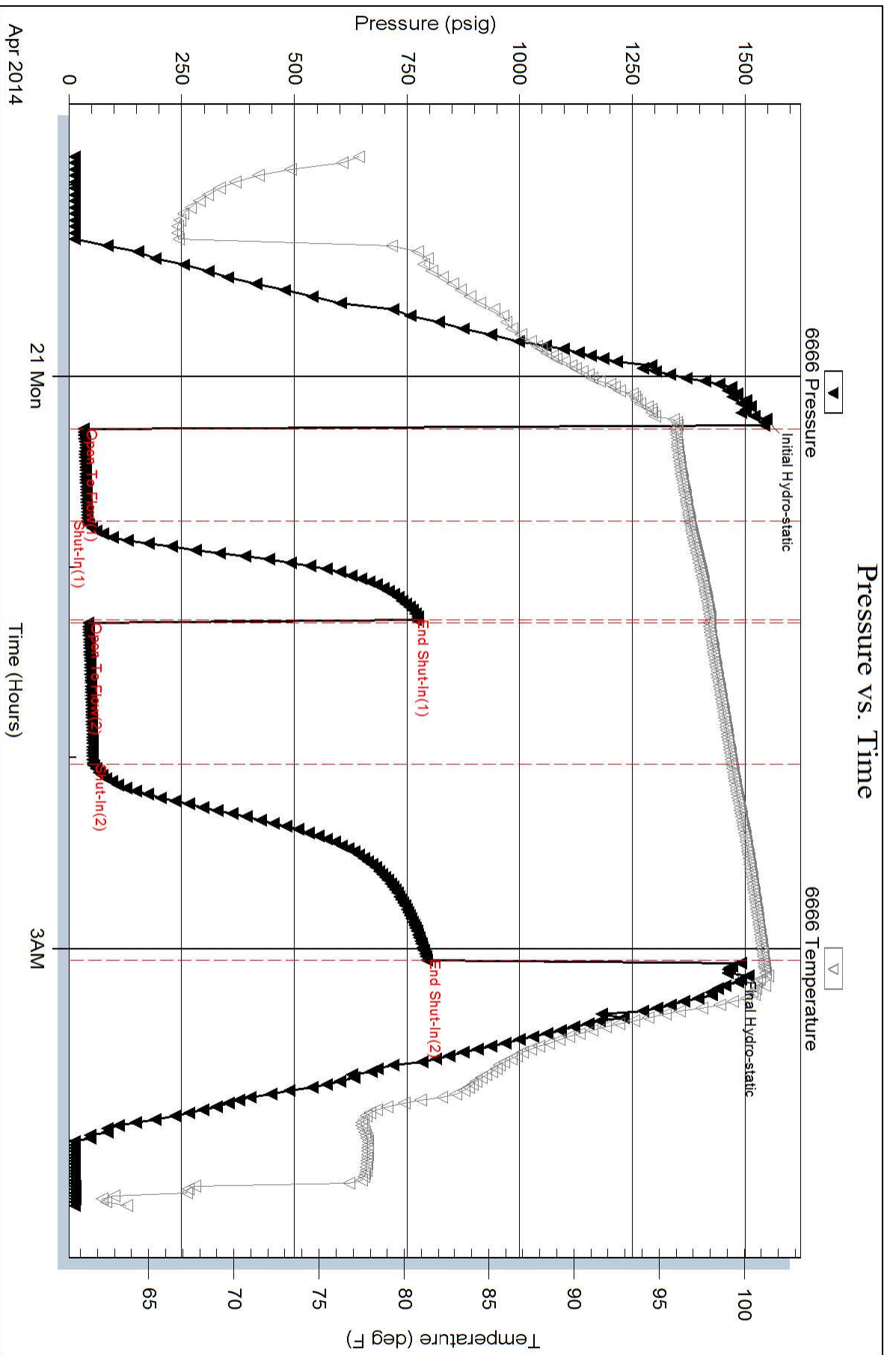
Num Gas Bombs: 0

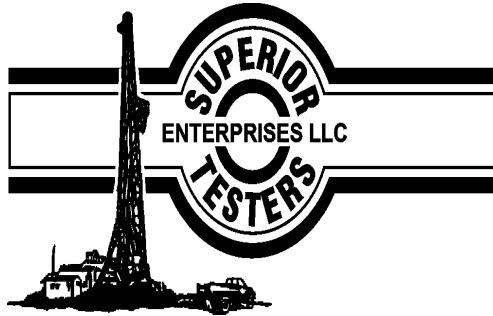
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **RJM Company**

P.O. Box 256
Clafin Ks, 67525-0256

ATTN: Jim Musgrove

Grasmick #1

34/15s/13w/Russell

Start Date: 2014.04.21 @ 16:35:00

End Date: 2014.04.21 @ 23:39:00

Job Ticket #: 19233 DST #: 3

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

Printed: 2014.04.22 @ 01:02:04

RJM Company
34/15s/13w/Russell
Grasmick #1
DST # 3
LKC "H-K"
2014.04.21



DRILL STEM TEST REPORT

RJM Company
 P.O. Box 256
 Claflin Ks, 67525-0256
 ATTN: Jim Musgrove

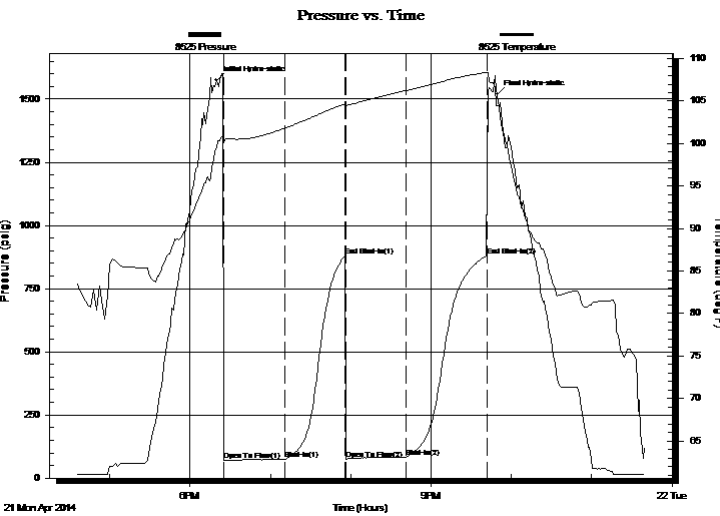
34/15s/13w/Russell
Grasmick #1
 Job Ticket: 19233 **DST#: 3**
 Test Start: 2014.04.21 @ 16:35:00

GENERAL INFORMATION:

Formation: **LKC "H-K"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:25:30
 Time Test Ended: 23:39:00
 Interval: **3153.00 ft (KB) To 3240.00 ft (KB) (TVD)**
 Total Depth: 3240.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzem
 Unit No: 3335/50/Great Bend
 Reference Elevations: 1870.00 ft (KB)
 1862.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8525 Outside
 Press@RunDepth: 879.89 psig @ 3237.67 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.04.21 End Date: 2014.04.21 Last Calib.: 2014.04.22
 Start Time: 16:35:00 End Time: 23:39:30 Time On Btm: 2014.04.21 @ 18:19:30
 Time Off Btm: 2014.04.21 @ 21:49:30

TEST COMMENT: 1st Open/ 45 Minutes. Weak blow built to 2 inches into bucket of water.
 1st Shut In/ 45 Minutes. No blow back.
 2nd Open/ 45 Minutes. Weak blow built to 3 inches into bucket of water.
 2nd Shut In/ 60 Minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1573.81	99.46	Initial Hydro-static
6	70.91	100.10	Open To Flow (1)
52	74.67	101.83	Shut-In(1)
96	881.11	104.64	End Shut-In(1)
97	76.40	104.49	Open To Flow (2)
142	83.70	106.25	Shut-In(2)
202	879.89	108.37	End Shut-In(2)
210	1518.11	104.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Oil, cut Mud	0.56

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RJM Company

34/15s/13w/Russell

P.O. Box 256
Clafin Ks, 67525-0256

Grasmick #1

Job Ticket: 19233

DST#: 3

ATTN: Jim Musgrove

Test Start: 2014.04.21 @ 16:35:00

Tool Information

Drill Pipe:	Length: 3143.00 ft	Diameter: 3.80 inches	Volume: 44.09 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 44.09 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3153.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	87.67 ft			
Tool Length:	107.67 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3138.00	
Hydraulic Tool	5.00			3143.00	
Top Packer	5.00			3148.00	
Packer	5.00			3153.00	20.00 Bottom Of Top Packer
Anchor	0.00			3153.00	
Change Over Sub	0.75			3153.75	
Drill Pipe	62.17			3215.92	
Change Over Sub	0.75			3216.67	
Anchor	19.00			3235.67	
Recorder	1.00	6666	Inside	3236.67	
Recorder	1.00	8525	Outside	3237.67	
Bull Plug	3.00			3240.67	87.67 Anchor Tool

Total Tool Length: 107.67



DRILL STEM TEST REPORT

FLUID SUMMARY

RJM Company

34/15s/13w/Russell

P.O. Box 256
Claflin Ks, 67525-0256

Grasmick #1

Job Ticket: 19233

DST#: 3

ATTN: Jim Musgrove

Test Start: 2014.04.21 @ 16:35:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 43.00 sec/qt

Water Loss: 9.60 in³

Resistivity: ohm.m

Salinity: 7000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	Oil, cut Mud	0.561

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

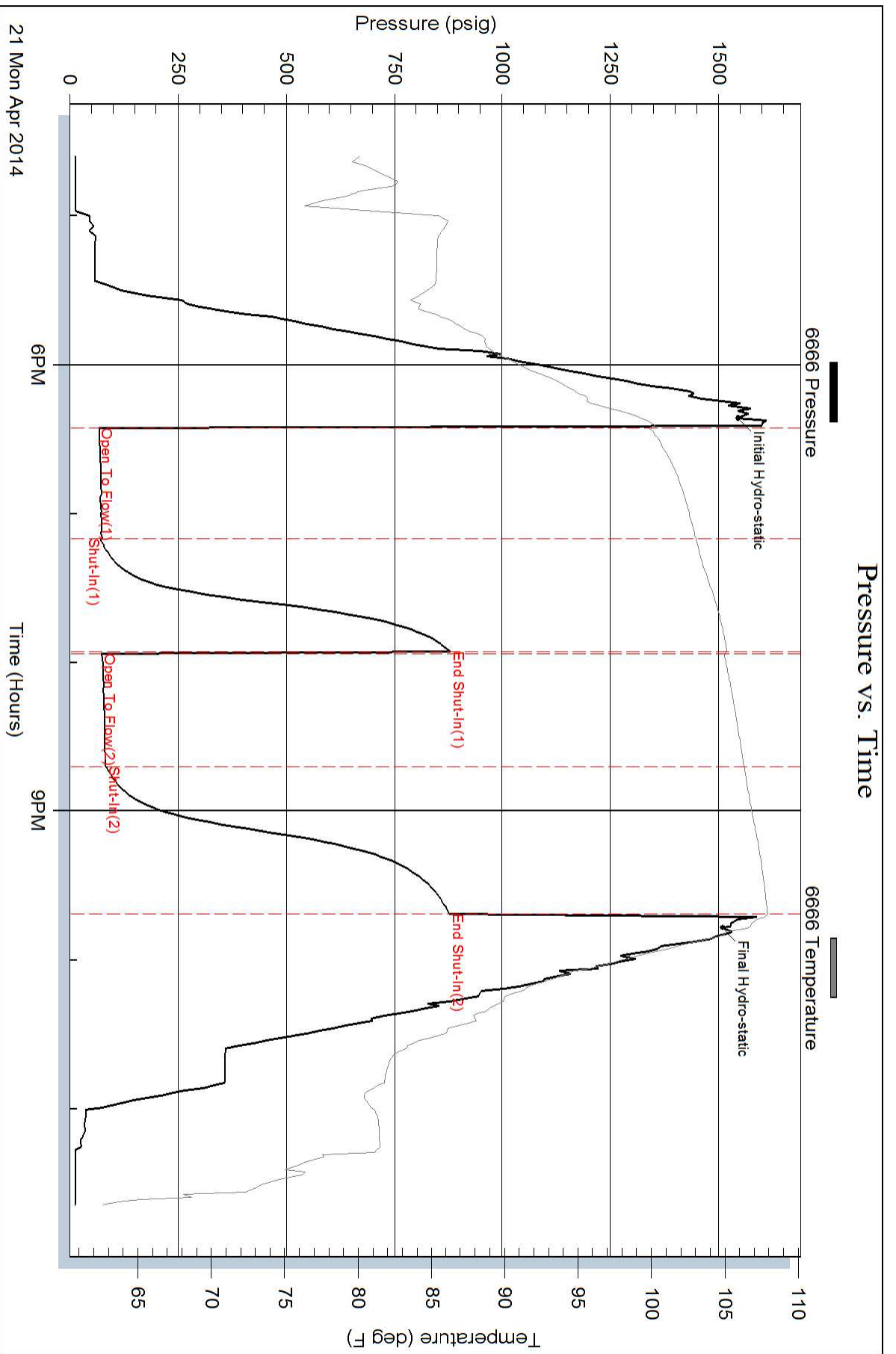
Num Gas Bombs: 0

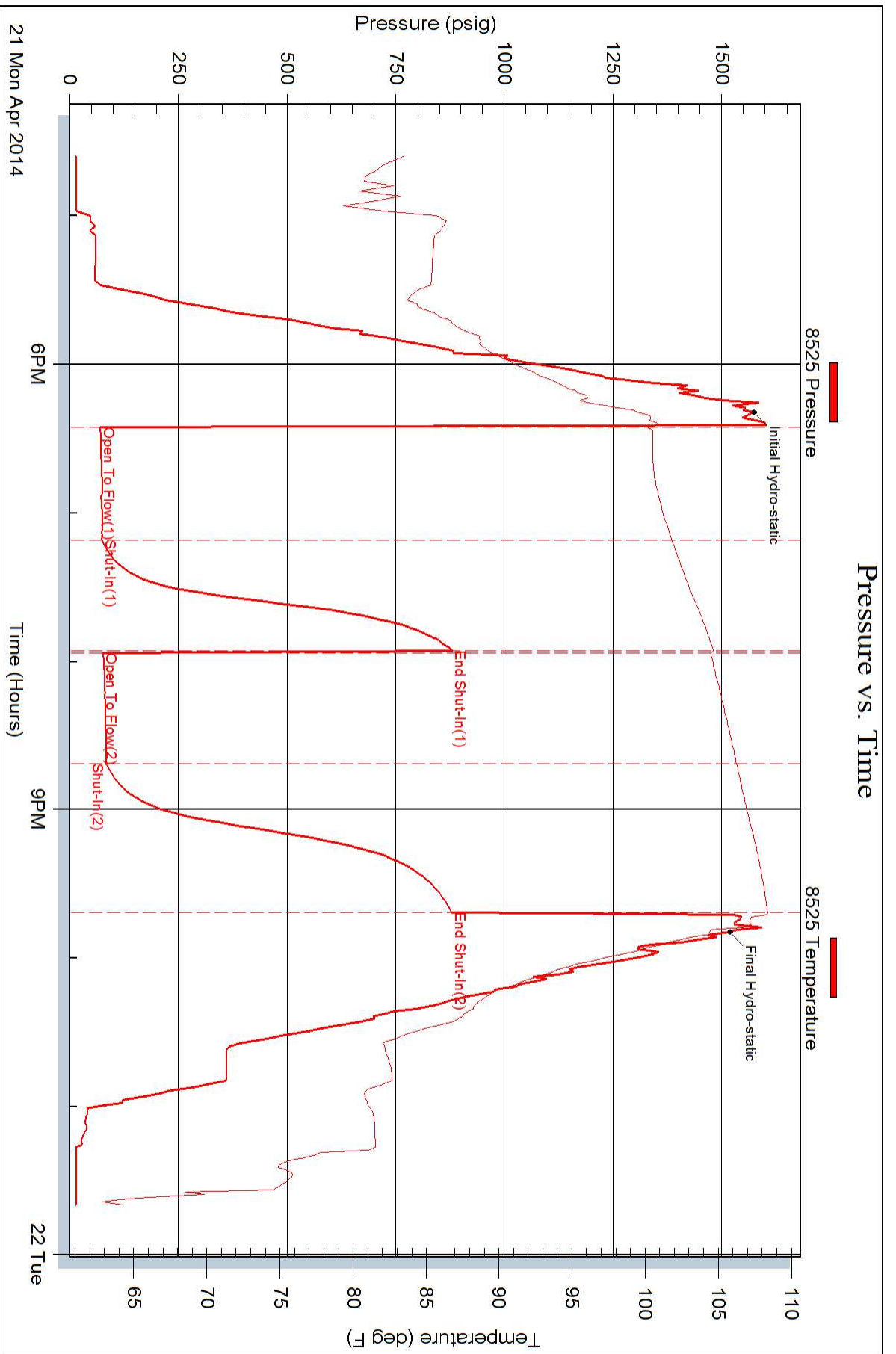
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **RJM Company**

P.O. Box 256
Clafin Ks, 67525-0256

ATTN: Jim Musgrove

Grasmick #1

34/15s/13w/Russell

Start Date: 2014.04.22 @ 12:41:00

End Date: 2014.04.22 @ 19:35:30

Job Ticket #: 19234 DST #: 4

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

Printed: 2014.04.22 @ 21:14:50

RJM Company
34/15s/13w/Russell
Grasmick #1
DST # 4
Arbuckle
2014.04.22



DRILL STEM TEST REPORT

TOOL DIAGRAM

RJM Company

34/15s/13w/Russell

P.O. Box 256
Clafin Ks, 67525-0256

Grasmick #1

Job Ticket: 19234

DST#: 4

ATTN: Jim Musgrove

Test Start: 2014.04.22 @ 12:41:00

Tool Information

Drill Pipe:	Length: 3302.00 ft	Diameter: 3.80 inches	Volume: 46.32 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 46.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3300.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3285.00	
Hydraulic Tool	5.00			3290.00	
Top Packer	5.00			3295.00	
Packer	5.00			3300.00	20.00 Bottom Of Top Packer
Anchor	20.00			3320.00	
Recorder	1.00	6666	Inside	3321.00	
Recorder	1.00	8525	Outside	3322.00	
Bull Plug	3.00			3325.00	25.00 Anchor Tool

Total Tool Length: 45.00



DRILL STEM TEST REPORT

FLUID SUMMARY

RJM Company

34/15s/13w/Russell

P.O. Box 256
Claflin Ks, 67525-0256

Grasmick #1

Job Ticket: 19234

DST#: 4

ATTN: Jim Musgrove

Test Start: 2014.04.22 @ 12:41:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity: ppm

Viscosity: 48.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 9000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	100% Clean gassy oil	1.262
10.00	Oil cut Mud	0.140
0.00	corrected oil gravity w as 40	0.000

Total Length: 100.00 ft Total Volume: 1.402 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

