

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1254168
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: _____

1254168

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
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<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
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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> _____
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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: _____ _____
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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. 1131

Date <u>2-13-15</u>	Sec. <u>24</u>	Twp. <u>10</u>	Range <u>29</u>	County <u>Sheridan</u>	State <u>KS</u>	On Location	Finish <u>8:45</u>
				Location <u>Grainfield N to Hwy 40 4W to 38 2N E into</u>			

Lease <u>Gassman Family trust</u>	Well No. <u>1-34</u>	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 <u>Discovery</u>	<u>4</u>	Charge To <u>Sam Gary Jr & Associates</u>
Type Job <u>Surface</u>		Street
Hole Size <u>12 1/4</u>	T.D. <u>263</u>	City
Csg. <u>8 5/8</u>	Depth <u>263</u>	State
Tbg. Size	Depth	The above was done to satisfaction and supervision of owner agent or contractor.
Tool	Depth	Cement Amount Ordered <u>200 sq Com 3% CC 2% Gel</u>
Cement Left in Csg. <u>15'</u>	Shoe Joint <u>15'</u>	<u>1/2 # Flow</u>
Meas Line	Displace <u>15 1/2</u>	

EQUIPMENT

Pumptrk <u>16</u> No.	Cementer	<u>Billy</u>	Common <u>200</u>
Bulktrk <u>15</u> No.	Helper		Poz. Mix
Bulktrk No.	Driver	<u>Lonnie</u>	Gel. <u>4</u>
	Driver		Calcium <u>7</u>
	Driver		

JOB SERVICES & REMARKS

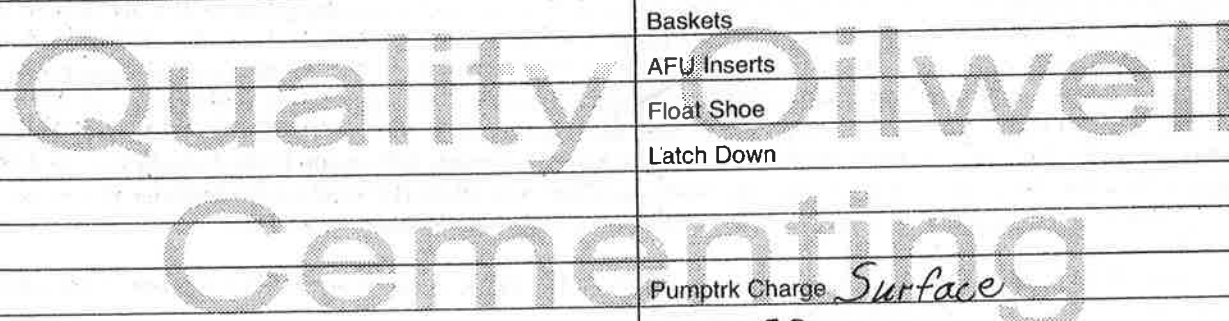
Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal <u>100#</u>
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
<u>Pipe on Bottom Brake Circulation</u>	Sand
<u>Hooked to 8 5/8 pumped 200 sq.</u>	Handling <u>211</u>
<u>Displaced with 15 bls. shut in</u>	Mileage

FLOAT EQUIPMENT

<u>Cement Did circulate</u>	Guide Shoe
	Centralizer <u>1</u>
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	Pumptrk Charge <u>Surface</u>
	Mileage <u>22</u>

Tax
Discount
Total Charge

X Signature [Signature]



QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 924

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

Date	2-21-15	Sec.	34	Twp.	10	Range	29	County	Sheridan	State	KS	On Location	Finish	7:30 AM	
Location								Grainfield Blw to 39 Rd 2N E1/4							

Lease Cassman Family Trust Well No. 1-34

Contractor Discovery #4

Type Job Plug

Hole Size 7 7/8 T.D.

Csg. Drill Pipe Depth 2310'

Tbg. Size Depth

Tool Depth

Cement Left in Csg. Shoe Joint

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.

Charge To Sam Gary Jr

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 255 60/40 4% Gel 1/4 Fls

Meas Line Displace

EQUIPMENT

Pumptrk	5	No.	Cementer	<u>David</u>
Bulktrk	9	No.	Helper	<u>Ryan</u>
Bulktrk	<u>P4</u>	No.	Driver	<u>Brett</u>

Common	<u>153</u>
Poz. Mix	<u>102</u>
Gel.	<u>9</u>
Calcium	
Hulls	
Salt	
Flowseal	<u>56#</u>
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	<u>264</u>
Mileage	<u>8 5/8</u>

JOB SERVICES & REMARKS

Remarks:

Rat Hole - 30 sx

Mouse Hole - 15 sx

Centralizers

Baskets

D/V or Port Collar

1st Plug @ 2310' w/ 50 sx

2nd Plug @ 1435' w/ 100 sx

3rd Plug @ 320' w/ 50 sx

4th Plug @ 40' w/ 10 sx

X Signature [Signature]

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Wood Plug - 1

Pumptrk Charge plug

Mileage 22.1

Tax

Discount

Total Charge



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Sam Gary Jr. & Assoc.
 1515 Wynkoop Suite 700
 Denver Colorado
 80202
 ATTN: Clayton Camozzi

Sec. 34 - 10 s. -29 w./Sheridan
Gassman Family Trust
 Job Ticket: 62513 **DST#: 1**
 Test Start: 2015.02.19 @ 01:00:00

GENERAL INFORMATION:

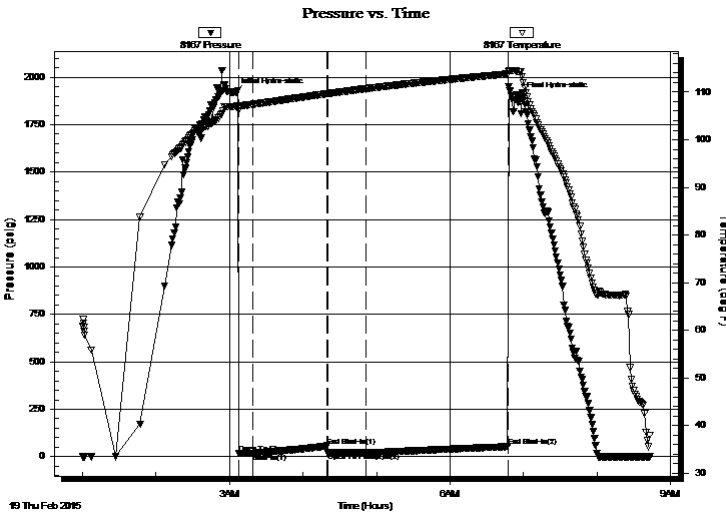
Formation: **L.K.C. ' I'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:07:30
 Time Test Ended: 08:43:15
 Interval: **4006.00 ft (KB) To 4033.00 ft (KB) (TVD)**
 Total Depth: 4033.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Bob Hamel
 Unit No: 72
 Reference Elevations: 2744.00 ft (KB)
 2736.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8167 Outside

Press@RunDepth: 20.11 psig @ 4009.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.02.19 End Date: 2015.02.19 Last Calib.: 2015.02.19
 Start Time: 01:00:05 End Time: 08:43:14 Time On Btm: 2015.02.19 @ 03:04:00
 Time Off Btm: 2015.02.19 @ 06:57:00

TEST COMMENT: I.F. - 10 - 1/4" INT. BLOW BUILT TO 3/4"
 I.S.I. - 60 - NO B.B.
 F.F. - 30 - W.S.B. BUILT TO 3/4"
 F.S.I. - 120 - NO B.B.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1919.31	106.99	Initial Hydro-static
4	17.79	106.16	Open To Flow (1)
15	18.42	107.40	Shut-In(1)
76	56.21	109.64	End Shut-In(1)
76	20.10	109.65	Open To Flow (2)
108	20.11	110.69	Shut-In(2)
223	53.19	113.80	End Shut-In(2)
233	1897.60	114.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
4.00	MUD	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary Jr. & Assoc.

Sec. 34 - 10 s. -29 w./Sheridan

1515 Wynkoop Suite 700
Denver Colorado
80202
ATTN: Clayton Camozzi

Gassman Family Trust

Job Ticket: 62513 **DST#: 1**

Test Start: 2015.02.19 @ 01:00:00

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: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

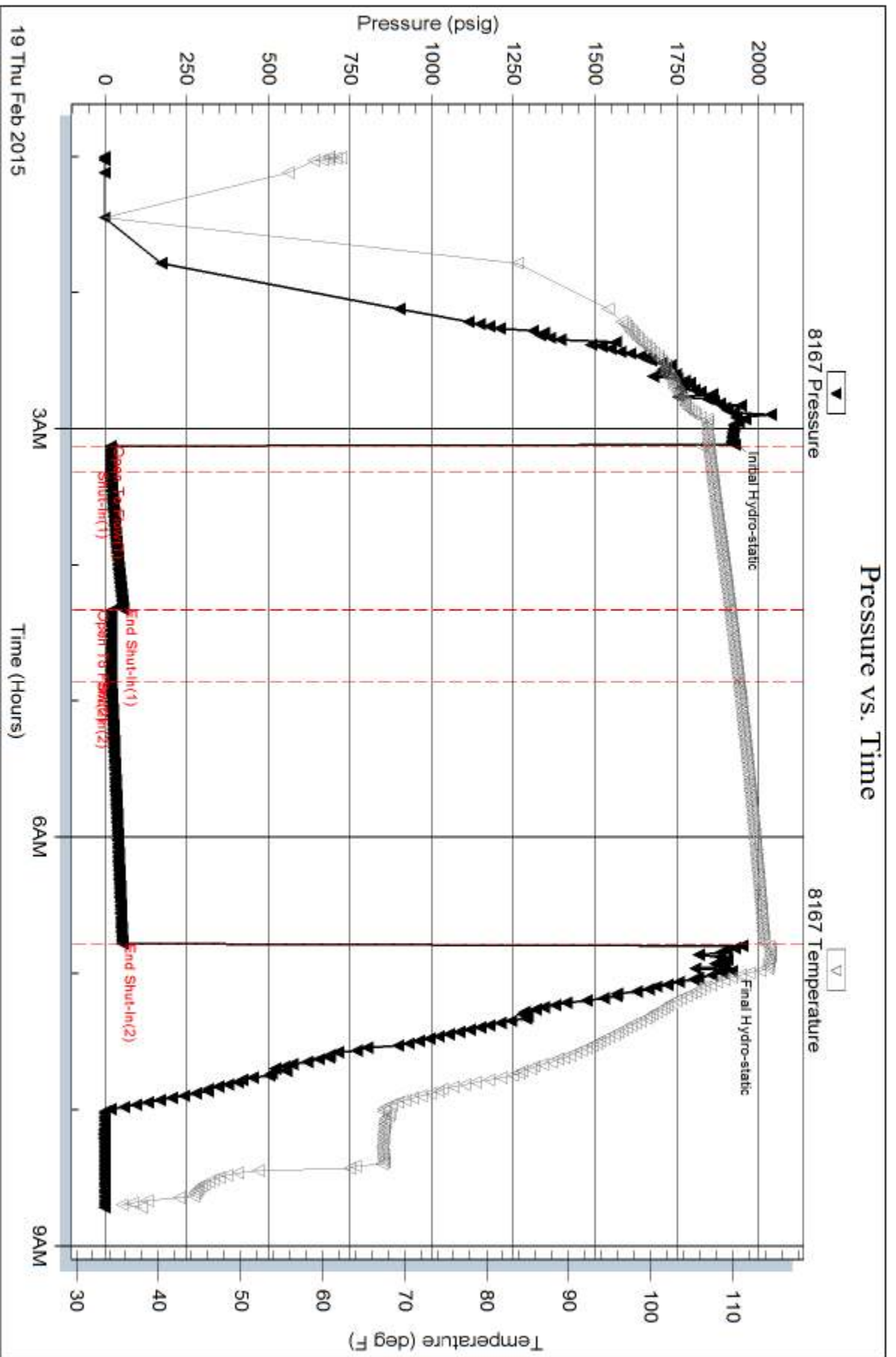
Length ft	Description	Volume bbl
4.00	MUD	0.020

Total Length: 4.00 ft Total Volume: 0.020 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



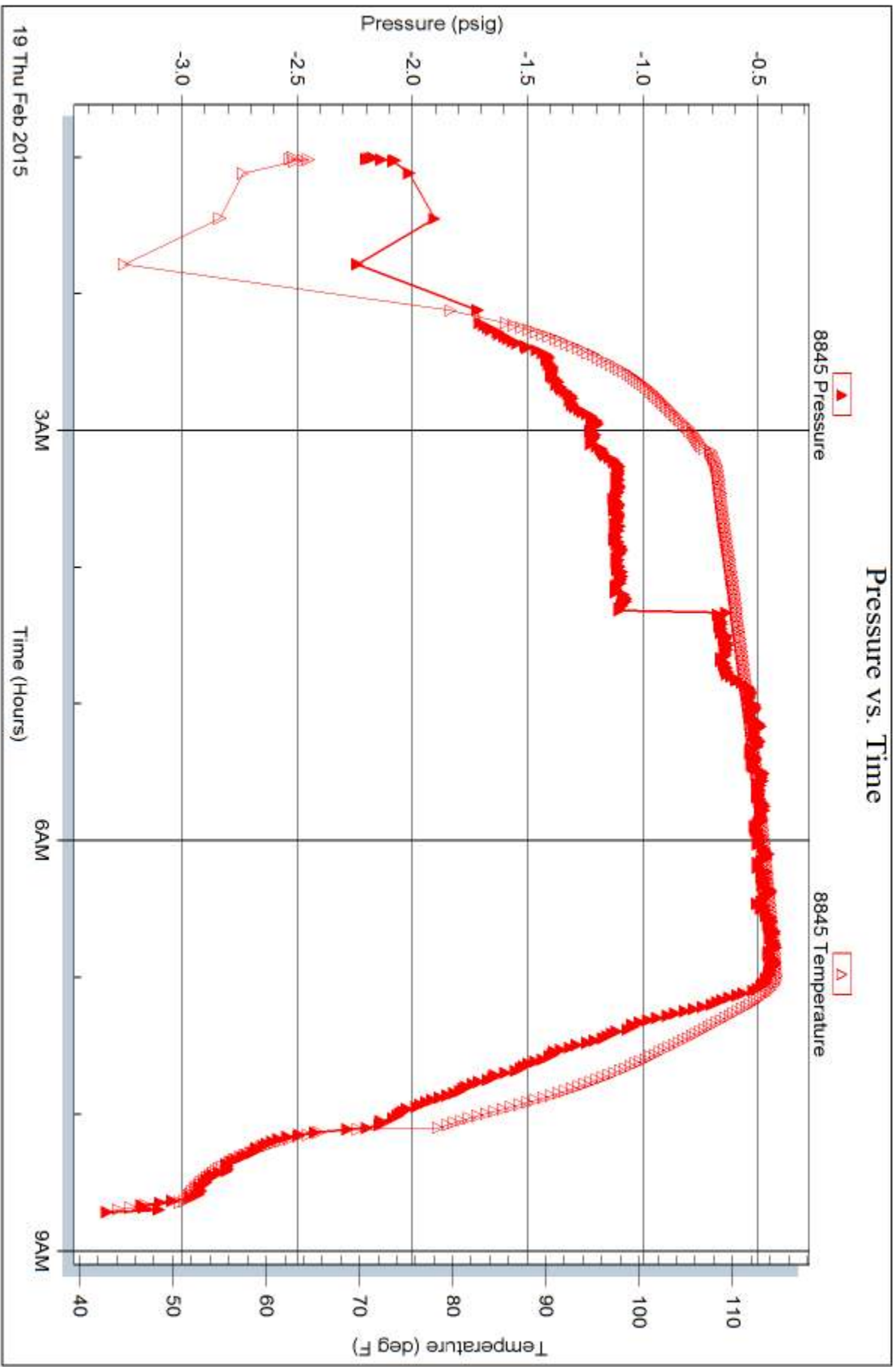
Serial #: 8845

Fluid

Sam Gary Jr. & Assoc.

Gassman Family Trust

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 62513

Printed: 2015.02.19 @ 09:29:38



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Sam Gary Jr. & Assoc.
1515 Wynkoop Suite 700
Denver Colorado
80202
ATTN: Clayton Camozzi

Sec. 34 - 10 s. -29 w./Sheridan
Gassman Family Trust
Job Ticket: 62514 **DST#: 2**
Test Start: 2015.02.19 @ 21:15:00

GENERAL INFORMATION:

Formation: **L.K.C. ' L '**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 23:31:15 Tester: Bob Hamel
Time Test Ended: 04:24:45 Unit No: 72
Interval: 4085.00 ft (KB) To 4115.00 ft (KB) (TVD) Reference Elevations: 2744.00 ft (KB)
Total Depth: 4115.00 ft (KB) (TVD) 2736.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

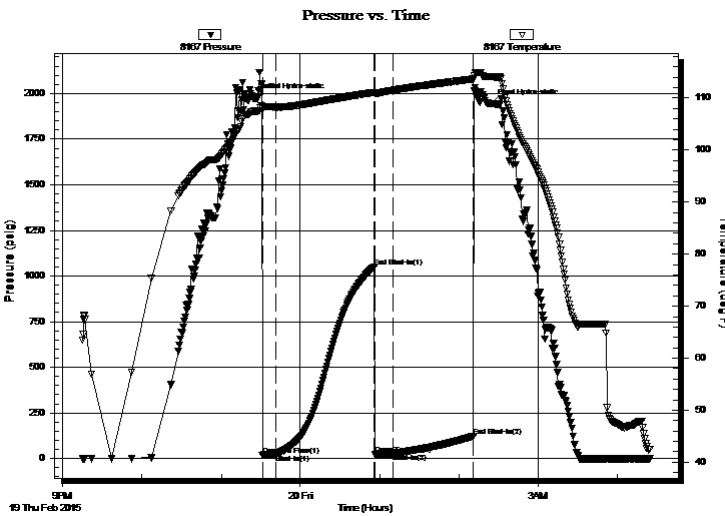
Serial #: 8167

Outside

Press@RunDepth: 27.29 psig @ 4091.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2015.02.19 End Date: 2015.02.20 Last Calib.: 2015.02.20
Start Time: 21:15:05 End Time: 04:24:44 Time On Btm: 2015.02.19 @ 23:26:15
Time Off Btm: 2015.02.20 @ 02:24:15

TEST COMMENT: I.F. - 10 - 1/8" INT. BLOW BUILT TO 1"
I.S.I. - 75 - NO B.B.
F.F. - 10 - 1/8" INT. BLOW BUILT TO 1 1/4"
F.S.I. - 60 - NO B.B.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1975.45	107.49	Initial Hydro-static
5	19.07	108.15	Open To Flow (1)
16	22.58	108.28	Shut-In(1)
90	1050.39	111.10	End Shut-In(1)
91	24.60	110.87	Open To Flow (2)
104	27.29	111.49	Shut-In(2)
165	123.64	113.66	End Shut-In(2)
178	1945.25	114.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
6.00	H ₂ O,C,M, 30%O 70%M	0.03
0.00	SHOW OF FREE OIL IN TEST TOOL	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary Jr. & Assoc.

Sec. 34 - 10 s. -29 w./Sheridan

1515 Wynkoop Suite 700
Denver Colorado
80202

Gassman Family Trust

Job Ticket: 62514

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2015.02.19 @ 21:15:00

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: 45.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
6.00	H ₂ O,C,M, 30%O 70%M	0.030
0.00	SHOW OF FREE OIL IN TEST TOOL	0.000

Total Length: 6.00 ft Total Volume: 0.030 bbf

Num Fluid Samples: 0

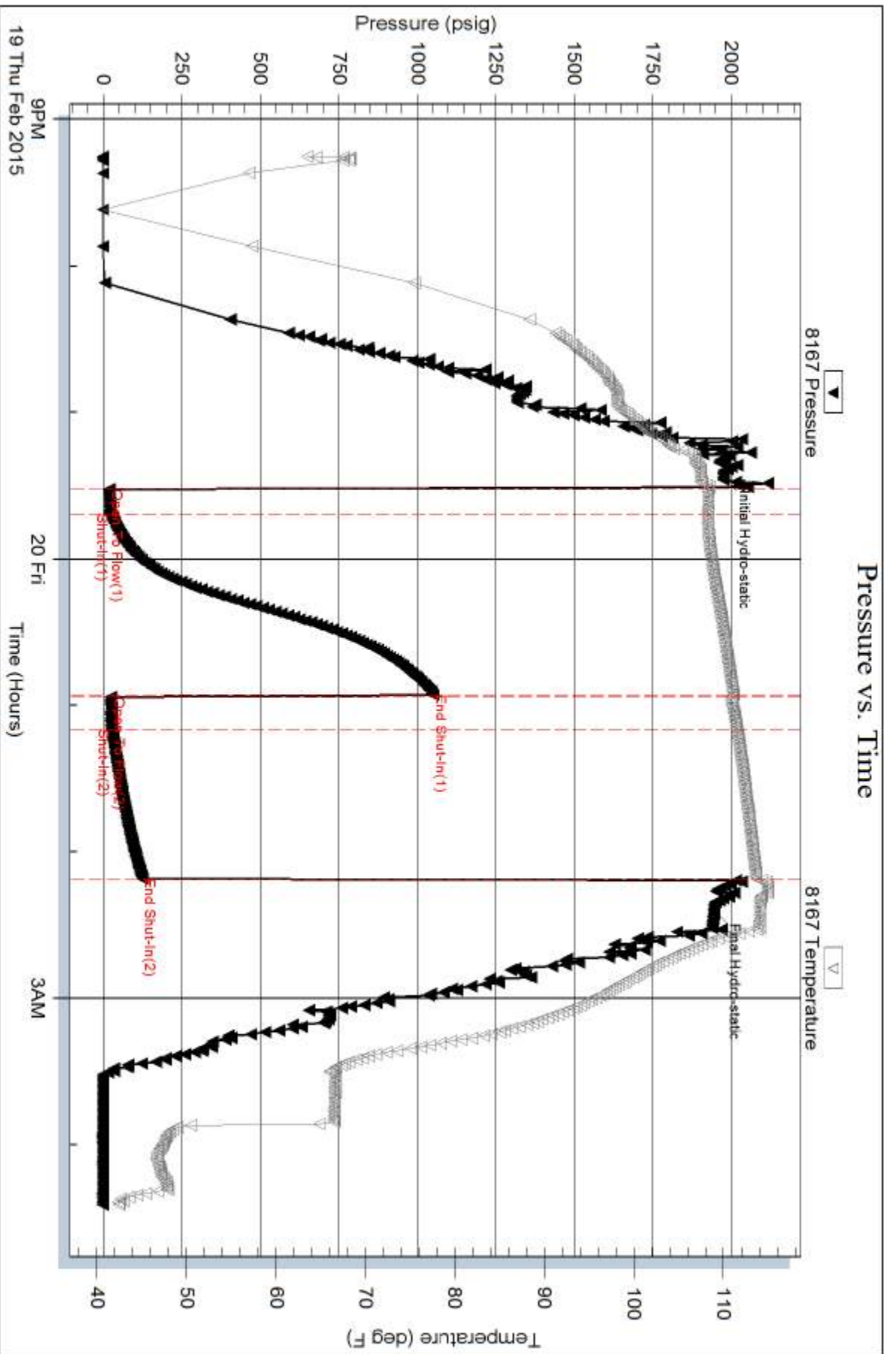
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



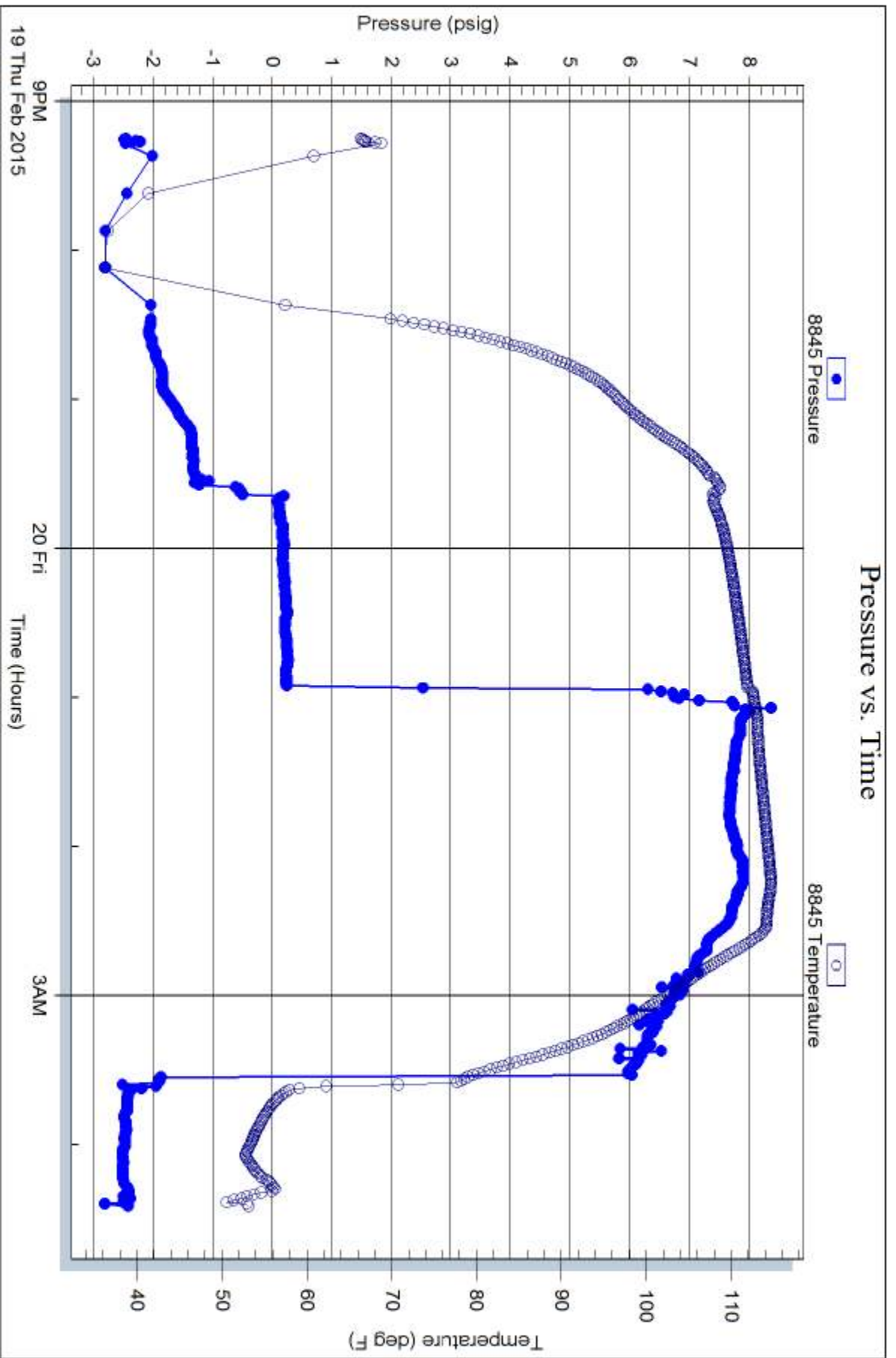
Serial #: 8845

Fluid

Sam Gary Jr. & Assoc.

Gassman Family Trust

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 62514

Printed: 2015.02.20 @ 08:12:13



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

Well Name: SGA Gassman Family Trust et al 1-34
Well Id:
Location: Sec. 34 T10S R29W
License Number: 15-179-21395
Spud Date: Feb 13, 2015
Surface Coordinates: 675' FNL 2400' FWL
Region: Wildcat
Drilling Completed: Feb. 21, 2015

Bottom Hole
Coordinates:
Ground Elevation (ft): 2736' K.B. Elevation (ft): 2744'
Logged Interval (ft): 3750' To: 4390' Total Depth (ft): 4390'
Formation: Lansing / Kansas City
Type of Drilling Fluid: Natural Chemical

Printed by WellSight Log Manager from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Samuel Gary Jr. & Assoc.
Address: 1515 Winkoop Street, Suite 700
Denver CO, 80202
Geo: Chris Mitchell

GEOLOGIST

Name: Jeff Kamps
Company: EARTH TECH OGL, Inc.
Address: PO Box 683
Hooker, Okla 73945
1-580-652-3924
8918 5Th St
Great Bend, Ks. 67530
1-888-543-8378



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Sam Gary Jr. & Assoc.
1515 Wynkoop Suite 700
Denver Colorado
80202
ATTN: Clayton Camozzi

Sec. 34 - 10 s. -29 w./Sheridan
Gassman Family Trust
Job Ticket: 62513 **DST#: 1**
Test Start: 2015.02.19 @ 01:00:00

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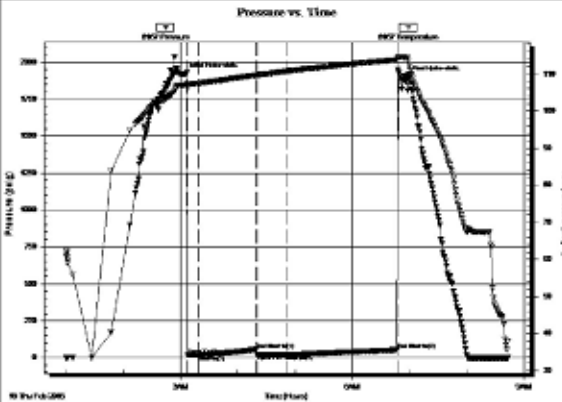
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Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 03:07:30 Tester: Bob Hamel
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Interval: **4006.00 ft (KB) To 4033.00 ft (KB) (TVD)** Reference Elevations: 2744.00 ft (KB)
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Recovery

Length (ft)	Description	Volume (bbl)
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Gas Rates

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



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Sec. 34 - 10 s. -29 w./Sheridan

1515 Wynkoop Suite 700
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Gassman Family Trust

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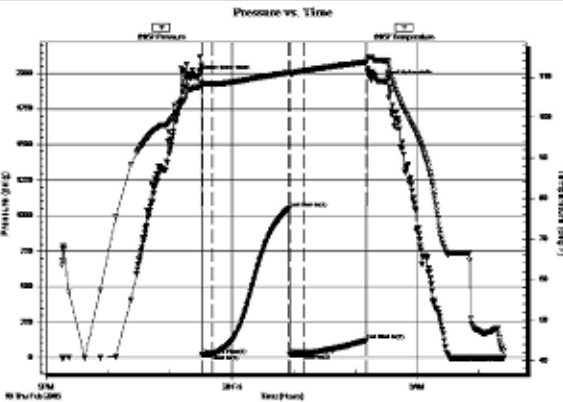
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90	1050.39	111.10	End Shut-in(1)
91	24.60	110.87	Open To Flow (2)
104	27.29	111.49	Shut-in(2)
165	123.64	113.66	End Shut-in(2)
178	1945.25	114.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
6.00	H ₂ O,C,M, 30%O 70%M	0.03
0.00	SHOW OF FREE OIL IN TEST TOOL	0.00

* Recovery from multiple tests

Gas Rates

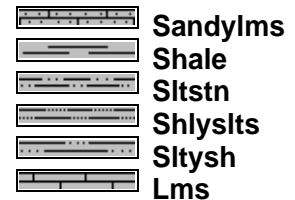
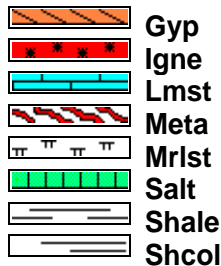
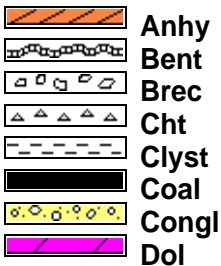
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc

Ref. No: 62514

Printed: 2015.02.20 @ 05:00:25

ROCK TYPES



ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr

- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Sltly

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram

- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh

- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang

- Angular

OIL SHOWS

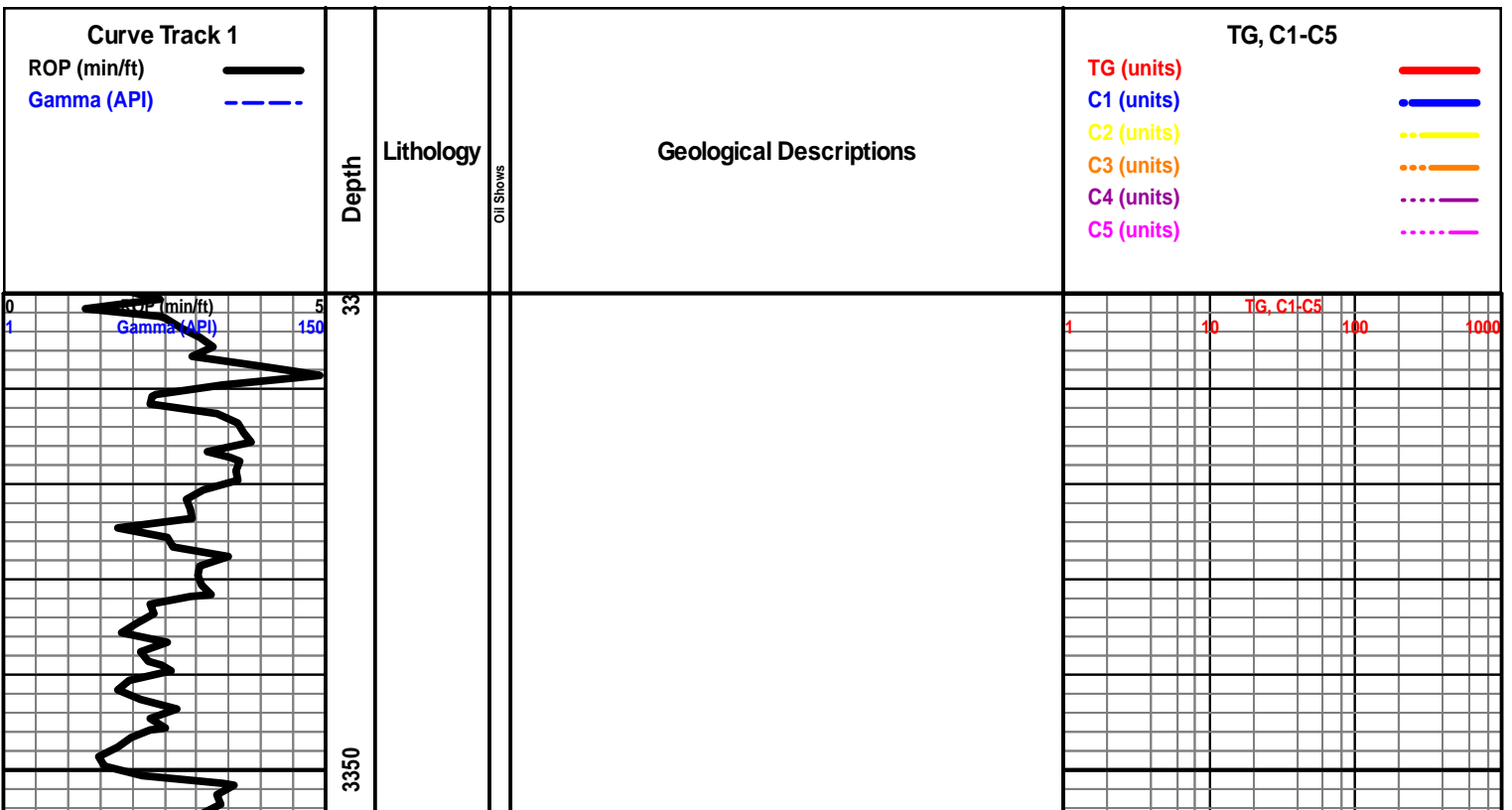
- Even
- Spotted
- Ques
- Dead
- Gas show

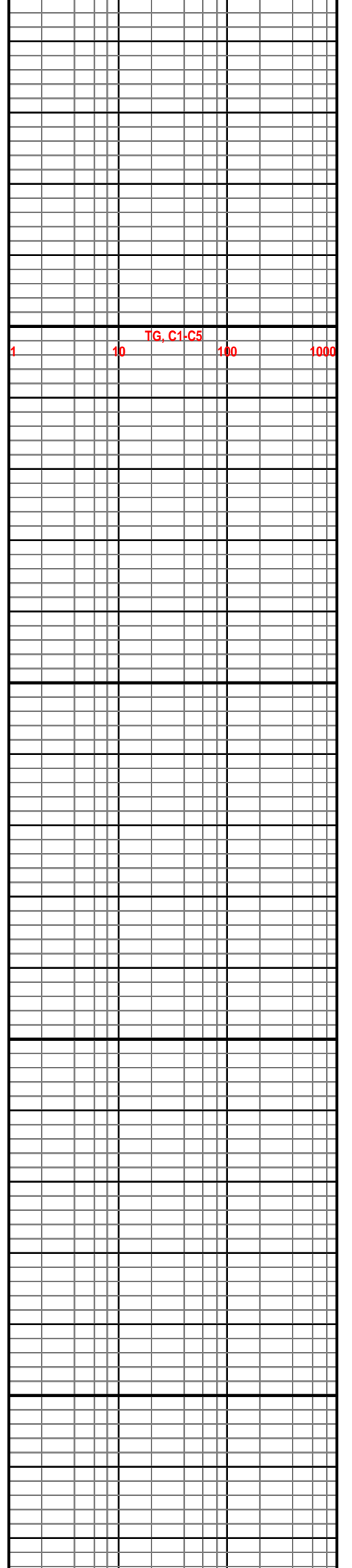
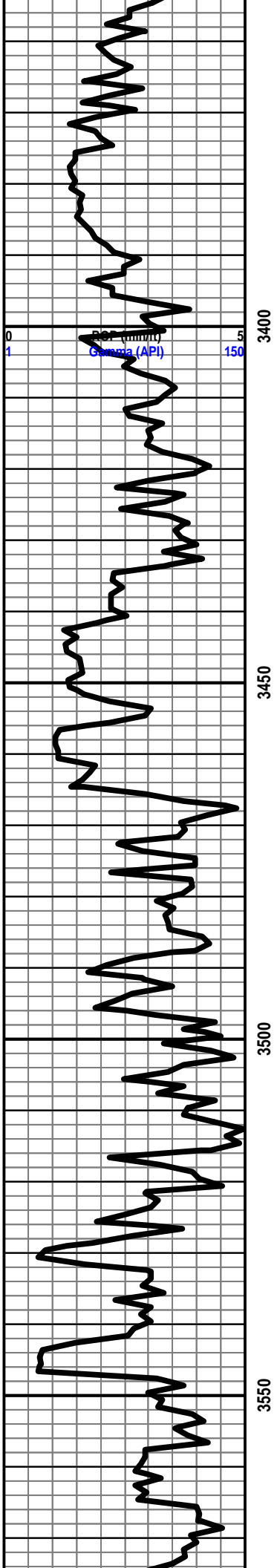
INTERVALS

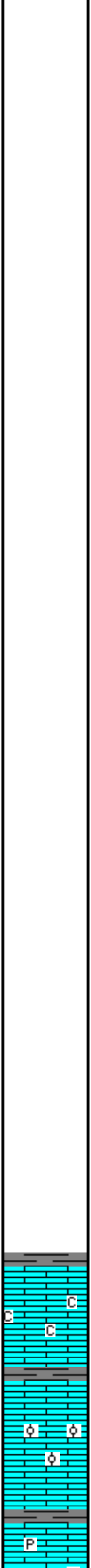
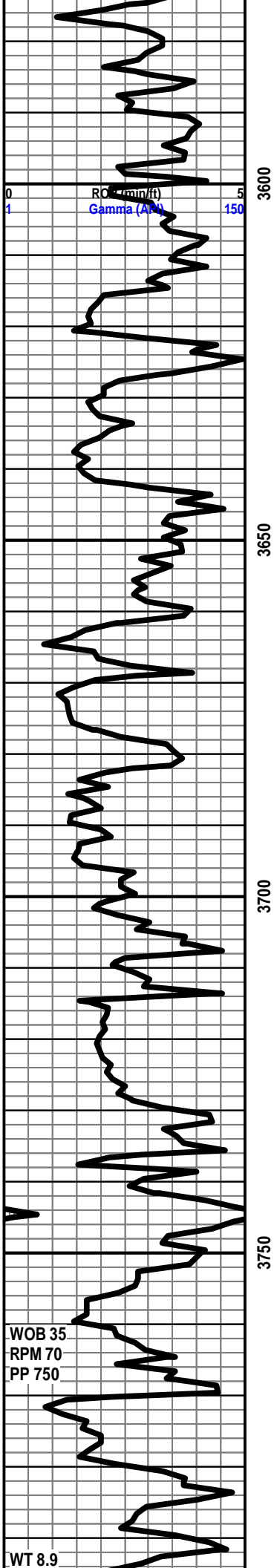
- Core
- Dst
- Dst

EVENTS

- Rft
- Sidewall







WOB 35
RPM 70
PP 750

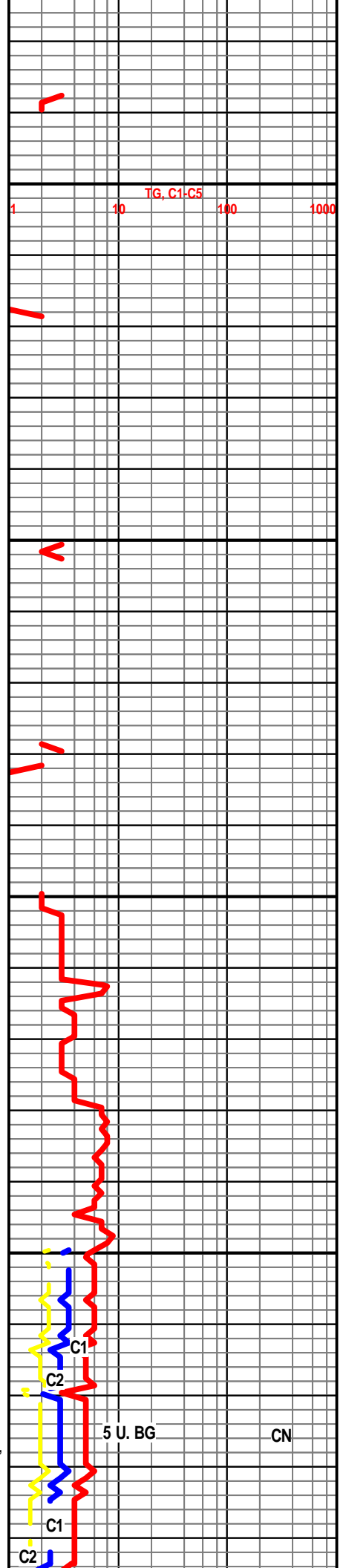
WT 8.9

START 24 HOUR MANNED UNIT FEB. 17, 2015

LS - OFF WHT TO WHT, CRM IP, HD DNS TO BRIT, FN-XLN TO MD-XLN, S-SUCRO, V TT SUCRO MTRX IP, ABDT FREE SFT WHT CHLK, LT TR IMBD CALC-XLS, DLL YEL MIN FLO THRU, PR INTER-XLN POR IP, NO CUT OR SHOW

LS - OFF WHT TO WHT, CRM IP, HD DNS TO BRIT, FN TO MD-XLN, S-SUCRO, OOLICASTIC IP, LT TR IMBD FOSS FRAGS, LT TR FREE SFT WHT CHLK, DLL YEL MIN FLO IN 60%, FR TO GD INTER-FOSS POR IN 3%, NO VIS CUT OR SHOW

LS - OFF WHT TO WHT, LT GRAY IP, HD DNS TO BRIT, FN TO MD-XLN, RE-XLN IP, S-SUCRO, TR FREE SFT WHT CHLK, LT TR IMBD PYR, DLL

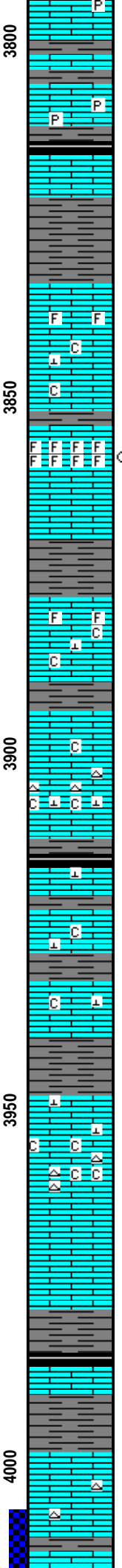
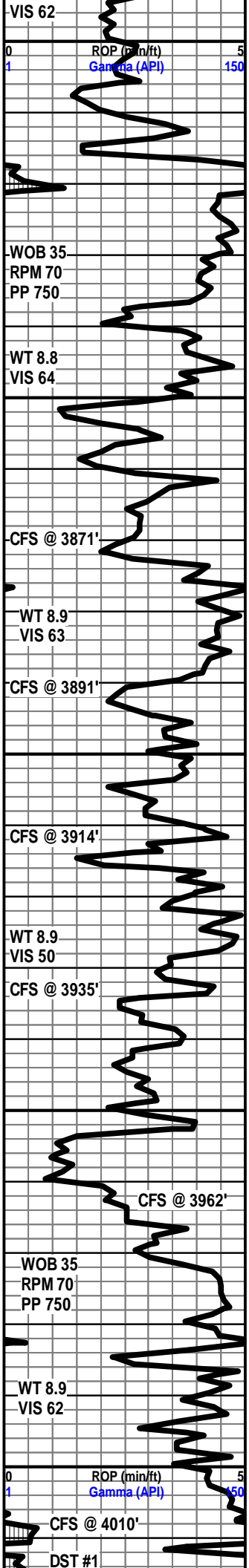


TG, C1-C5
1 10 100 1000

C1
C2
C1
C2

5 U. BG

CN



YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO WHT, HD DNS TO BRIT, FN TO VF-XLN, S-CHLKY, LT TR IMBD PYR, DLL YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

HEEBNER 3815' (-1071')

SH - LT GRY TO GRY, SFT TO V SFT, GMMY IP, SMTH SLTY TXT

LS - OFF WHT TO WHT, CRM IP, HD DNS TO BRIT, FN TO MD-XLN, S-SUCRO, TR IMBD FOSS FRAGS, LT TR IMBD CALC-XLS, TR FREE SFT WHT CHLK, DLL YEL MIN FLO IN 50%, PR INTER-FOSS POR IN 1%, NO CUT OR SHOW

LANSING 3853' (-1109')

LS - OFF WHT TO CRM, HD DNS TO BRIT, RE-XLN TO MD-XLN, S-SUCRO, ABDT IMBD FOSS FRAGS, FREE SFT WHT CHLK THRU, DLL YEL FLO IN 80%, FR INTER-FOSS POR IN 5%, PR INTER-XLN POR IN 1%, V PR INST FLH CUT IN 10%, V PR SLOW STRM CUT IN 10%, NO ODOR, NO LCH ON DISH

LANSING "C" 3880' (-1136')

LS - OFF WHT TO WHT, HD DNS TO BRIT, FN TO VF-XLN, S-SUCRO, TR IMBD FOSS FRAGS, LT TR IMBD CALC-XLS, TR FREE SFT WHT CHLK, DLL YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO CRM, HD DNS TO BRIT, FN TO MD-XLN, S-SUCRO, TR IMBD CALC-XLS, TR FREE SFT WHT CHLK, LT TR IMBD S-ANG OFF WHT CHRT, DLL YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

LANSING "F" SHALE 3915' (-1171')

LS - OFF WHT TO WHT, CRM IP, HD DNS TO BRIT, FN TO VF-XLN, S-CHLKY, LT TR IMBD CALC-XLS, DLL YEL MIN FLO IN 30%, PR TO FR INTER-XLN POR IN 1%, NO VIS CUT OR SHOW

LS - OFF WHT TO WHT, CRM IP, HD DNS TO BRIT, FN TO VF-XLN, S-CHLKY, IMBD CALC-XLS, DLL YEL MIN FLO IN 20%, NO VIS POR, NO CUT OR SHOW

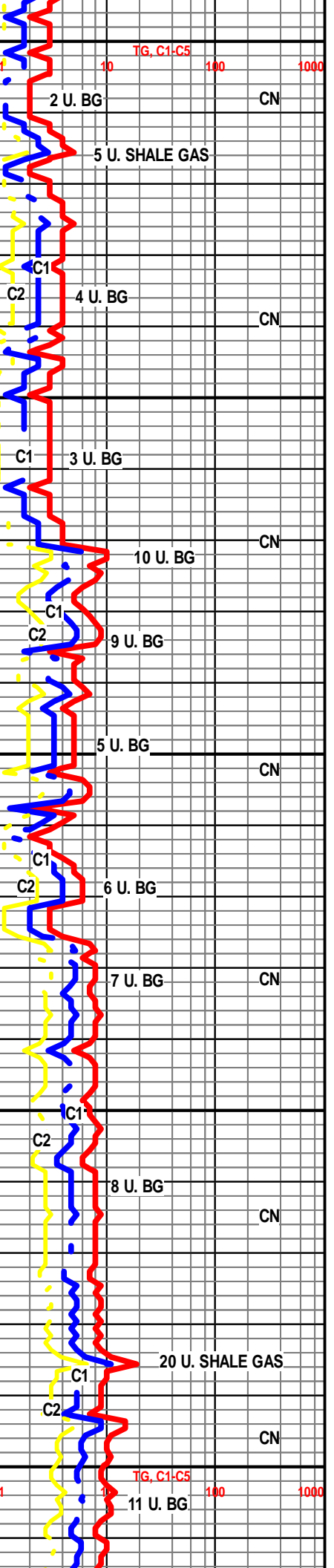
LS - OFF WHT TO WHT, HD DNS TO BRIT, V TT SUCRO MTRX, ABDT FREE SFT WHT CHLK, FREE S-ANG OFF WHT CHRT, TR IMBD CALC-XLS, LT TR IMBD FOSS FRAGS, DLL YEL MIN FLO THRU, FR INTER-XLN POR IN 1%, NO CUT OR SHOW

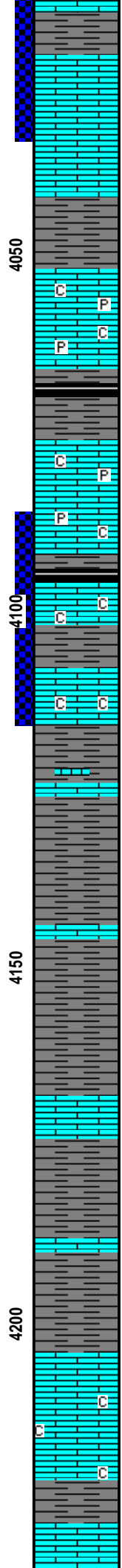
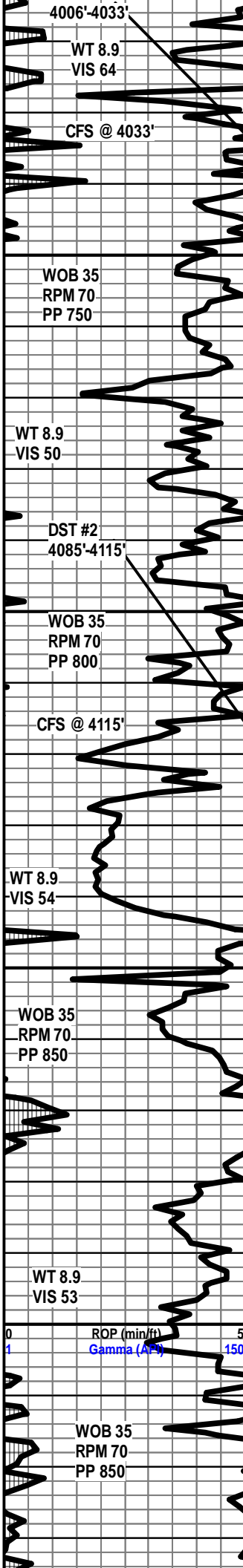
LS - OFF WHT TO WHT, HD DNS TO BRIT, FN TO VF-XLN, S-SUCRO, FREE S-ANG OFF WHT CHRT, LT TR IMBD CALC-XLS, DLL YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

SH - SFT BLK CARB

SH - LT GRY TO GRY, FRM TO SFT IP, BLKY SMTH TXT

LS - OFF WHT TO WHT, CRM IP, HD DNS TO BRIT, FN TO VF-XLN, S-SUCRO, LT TR FREE S-ANG OFF WHT CHRT, DLL YEL MIN FLO THRU, NO VIS POR, NO CUT OR SHOW





LS - OFF WHT TO WHT, CRM IP(W/ TN TO DRK TN OIL STN IN 50%) HD DNS TO BRTT, FN TO MD-XLN, S-SUCRO, YEL GLD FLO IN 50%, FR INTER-XLN POR IN 2%, PR TO FR MICRO VUG POR IN 1%, EXCEL INST FLSH CUT, FR TO PR SLOW STRM CUT IN 30%, FAINT OIL ODOR, LT TN LCH ON DISH, LIVE OIL ON SAMPLES

SH - LT GRY TO RD, BRWN IP, SFT TO GMMY, SLTY SMTH TXT

LANSING "J" 4053 (-1309')

LS - OFF WHT TO WHT, LT GRY IP, HD DNS TO BRTT, FN TO VF-XLN, S-SUCRO, LT TR IMBD PYR, LT TR FREE SFT WHT CHLK, YEL GLD FLO IN 10%, PR INTER-XLN POR IP, V PR INST FLSH CUT, V PR SLOW STRM CUT IN 5%, NO ODOR, NO LCH ON DISH

SH - SFT BLK CARB

LS - OFF WHT TO WHT, LT GRY, HD DNS TO BRTT, FN TO VF-XLN, S-CHLKY, LT TR IMBD PYR, DLL YEL MIN FLO IN 20%, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO CRM, MOTT, LT GRY, HD DNS TO BRTT, FN TO MD-XLN, RE-XLN IP, S-SUCRO, ABDT SFT WHT CHLK, DLL YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO CRM(W/LT TN TO TN OIL STN IN 40%) HD DNS TO BRTT, FN TO MD-XLN, S-SUCRO, LT TR IMBD SFT WHT CHLK, YEL GLD FLO THRU, SPTTD BRI YEL FLO IN 10-20%, FR TO GD INTER-XLN POR IN 3%, GD MICRO VUG POR IN 1%, GD INST FLUSH CUT, GD SLOW STRM CUT IN 30%, FAIR OIL ODOR, LT TN LCH ON DISH, LIVE OIL ON SAMPLES

BKC 4116' (-1372')

SH - LT GRY TO BRWN, GRN IP, FRM TO SFT, BLKY SMTH TXT

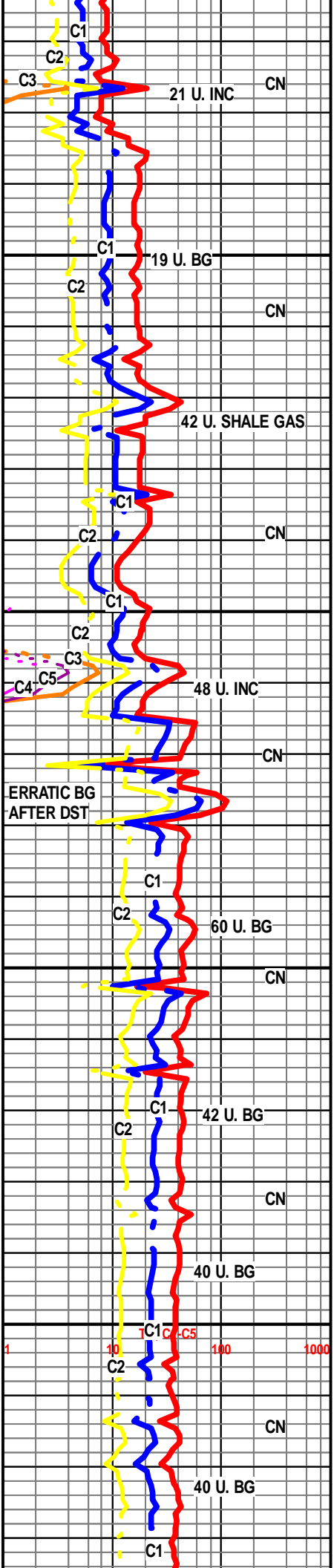
SH - BRWN TO LT GRY, RD IP, FRM TO SFT, GMMY IP, BLKY SMTH TXT

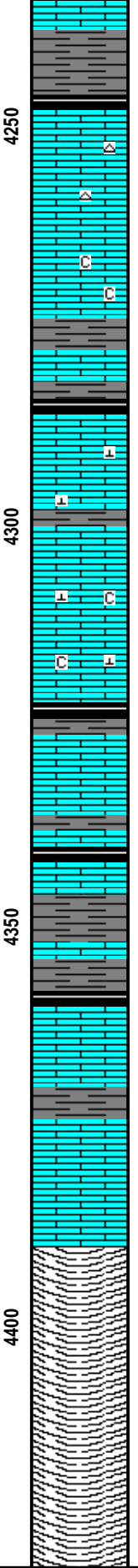
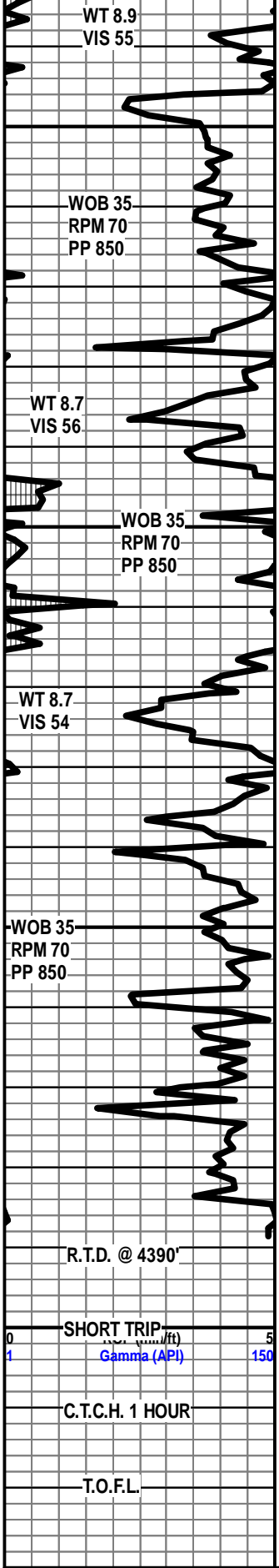
LS - OFF WHT TO LT GRY, MOTT, HD DNS TO BRTT, MD-XLN TO RE-XLN, S-CHLKY, ABDT IMBD GRY SH, NO VIS FLO, NO VIS POR, NO CUT OR SHOW

SH - LT GRY TO RD, BRWN IP, SFT TO FRM IP, BLKY SMTH TXT

LS - OFF WHT TO WHT, LT GRY IP, MOTT, HD DNS TO BRTT, FN TO MD-XLN, RE-XLN IP, S-SUCRO, FREE SFT WHT CHLK THRU, DLL YEL MIN FLO THRU, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO WHT, LT GRY IP, MOTT, HD DNS TO BRTT, FN TO MD-XLN, RE-XLN IP, S-SUCRO, NO VIS FLO,





NO VIS POR, NO CUT OR SHOW

SH - LT GRY TO GRY, RED IP, FRM TO SFT, BLKY SMTH TXT

LABETTE 4248' (-1504')

LS - OFF WHT TO CRM, HD DNS TO BRIT, FN-XLN TO V TT SUCRO MTRX, FREE S-ANG OFF WHT CHRT, LT TR FREE SFT WHT CHLK, DLL YEL MIN FLO IN 20%, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO LT GRY, HD DNS TO BRIT, FN TO VF-XLN, S-SUCRO, AREN IP, LT TR FREE SFT WHT CHLK, DLL YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

FT SCOTT 4287' (-1543')

LS - OFF WHT TO WHT, HD DNS TO BRIT, FN TO VF-XLN, MD-XLN IP, S-SUCRO, LT TR IMBD CALC-XLS, NO VIS FLO, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO LT GRY, MOTT, HD DNS TO BRIT, FN TO VF-XLN, S-SUCRO, ABTD IMBD CALC-XLS, TR FREE SFT WHT CHLK, DLL YEL MIN FLO IN 30%, NO VIS POR, NO CUT OR SHOW

CHEROKEE 4322' (-1578')

LS - OFF WHT TO WHT, LT GRY, MOTT, HD DNS TO BRIT, FN TO MD-XLN, RE-XLN IP, S-SUCRO, DLL YEL MIN FLO IP, NO VIS POR NO CUT OR SHOW

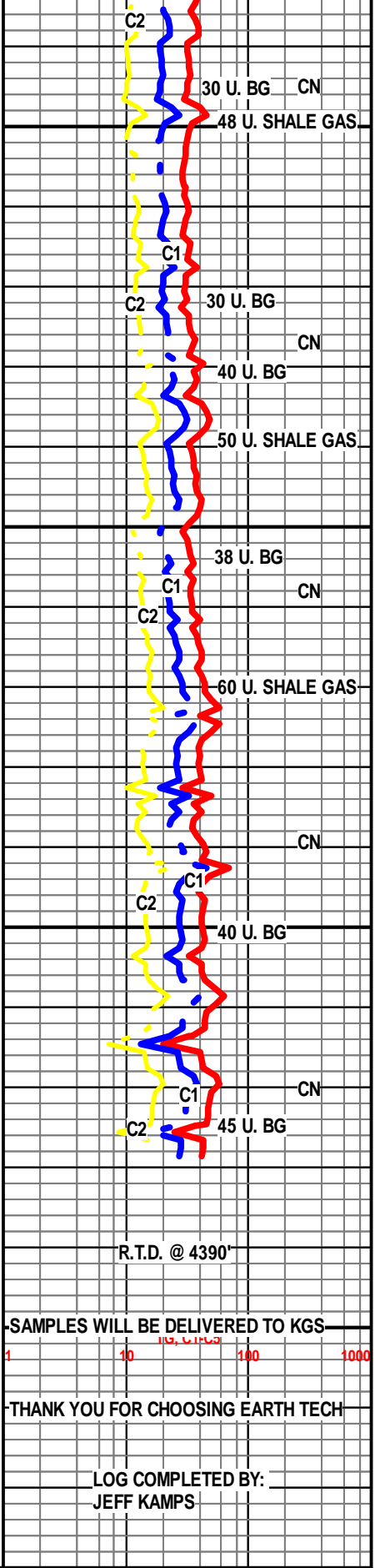
SH - LT GRY TO DRK GRY, FRM TO SFT IP, BLKY SMTH TXT

LS - OFF WHT TO WHT, HD DNS TO BRIT, FN TO VF-XLN, S-SUCRO, LT TR FREE S-ANG OFF WHT CHRT, DLL YEL MIN FLO THRU, NO VIS POR, NO CUT OR SHOW

LS - OFF WHT TO WHT, CRM IP, HD DNS TO BRIT, FN TO MD-XLN, VF-XLN IP, S-SUCRO, DLL YEL MIN FLO IP, NO VIS POR, NO CUT OR SHOW

R.T.D. @ 3:00 AM FEB. 21, 2015

LOGGING SERVICES COMPLETED BY: WEATHERFORD



SAMPLER WILL BE DELIVERED TO KGS

1 10 100 1000

THANK YOU FOR CHOOSING EARTH TECH

LOG COMPLETED BY:
JEFF KAMPS