



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1173380
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: _____

1173380

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
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	K & N Petroleum, Inc.
Well Name	Betty Mae 1
Doc ID	1173380

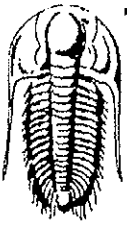
All Electric Logs Run

Cement Bond Log
Dual Compensated Porosity Log
Dual Induction Log
Microresistivity Log
Borehole Compensated Sonic Log

Form	ACO1 - Well Completion
Operator	K & N Petroleum, Inc.
Well Name	Betty Mae 1
Doc ID	1173380

Tops

Name	Top	Datum
Anydrite	572	+1216
Base Anhydrite	597	+1191
Heebner	2919	-1131
Toronto	2935	-1147
Douglas	2950	-1162
Brown Lime	3035	-1247
Lansing	3051	-1263
Base Kansas City	3314	-1526
Conglomerate	3320	-1540
Conglomerate Sand	3350	-1562
Arbuckle	3360	-1572
RTD	3460	-1672
LTD	3460	-1672



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

K & N Petroleum
1105 Walnut
Great Bend, KS 67530
ATTN: Wyatt Urban

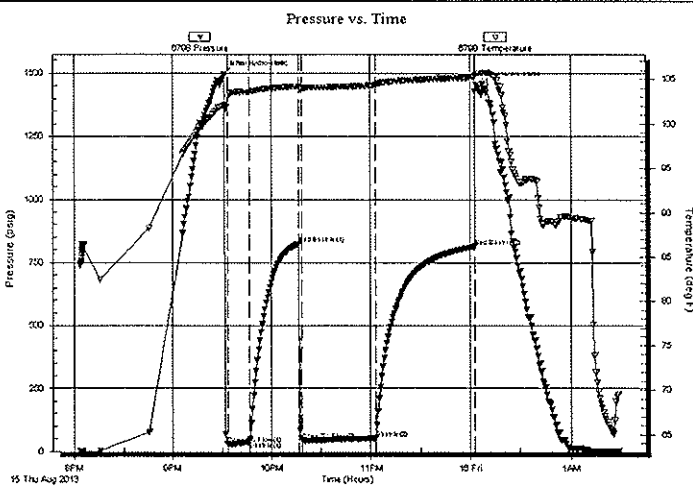
3-19S-11W Barton
Betty Mae 1
Job Ticket: 52385 DST#: 1
Test Start: 2013.08.15 @ 20:03:39

GENERAL INFORMATION:

Formation: **Lansing "A-F"**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 21:33:39 Tester: Leal Cason
Time Test Ended: 01:28:39 Unit No: 45
Interval: 3057.00 ft (KB) To 3132.00 ft (KB) (TVD) Reference Elevations: 1787.00 ft (KB)
Total Depth: 3132.00 ft (KB) (TVD) 1780.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 7.00 ft

Serial #: 6798 Inside
Press@RunDepth: 52.92 psig @ 3058.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.08.15 End Date: 2013.08.16 Last Calib.: 2013.08.16
Start Time: 20:03:40 End Time: 01:28:39 Time On Btm: 2013.08.15 @ 21:31:24
Time Off Btm: 2013.08.16 @ 00:03:39

TEST COMMENT: IF: Strong Blow , BOB in 30 seconds
IS: No Blow Back
FF: Strong Blow , BOB in 30 seconds, GTS in 8 minutes, Gauged Gas
FS: No Blow Back



PRESSURE SUMMARY

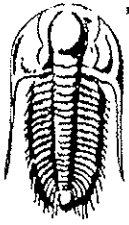
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1494.54	102.17	Initial Hydro-static
3	28.03	102.86	Open To Flow (1)
16	38.91	103.57	Shut-In(1)
46	824.69	104.20	End Shut-In(1)
48	45.24	103.92	Open To Flow (2)
92	52.92	104.36	Shut-In(2)
152	814.04	105.24	End Shut-In(2)
153	1455.30	105.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	2968 GIP	0.00
70.00	SOCM 5%O 95%M	0.98

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	10.00	38.71
Last Gas Rate	0.25	6.00	32.36
Max. Gas Rate	0.25	10.00	38.71



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

K & N Petroleum
1105 Walnut
Great Bend, KS 67530
ATTN: Wyatt Urban

3-19S-11W Barton
Betty Mae 1
Job Ticket: 52385 DST#: 1
Test Start: 2013.08.15 @ 20:03:39

Mud and Cushion Information

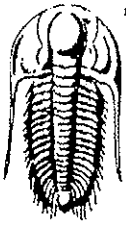
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 64.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	2968 GIP	0.000
70.00	SOCM 5%O 95%M	0.982

Total Length: 70.00 ft Total Volume: 0.982 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

K & N Petroleum
1105 Walnut
Great Bend, KS 67530
ATTN: Wyatt Urban

3-19S-11W Barton
Betty Mae 1
Job Ticket: 52385 **DST#: 1**
Test Start: 2013.08.15 @ 20:03:39

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.25	10.00	38.71
2	20	0.25	9.00	37.12
2	30	0.25	7.00	33.95
2	40	0.25	6.00	32.36
2	45	0.25	6.00	32.36

Serial #: 6798

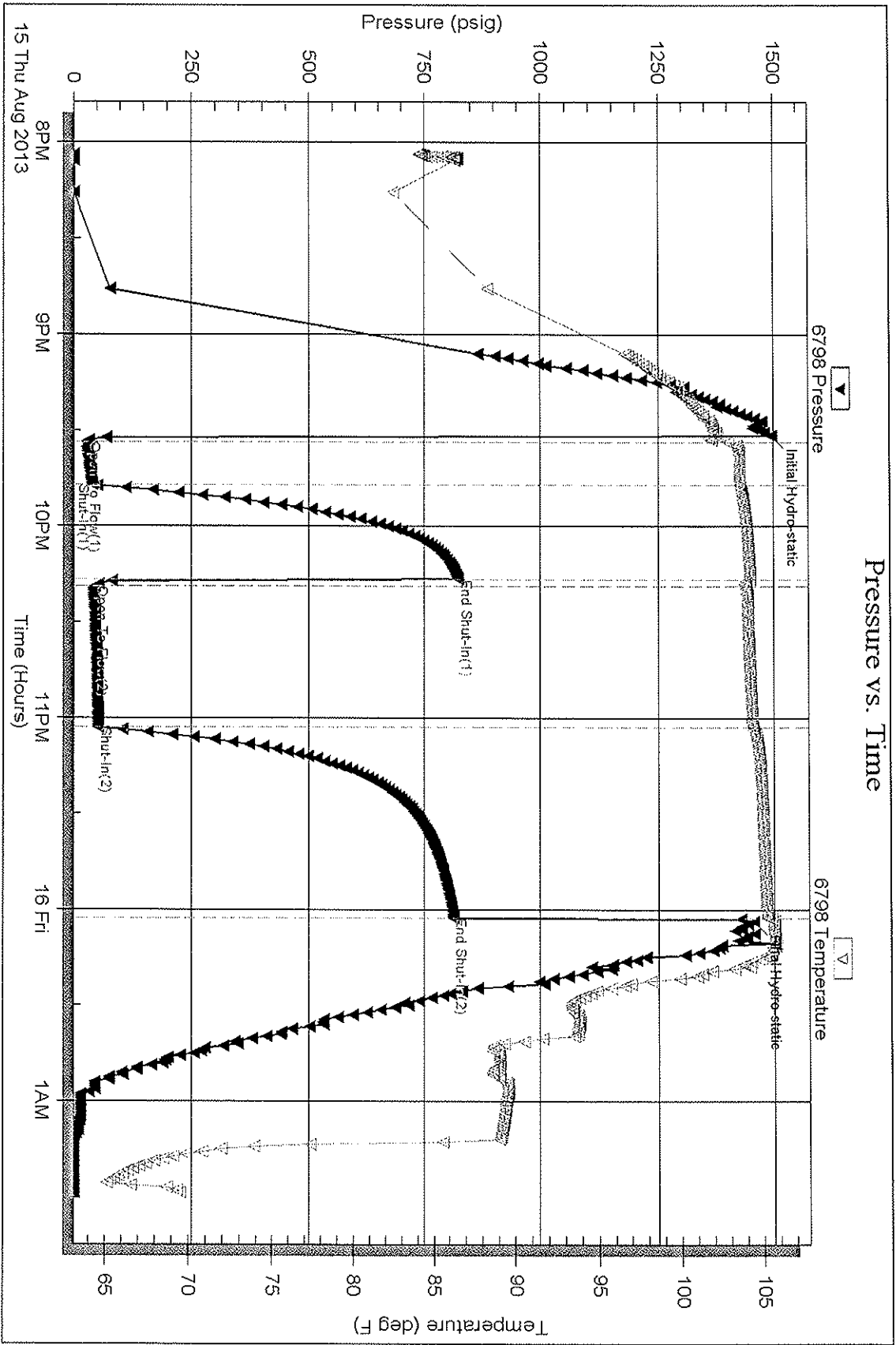
Inside

K & N Petroleum

Betty Mae 1

DST Test Number: 1

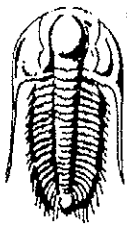
Pressure vs. Time



Trible Testing, Inc

Ref. No: 52385

Printed: 2013.08.16 @ 06:30:46



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

K & N Petroleum
1105 Walnut
Great Bend, KS 67530
ATTN: Wyatt Urban

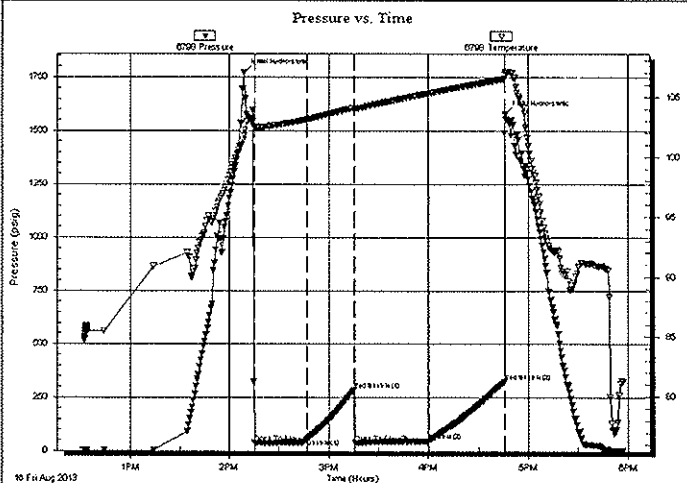
3-19S-11W Barton
Betty Mae 1
Job Ticket: 52386 DST#: 2
Test Start: 2013.08.16 @ 12:32:12

GENERAL INFORMATION:

Formation: **Lansing "H, I, J"**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 14:15:12 Tester: Leal Cason
 Time Test Ended: 17:56:57 Unit No: 45
 Interval: 3204.00 ft (KB) To 3260.00 ft (KB) (TVD) Reference Elevations: 1787.00 ft (KB)
 Total Depth: 3132.00 ft (KB) (TVD) 1780.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 7.00 ft

Serial #: 6798 Inside
 Press@RunDepth: 47.82 psig @ 3205.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.16 End Date: 2013.08.16 Last Calib.: 2013.08.16
 Start Time: 12:32:13 End Time: 17:56:57 Time On Btm: 2013.08.16 @ 14:08:57
 Time Off Btm: 2013.08.16 @ 16:45:57

TEST COMMENT: IF: Fair Blow, Built to 7 inches
 IS: No Blow Back
 FF: Fair Blow, BOB in 10 minutes
 FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1772.32	101.75	Initial Hydro-static
7	38.02	102.58	Open To Flow (1)
38	54.74	103.14	Shut-In(1)
66	285.83	104.10	End Shut-In(1)
67	37.34	104.02	Open To Flow(2)
112	47.82	105.32	Shut-In(2)
157	324.01	106.52	End Shut-In(2)
157	1578.87	106.99	Final Hydro-static

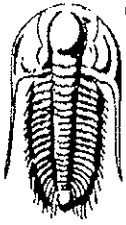
Recovery

Length (ft)	Description	Volume (bbl)
0.00	268 GIP	0.00
40.00	SOGCM 4%O 6%G 90%M	0.56

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

K & N Petroleum
1105 Walnut
Great Bend, KS 67530
ATTN: Wyatt Urban

3-19S-11W Barton
Betty Mae 1
Job Ticket: 52386 DST#: 2
Test Start: 2013.08.16 @ 12:32:12

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: 64.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	268 GIP	0.000
40.00	SOGCM 4%O 6%G 90%M	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:

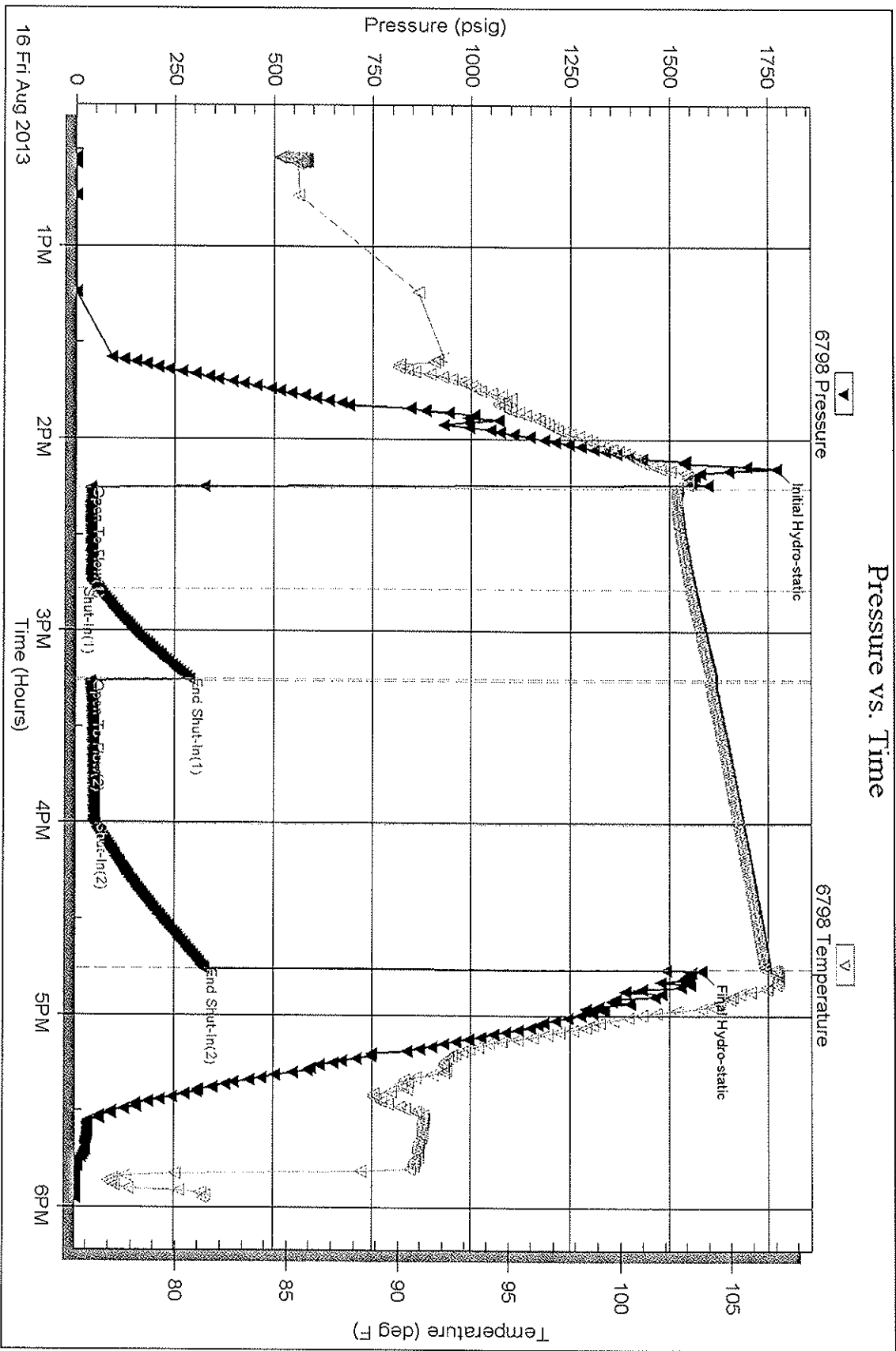
Serial #: 6798

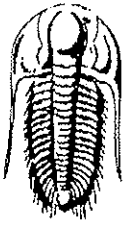
Inside

K & N Petroleum

Belly Mae 1

DST Test Number: 2





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

K & N Petroleum
1105 Walnut
Great Bend, KS 67530
ATTN: Wyatt Urban

3-19S-11W Barton
Betty Mae 1
Job Ticket: 52387 DST#: 3
Test Start: 2013.08.17 @ 06:56:15

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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	300 GIP	0.000
20.00	SOCM 2%O 98%M	0.281

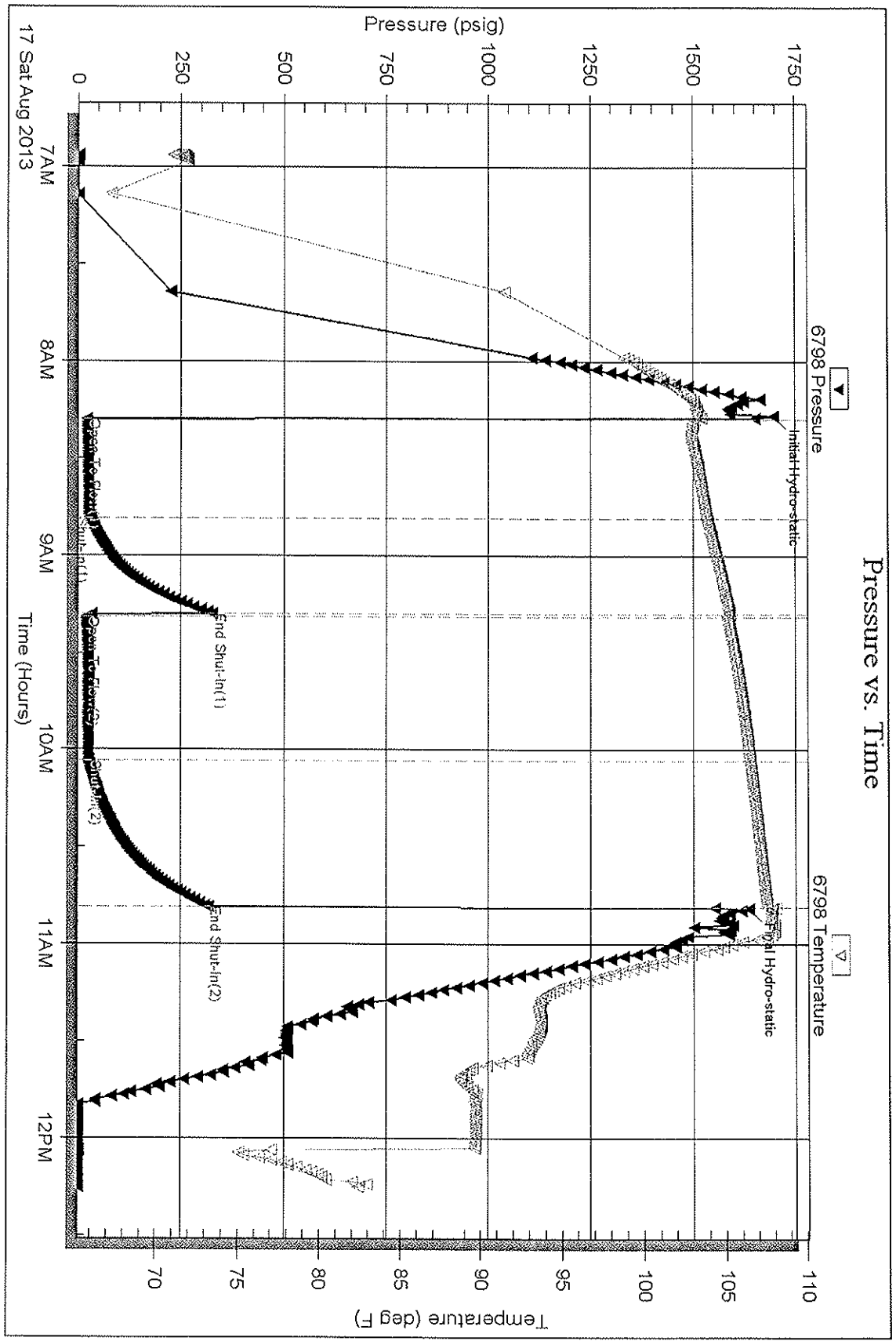
Total Length: 20.00 ft Total Volume: 0.281 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 6798

Inside K & N Petroleum

Betty Mae 1

DST Test Number: 3



Trilobe Testing, Inc

Ref. No: 52387

Printed: 2013.08.17 @ 23:01:43

MORNING DRILLING REPORT

SOUTHWIND DRILLING, INC.

For: K&N Petroleum

RIG No. 3

Well Name: Betty Mae #1 Elevation: GL 1780' Rig No. 3 (Pusher Jay Krier) 620 617-4477
 Location: 943' FSL & 1875' FEL KB 1788' Rig No. 3 (Doghouse) 620 617-7104
 Section: 3-19S-11W Est. TD: 3450' Southwind Drilling Office 620 564-3800
 County: Barton Conductor: N/A
 API: 15-009-25863-00-00 Surface Casing: Ran 9 joints of new 23#, 8 5/8" casing, Tally @ 379.45', Set @ 389', used 250 sacks of 60/40 Poz, 3% cc, 2% gel, cement circulated, by Copeland (Ticket #41359), plug down @ 9:30 pm on 08.12.13.
 Production Casing: Ran 83 joints of new 14#, 5 1/2" casing, Tally @ 3442.54'. Set @ 3450', used 200 sacks of 60/40 Poz, 18% salt, 2% gel, 3/4" Defomer, 30 sacks for Rat hole, cemented, by Copeland (Ticket #41362), job complete @ 10:15 am on 08.18.13.
 Rotary Total Depth: 3460' Geologist: JIm Musgrove
 Log Total Depth:

7:00 A.M. Depth: 3460' 7:00 A.M. Current Operation: TEAR DOWN

Spud Date & Time:	08/12/13	08/13/13	08/14/13	08/15/13	08/16/13	08/17/13	08/18/13	Total
08/12/2013 @ 3:00 PM	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	
Total Depth (7:00am)	0	485	1975	2910	3180	3368	3460	
Daily Progress	485	1490	935	270	188	92		3460
Ft. Per Hr.	161.67	78.42	50.54	32.73	21.49	36.80	#DIV/0!	57.67
Current Operation (7:00am)	Rig Up	Drilling	Drilling	CFS	Drilling	TOWB	Tear Down	
Formation	Surface	Shale / Red Bed	Shale/Lime	Shale/Lime	LKC	Arbuckle	Arbuckle	
Fuel Used (39 Gal/Inch)	117.00	429.00	351.00	273.00	273.00	195.00	39.00	1677.00
Survey (degree & depth)				3° @ 3132'	2° @ 3260'	2 1/4° @ 3460'		

Mud Info

	08/12/13	08/13/13	08/14/13	08/15/13	08/16/13	08/17/13	08/18/13	Total
Mud Cost	\$0.00	\$1,429.40	\$0.00	\$4,650.85	\$0.00	\$0.00	\$0.00	\$ 6,080.25
Weight (# / Gal)			8.5	8.7	9.0	9.2		
Vis (Funnel)			57	60	58	60		
Water Loss (cc)			8.00	7.2	8.0	8.8		

Bit #1

Bit Make / Type	"A" - RT							
Bit Size	12 1/4							
Bit Hours	2.00							2.00

Bit #2

Bit Make / Type	GT - GT27x6	GT--RR-G26x6	GT--RR-G26x6	GT--RR-G26x6	GT--RR-G26x6	GT--RR-G26x6		
Bit Size	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8		
Bit Hours	1.00	19.00	18.50	8.25	8.75	2.50		58.00
Bit Cumulative Hours	3.00	19.00	18.50	8.25	8.75	2.50	0.00	60.00
Weight on Bit (WOB)	30,000	30,000	30,000	30,000	30,000	30,000		
RPM	80	80	80	80	80	80		
Pump Pressure	400	650	600	600	600	600		
Drilling (Rotating) Hours	3.00	19.00	18.50	8.25	8.75	2.50	0.00	60.00

Daywork Hrs. (Operator's time)

Rat Hole (>.75 Hrs)								0.00
Wait on Cement	8.00							8.00
Trip				6.25	5.50	5.75		17.50
Circulate			1.00	5.50	6.00	4.00		16.50
Tool				0.75	0.50	0.50		1.75
Testing				2.50	2.50	2.50		7.50
Wait on tester								0.00
Logging						5.25		5.25
LDDP / LDDC						2.75		2.75
Run Casing / Cement	2.00						2.75	4.75
Nipple Down / Jet Cellar						0.50	0.50	1.00
Set Slips							0.50	0.50
Lost Circulation (> 2 Hrs)								0.00
Billable Hours	10.00	0.00	1.00	15.00	14.50	21.25	3.75	65.50

Non-Billable Hours (Southwind's time)

Rig Up / Tear Down	5.00						4.25	9.25
Wait on Cement (NB)								0.00
Drill Rat Hole	0.50							0.50
Drill Plug	0.50							0.50
Circulate / Trip (Surface)	0.75							0.75
Rig Repair	2.50							2.50
Connections	1.75	3.50	3.00	0.50	0.75			9.50
Jet/Displace		1.50	1.50					3.00
Surveys				0.25		0.25		0.50
Rig Check								0.00
Lost Circulation (< 2 hrs)								0.00
Lay Down Kelly								0.00
Trip Time for Plugged Bit								0.00
Non-Billable Hrs.	11.00	5.00	4.50	0.75	0.75	0.25	4.25	26.50

Footage Cost	\$ 6,790.00	\$ 20,860.00	\$ 13,090.00	\$ 3,780.00	\$ 2,632.00	\$ 1,288.00	\$ -	\$ 48,440.00
Daywork Cost	\$ 3,500.00	\$ -	\$ 350.00	\$ 5,250.00	\$ 5,075.00	\$ 7,437.50	\$ 1,312.50	\$ 22,925.00
Combined Est. Cost*	\$ 10,290.00	\$ 20,860.00	\$ 13,440.00	\$ 9,030.00	\$ 7,707.00	\$ 8,725.50	\$ 1,312.50	\$ 71,365.00

*Please note that this is estimated footage & daywork cost only. Additional charges will apply on invoice (fuel surcharge, water transfer pump, etc)

DST #1 Info -	Footage Interval: 3057' - 3132'	LKC "A-F"	DST #2 Info -	Footage Interval: 3204' - 3260'	"LKC"
	Recovery: 2900' Gas in Pipe			Recovery: 268' Gas in Pipe	
	70' Slight Oil Cut Mud			40' Oil Cut Gassy Mud	
DST #3 Info -	Footage Interval: 3295' - 3368'		DST #4 Info -	Footage Interval:	
	Recovery: 40' Cil Cut Mud			Recovery:	

Displaced @

Anhydrite: