



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1213902
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: _____

1213902

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

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

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

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

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

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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

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

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

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	NUERNBERGER 1-1
Doc ID	1213902

All Electric Logs Run

DEN-NEUT
INDUCTION
MICRO
SONIC
SPECTRAL



QUALITY OILWELL CEMENTING, INC.
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone: 785-324-1041 fax: 785-483-1087
 Email: cementing@ruraltel.net

Date: 3/21/2014
 Invoice # 7091

P.O.#:
 Due Date: 4/20/2014
 Division: Russell

Invoice

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1935 LOUIE ROAD
 HAYS KANSAS 67601

RECEIVED
 MAR 31 2014
 SAMUEL GARY JR.
 & ASSOCIATES, INC.

Reference:
 NEURNBERGER 1-1

Description of Work:
 LONG SURFACE JOB

DRLG COMP W/O LOE GG

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	
Description	

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,020.55	No				
Common-Class A	250	\$ 4,191.18	Yes				
Calcium Chloride	9	\$ 559.87	Yes				
Bulk Truck Mat-Material Service Charge	264	\$ 590.12	No				
Pump Truck Mileage-Job to Nearest Camp	51	\$ 568.86	No				
8 5/8" Basket	1	\$ 353.18	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	51	\$ 332.88	No				
8 5/8" Top Rubber Plug	1	\$ 118.47	Yes				
Baffle Plate Aluminum, 8 5/8"	1	\$ 100.59	Yes				
Premium Gel (Bentonite)	5	\$ 90.98	Yes				
8 5/8" Centralizer	1	\$ 71.53	Yes				

Invoice Terms:

Net 30

SubTotal: \$ 7,998.20
 Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (1,199.73)

SubTotal for Taxable Items: \$ 4,662.92
 SubTotal for Non-Taxable Items: \$ 2,135.54

6.90% Norton County Sales Tax

Thank You For Your Business!

Total: \$ 6,798.47
 Tax: \$ 321.74
Amount Due: \$ 7,120.21
 Applied Payments:
Balance Due: \$ 7,120.21

Past Due Invoices are subject to a service charge (annual rate of 24%)
 This does not include any applicable taxes unless it is listed.
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 7091
8:30

Date	3-21-14	Sec.	1	Twp.	5	Range	24	County	Norton	State	KS	On Location		Finish	20:30
Location													Hill City N to Hwy 9 4W to W-4 Rd		

Lease	Newnberger	Well No.	1-1	Owner	2N 1/2 W N into
Contractor	WW #12	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.			
Type Job	Surface	Charge To	Sam Gary Jr & Associates		
Hole Size	12 1/4	T.D.	559'	Street	
Csg.	8 5/4	Depth	559'	City	State
Tbg. Size		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Tool		Depth		Cement Amount Ordered 250 com 3% cc 2% Gel	
Cement Left in Csg.	41.90	Shoe Joint	41.90	Meas Line Displace 32 3/4 bbl	

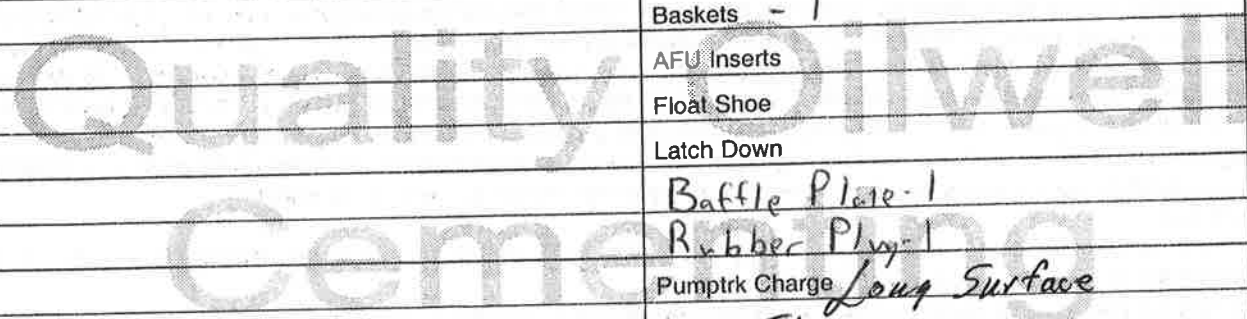
EQUIPMENT

Pumptrk	5	No.	Cementer		Common	250
			Helper	Lannie W	Poz. Mix	
Bulktrk	13	No.	Driver	David	Gel.	5
			Driver		Calcium	9
Bulktrk	PU	No.	Driver	Brett	Hulls	
			Driver		Salt	

JOB SERVICES & REMARKS

Remarks:	
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 264
	Mileage 8 5/8
	FLOAT EQUIPMENT
	Guide Shoe
	Centralizer - 1
	Baskets - 1
	AFU Inserts
	Float Shoe
	Latch Down
	Baffle Plate - 1
	Rubber Plug - 1
	Pumptrk Charge Low Surface
	Mileage 51

CEMENT DID CIRCULATE



X Signature *[Handwritten Signature]*

Tax
Discount
Total Charge



QUALITY OILWELL CEMENTING, INC.
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone: 785-324-1041 fax: 785-483-1087
 Email: cementing@ruraltel.net

Date: 3/29/2014
 Invoice # 7140

P.O.#:
 Due Date: 4/28/2014
 Division: Russell

Invoice

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1935 LOUIE ROAD
 HAYS KANSAS 67601

RECEIVED

APR 04 2014

SAMUEL GARY JR.
& ASSOCIATES, INC.

Reference:
 NEURBERGER 1-1

Description of Work:
 PROD STRING

DRLG COMP W/O LOE GG

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	
Description	

Services / Items Included:

	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,020.55	No	Auto Fill Float Shoe, 5 1/2"	1	\$342.00	Yes
Common-Class A	225	\$ 3,772.06	Yes	Bulk Truck Mileage-Job to Nearest Bulk Plant	51	\$332.88	No
Cement Port Collar, 5 1/2"	1	\$ 2,794.12	Yes	Salt (Fine)	19	\$296.44	Yes
Gilsonite	1057	\$ 1,772.03	Yes	Latch Down Plug & Baffle, 5 1/2"	1	\$250.35	Yes
5 1/2" Basket	4	\$ 1,537.88	Yes	Flo Seal	56	\$125.18	Yes
Pump Truck Mileage-Job to Nearest Camp	51	\$ 568.86	No	Rotating Head (4 1/2", 5 1/2", or 2 7/8")	1	\$40.24	No
Bulk Truck Matl-Material Service Charge	254	\$ 567.76	No				
CD-110	117	\$ 523.06	Yes				
Mud Clear	500	\$ 413.53	Yes				
Defoamer A or CAF-38	50	\$ 391.18	Yes				
5 1/2" Turbolizer	6	\$ 388.94	Yes				

Invoice Terms:

Net 30

SubTotal: \$ 15,137.05
 Discount Available ONLY if Invoice is Paid & Received
 within listed terms of invoice: \$ (2,270.56)

SubTotal for Taxable Items:	\$ 10,715.75
SubTotal for Non-Taxable Items:	\$ 2,150.74
Total:	\$ 12,866.49
Tax:	\$ 739.39

6.90% Norton County Sales Tax

Thank You For Your Business!

Amount Due: \$ 13,605.88
Applied Payments:
Balance Due: \$ 13,605.88

Past Due Invoices are subject to a service charge (annual rate of 24%)
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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. 7140

Date	Sec.	Twp.	Range	County	State	On Location	Finish
3-29-14	1	5	24	Norton	KS		D9145
Lease <i>Neurnberger</i>				Well No. <i>1-1</i>		Owner	
Contractor <i>WW 12</i>				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.			
Type Job <i>long string</i>				Charge To <i>Sam Gary Jr & Associates</i>			
Hole Size <i>7 7/8</i>		T.D. <i>3940</i>		Street			
Csg. <i>5 1/2 15 1/2 #</i>		Depth <i>3937.66</i>		City			
Tbg. Size		Depth		State			
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg.		Shoe Joint <i>42.70</i>		Cement Amount Ordered <i>225 sx Q, pro-c, 10% salt, 5% Gilsonite, 1/4 # Flow. 20 bbl KCL .08% CFL117</i>			
Meas Line		Displace <i>92.70 bbl</i>		Common <i>225</i> .25% CAF38			
EQUIPMENT				Common <i>225</i> .3% CD110			
Pumptrk <i>17</i>	No.	Cementer		Poz. Mix			
		Helper <i>Nick</i>		Gel.			
Bulktrk <i>9</i>	No.	Driver		Calcium <i>KCL 2 gal</i>			
		Driver <i>David</i>		Hulls <i>CD110 176 #</i>			
Bulktrk <i>PU</i>	No.	Driver		Salt <i>19</i>			
		Driver <i>Travis</i>		Flowseal <i>56 #</i>			
JOB SERVICES & REMARKS				Kol-Seal <i>1057</i>			
Remarks:				Mud CLR 48 <i>500 gal</i>			
Rat Hole				CFL117 or CD110 (CAF 38) → <i>50 #</i>			
Mouse Hole <i>30 sx</i>				Sand <i>117</i>			
Centralizers <i>1,3,7,11,13,49</i>				Handling <i>25 #</i>			
Baskets <i>6,10,16,48</i>				Mileage			
D/V or Port Collar <i>48 at 1936</i>				FLOAT EQUIPMENT			
Pipe on bottom broke circulation. Pumped 500 gal Mud CLR 48 with 10 bbl fw behind it. Plugged Rat hole with 30 sx. Hooked to 5 1/2 Mixed 195 sx shutdown washed pump and lines. Released Plug and displaced with 42.7 bbl fw 20 bbl KCL and 72.7 bbl fw plug landed and held.				Guide Shoe			
lift pressure <i>900 psi</i>				Centralizer <i>6 turbo's</i>			
Plug landed at <i>1600 psi</i>				Baskets <i>4 Red</i>			
				AFU Inserts			
				Float Shoe <i>1</i>			
				Latch Down <i>1</i>			
				<i>1 Port collar</i>			
				Pumptrk Charge <i>free string</i>			
				Mileage <i>51</i>			
				Tax			
				Discount			
				Total Charge			
Signature <i>[Handwritten Signature]</i>							



QUALITY OILWELL CEMENTING, INC.

PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone: 785-324-1041 fax: 785-483-1087
 Email: cementing@ruraltel.net

Date: 4/1/2014
 Invoice # 151

P.O.#:
 Due Date: 5/1/2014
 Division: Russell

Invoice

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1935 LOUIE ROAD
 HAYS KANSAS 67601

DRLG COMP W/O LOE GG

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	see work ticket
Description	

Reference:
 NUERNBERGER 1-1

Description of Work:
 PORT COLLAR JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,020.55	No				
mon, MetsoBeads, Plater, Gel, FloSeal, Calcium)	225	\$ 4,808.12	Yes				
Bulk Truck Matl-Material Service Charge	300	\$ 670.59	No				
Pump Truck Mileage-Job to Nearest Camp	51	\$ 568.86	No				
Bulk Truck Mileage-Job to Nearest Bulk Plant	51	\$ 332.88	No				
Flo Seal	75	\$ 167.65	Yes				

Invoice Terms:

Net 30		SubTotal: \$ 7,568.64
	Discount Available <u>ONLY</u> if Invoice is Paid & Received within listed terms of invoice:	\$ (1,135.30)
SubTotal for Taxable Items:		\$ 4,229.40
SubTotal for Non-Taxable Items:		\$ 2,203.94
Total:		\$ 6,433.34
6.90% Norton County Sales Tax		Tax: \$ 291.83
Amount Due:		\$ 6,725.17
Applied Payments:		
Balance Due:		\$ 6,725.17

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
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RECEIVED
 APR 09 2014
 SAMUEL GARY JR.
 & ASSOCIATES, INC.

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. 151

Date	4-1-14	Sec.	Twp.	Range	County	State	On Location	Finish
					Vorton	KS		1:00 PM
					Location Hill City N to HWY 9 6W to W4 Rd			
Lease	Nuernberger	Well No. 1-1			Owner 1 1/2 N Winto			
Contractor	Alliance	Well service			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.			
Type Job	Port collar				Charge To Sam Bury Jr + Associates			
Hole Size		T.D.			Street			
Csg.	5 1/2	Depth			City State			
Tbg. Size	2 1/2	Depth			The above was done to satisfaction and supervision of owner agent or contractor.			
Tool	Port collar	Depth 1932'			Cement Amount Ordered 300 QMDC 1/4 flo			
Cement Left in Csg.		Shoe Joint			Used 225 ga QMDC 1/4 flo			
Meas Line		Displace 9 bbl			Common 225			
EQUIPMENT								
Pumptrk	16	No.	Cementer		Poz. Mix			
			Helper	Billy				
Bulktrk	19	No.	Driver	Chad	Gel.			
			Driver					
Bulktrk	PU	No.	Driver	Brett	Calcium			
			Driver					
JOB SERVICES & REMARKS					Hulls			
Remarks:					Salt			
Rat Hole					Flowseal 75#			
Mouse Hole					Kol-Seal			
Centralizers					Mud CLR 48			
Baskets					CFL-117 or CD110 CAF 38			
Port Collar 1932'					Sand			
					Handling 300			
					Mileage			
Test PC to 1000 lbs					FLOAT EQUIPMENT			
Opened PC					Guide Shoe			
Mixed 225 ga QMDC					Centralizer			
Displaced 9 bbl					Baskets			
Ran 5 jts					AFU Inserts			
Washed clean w/ 27 bbl					Float Shoe			
					Latch Down			
					Pumptrk Charge part collar			
					Mileage 51			
					Tax			
					Discount			
					Total Charge			
X Signature								



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Sam Gary Jr & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE 700 Denver Co. 80202

Neurnberger #1-1

Job Ticket: 56813

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2014.03.25 @ 02:10:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:18:30

Time Test Ended: 09:20:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3465.00 ft (KB) To 3494.00 ft (KB) (TVD)

Reference Elevations: 2373.00 ft (KB)

Total Depth: 3494.00 ft (KB) (TVD)

2363.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8673 Inside

Press@RunDepth: 36.78 psig @ 3466.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.25 End Date: 2014.03.25

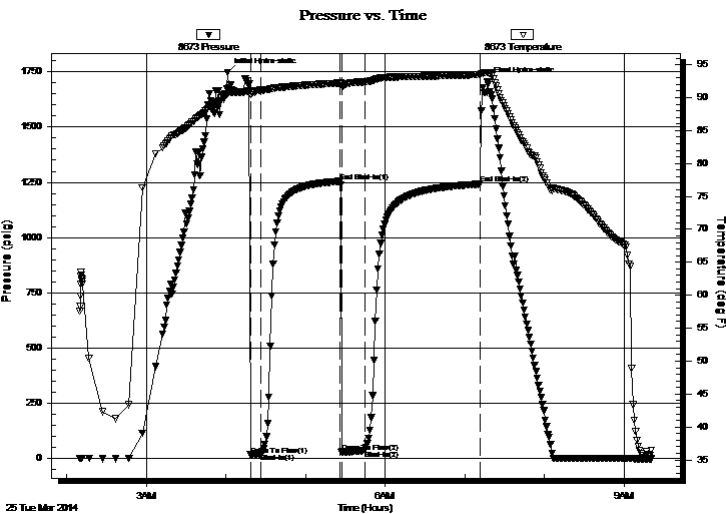
Last Calib.: 2014.03.25

Start Time: 02:10:05 End Time: 09:20:29

Time On Btm: 2014.03.25 @ 04:01:30

Time Off Btm: 2014.03.25 @ 07:17:00

TEST COMMENT: IF: Weak blow surface over 5 mins.
IS: No blow back
FF: Weak surface blow after 5 mins. Stayed at surface over the next 15 mins.
FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1747.71	90.59	Initial Hydro-static
17	16.36	90.44	Open To Flow (1)
25	22.06	91.14	Shut-In(1)
85	1254.90	92.21	End Shut-In(1)
86	28.20	91.83	Open To Flow (2)
103	36.78	92.39	Shut-In(2)
190	1242.47	93.48	End Shut-In(2)
196	1707.53	93.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	sampler-- 1400- HO 600M 75 PSI	0.00
25.00	HMCO-70%o30%m	0.12

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary Jr & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE 700 Denver Co. 80202

Neurnberger #1-1

Job Ticket: 56813

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2014.03.25 @ 02:10:00

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: 73.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 67.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	sampler-- 1400- HO 600M 75 PSI	0.000
25.00	HMCO-70%o30%m	0.123

Total Length: 25.00 ft Total Volume: 0.123 bbl

Num Fluid Samples: 0

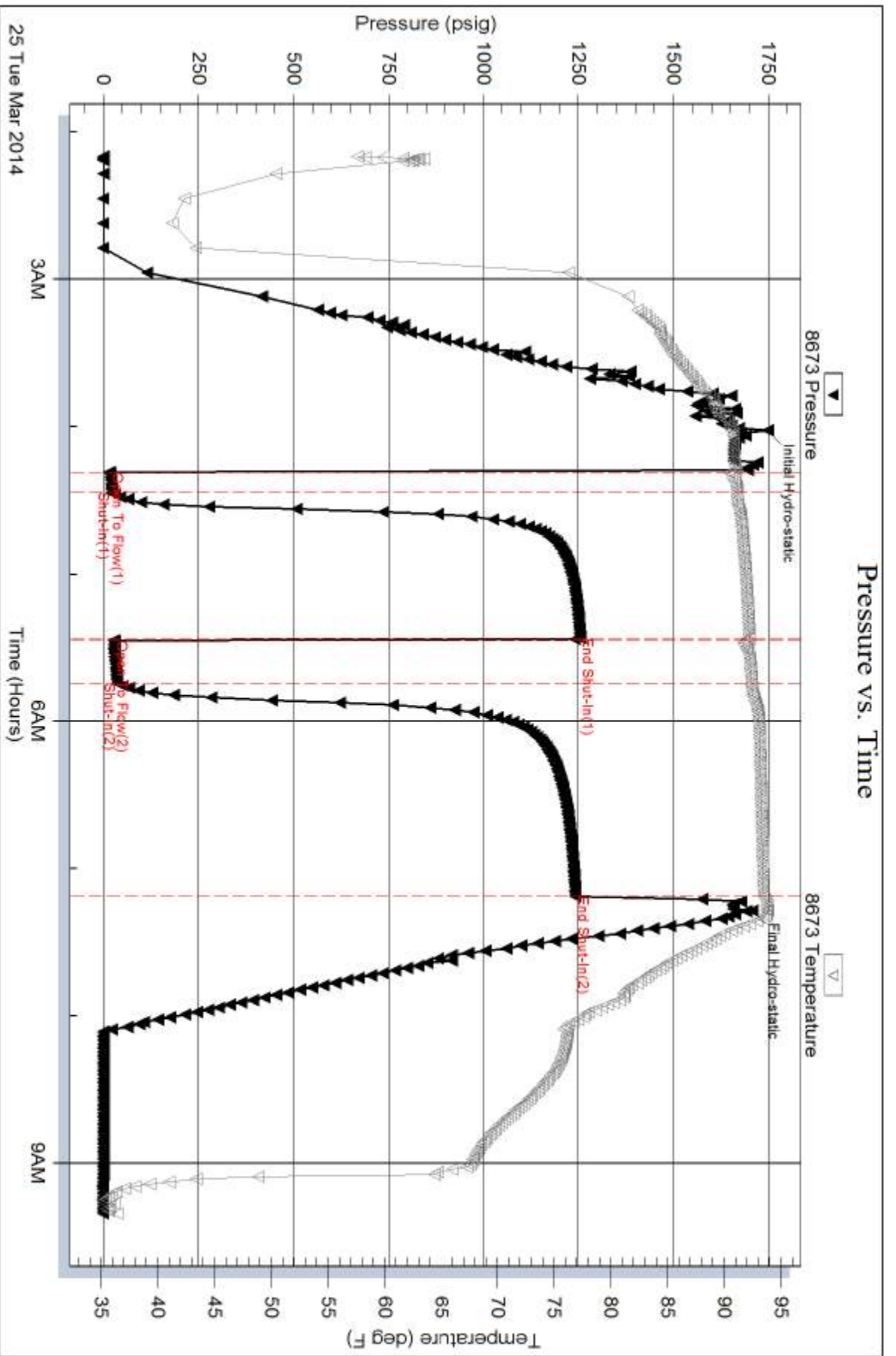
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



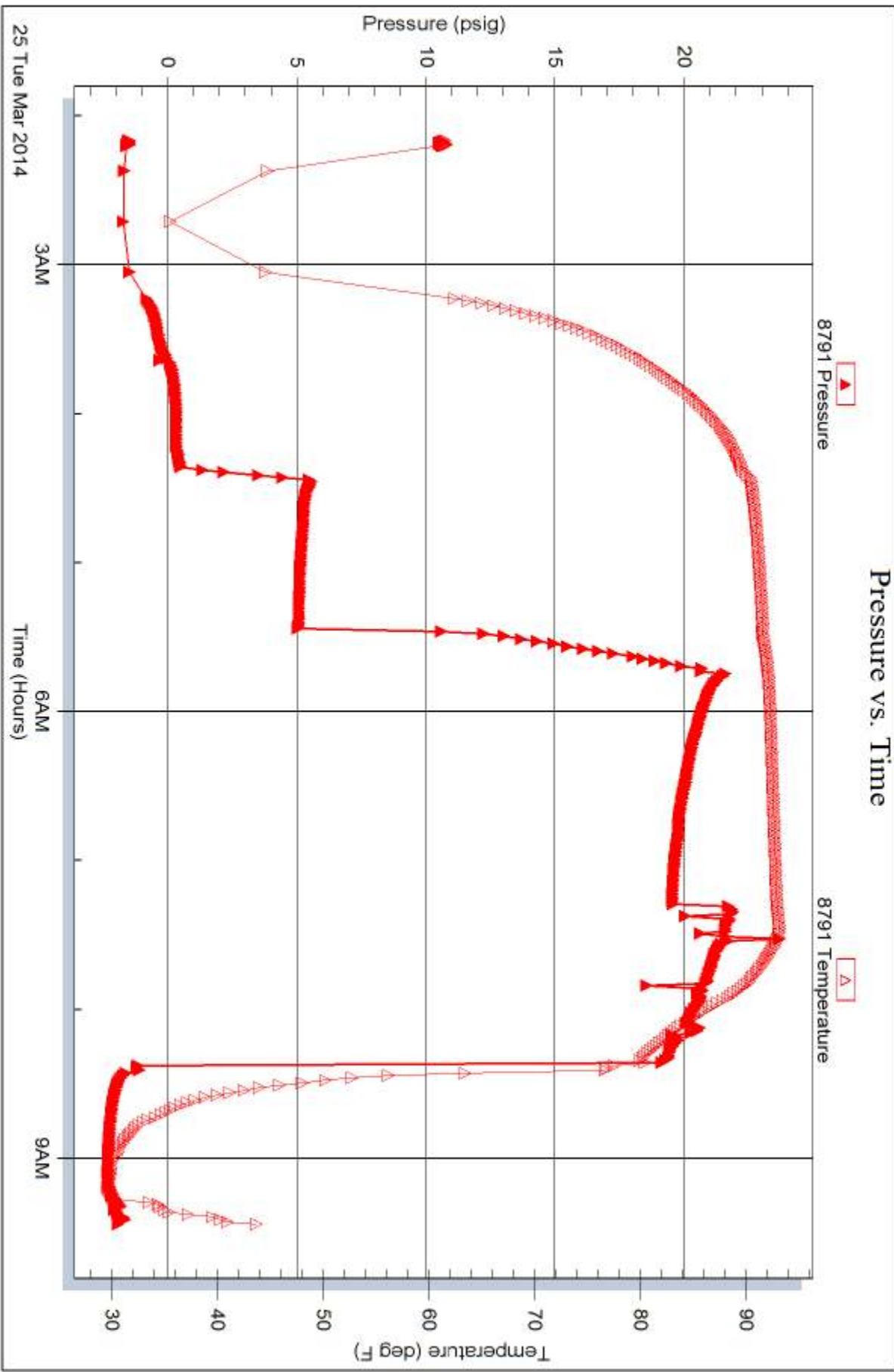
Serial #: 8791

Fluid

Sam Gary Jr & Associates Inc.

Neumberger #1-1

DST Test Number: 1





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Sam Gary & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE 700 Denver Co.
80202
ATTN: Clayton Camozzi

Neurnberger #1-1

Job Ticket: 56814

DST#: 2

Test Start: 2014.03.25 @ 16:35:00

GENERAL INFORMATION:

Formation: **LKC-A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:33:00

Time Test Ended: 22:54:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3490.00 ft (KB) To 3510.00 ft (KB) (TVD)

Reference Elevations: 2373.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

2363.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8673

Inside

Press@RunDepth: 21.75 psig @ 3491.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.25

End Date:

2014.03.25

Last Calib.:

2014.03.25

Start Time:

16:35:05

End Time:

22:53:59

Time On Btm:

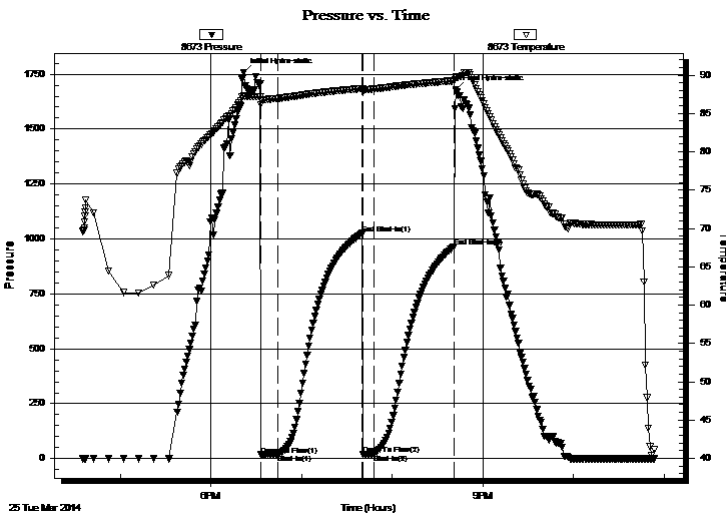
2014.03.25 @ 18:21:30

Time Off Btm:

2014.03.25 @ 20:42:00

TEST COMMENT: IF: Weak blow , Dead in 4 mins
IS: No blow back
FF: Weak blow , Dead in 4 mins.
FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1758.08	87.28	Initial Hydro-static
12	17.59	86.10	Open To Flow (1)
23	18.46	86.96	Shut-In(1)
79	1025.29	88.25	End Shut-In(1)
79	19.45	87.77	Open To Flow (2)
86	21.75	88.19	Shut-In(2)
139	963.67	89.26	End Shut-In(2)
141	1679.75	89.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	sampler-- 2000M 300PSI	0.00
5.00	mud w ith oil specs	0.02

* 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 & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE 700 Denver Co.
80202

Neurnberger #1-1

Job Ticket: 56814

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2014.03.25 @ 16:35:00

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: 73.00 sec/qt

Cushion Volume: bbl

Water Loss: 67.87 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	sampler-- 2000M 300PSI	0.000
5.00	mud with oil specs	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

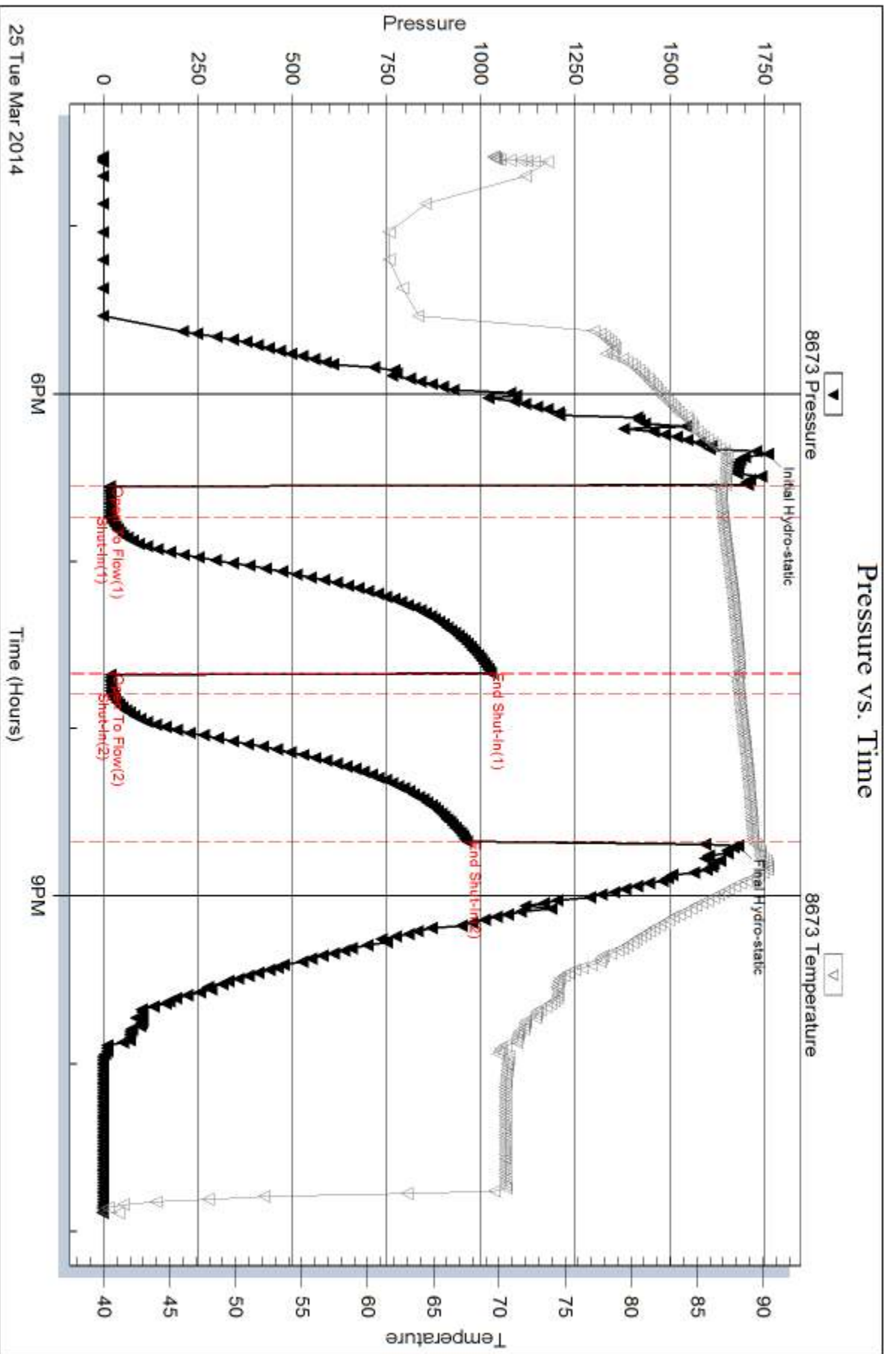
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



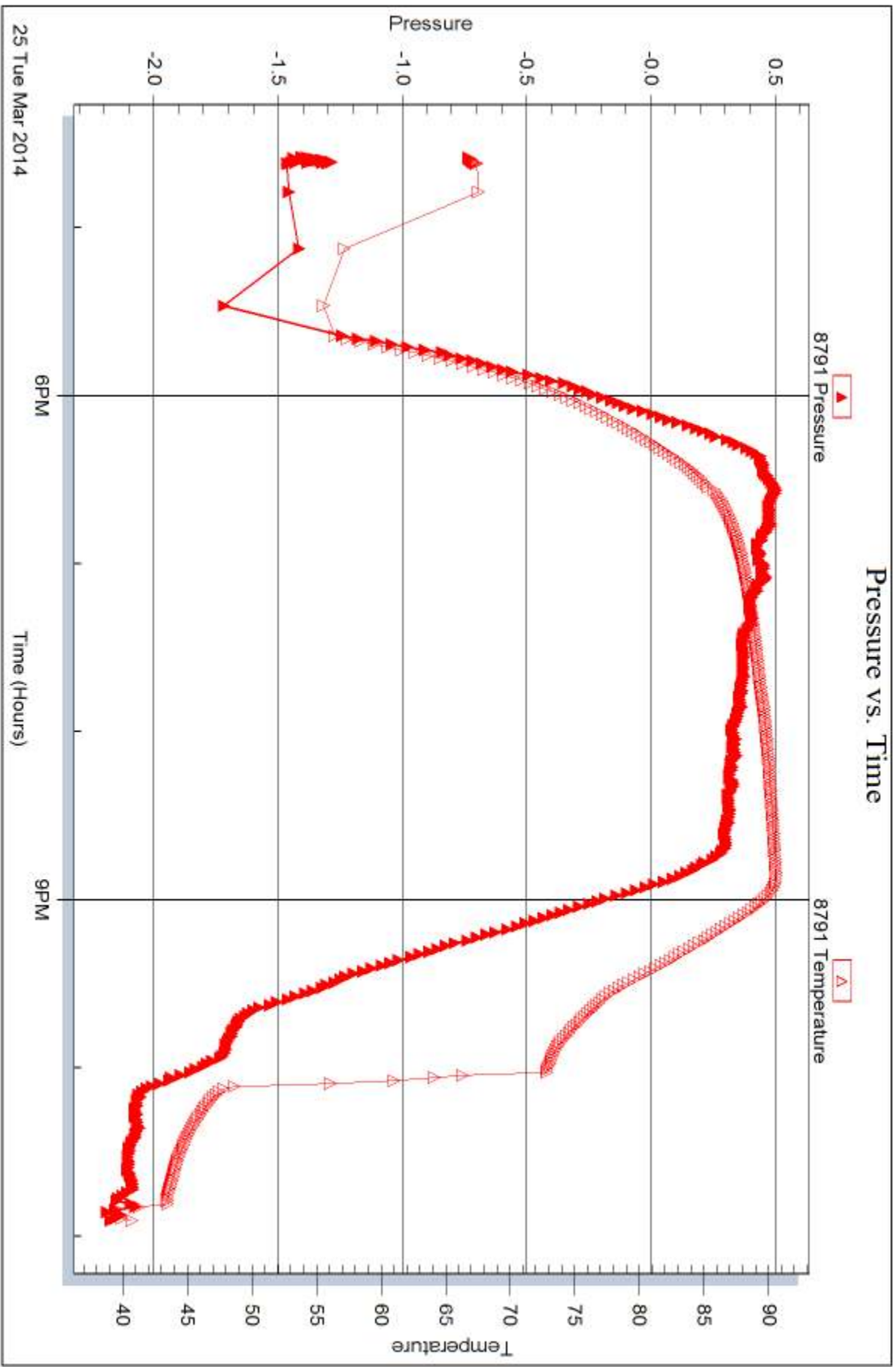
Serial #: 8791

Fluid

Sam Gary & Associates Inc.

Neumberger #1-1

DST Test Number: 2



25 Tue Mar 2014

Trilobite Testing, Inc

Ref. No: 56814

Printed: 2014.03.26 @ 20:18:21



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Sam Gary & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE 700 Denver Co.
80202
ATTN: Clayton Camozzi

Neurnberger #1-1

Job Ticket: 56815

DST#: 3

Test Start: 2014.03.26 @ 09:10:00

GENERAL INFORMATION:

Formation: **LKC-B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:15:30

Time Test Ended: 17:24:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3506.00 ft (KB) To 3550.00 ft (KB) (TVD)

Reference Elevations: 2373.00 ft (KB)

Total Depth: 3550.00 ft (KB) (TVD)

2363.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8673

Inside

Press@RunDepth: 101.70 psig @ 3509.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.26

End Date:

2014.03.26

Last Calib.:

2014.03.26

Start Time: 09:10:05

End Time:

17:24:29

Time On Btm:

2014.03.26 @ 11:12:00

Time Off Btm:

2014.03.26 @ 15:07:00

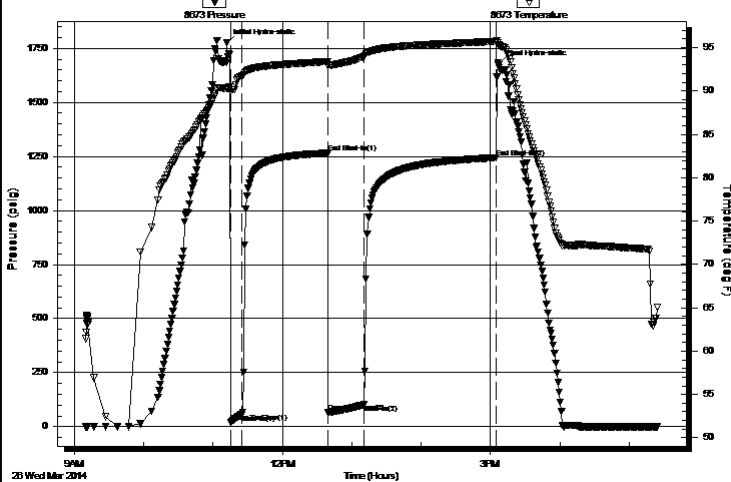
TEST COMMENT: IF: Strong blow , Built to 5 1/2 in. over 10 mins

IS: No blow back

FF: Strong blow , Built to B.O.B in 12 mins

FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1774.12	90.27	Initial Hydro-static
4	20.24	89.89	Open To Flow (1)
13	56.52	91.72	Shut-In(1)
87	1265.33	93.40	End Shut-In(1)
88	66.92	92.96	Open To Flow (2)
119	101.70	93.98	Shut-In(2)
233	1244.48	95.71	End Shut-In(2)
235	1673.01	95.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	sampler go-2000ml-40%g60%o-700psi	0.00
119.00	gocm-10%g40%o60%m	0.59
62.00	go-30%g70%o	0.87
50.00	go-10%g90%o	0.70
0.00	gravity-36@70=35	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE. 700 Denver Co.
80202

Neurnberger #1-1

Job Ticket: 56815

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.03.26 @ 09:10:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 7.20 in³

Resistivity: ohm.m

Salinity: 1500.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	sampler go-2000ml-40%g60%o-700psi	0.000
119.00	gocm-10%g40%o60%m	0.585
62.00	go-30%g70%o	0.870
50.00	go-10%g90%o	0.701
0.00	gravity-36@70=35	0.000

Total Length: 231.00 ft Total Volume: 2.156 bbl

Num Fluid Samples: 0

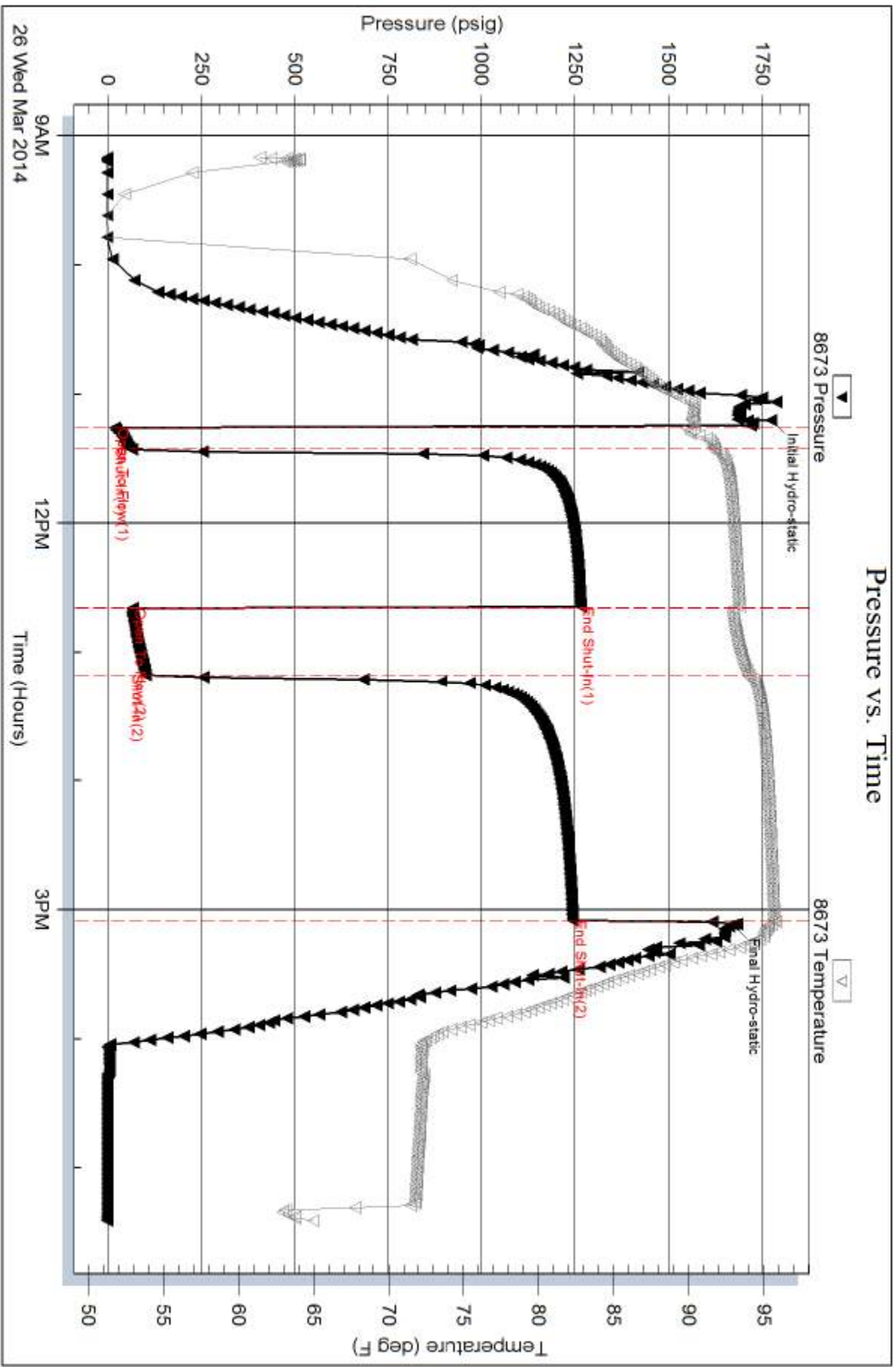
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8791

Fluid

Sam Gary & Associates Inc.

Neumberger #1-1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 56815

Printed: 2014.03.26 @ 20:16:06



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Sam Gary & Assoc. Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE. 700 Denver Co.
80202
ATTN: Clayton Camozzi

Neurnberger #1-1

Job Ticket: 56816

DST#: 4

Test Start: 2014.03.27 @ 10:00:00

GENERAL INFORMATION:

Formation: **LKC-G,F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:03:30

Time Test Ended: 17:18:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3590.00 ft (KB) To 3644.00 ft (KB) (TVD)

Reference Elevations: 2373.00 ft (KB)

Total Depth: 3644.00 ft (KB) (TVD)

2363.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8673 Inside

Press @ Run Depth: 77.82 psig @ 3593.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.27 End Date: 2014.03.27

Last Calib.: 2014.03.27

Start Time: 10:00:05 End Time: 17:18:29

Time On Btm: 2014.03.27 @ 12:01:30

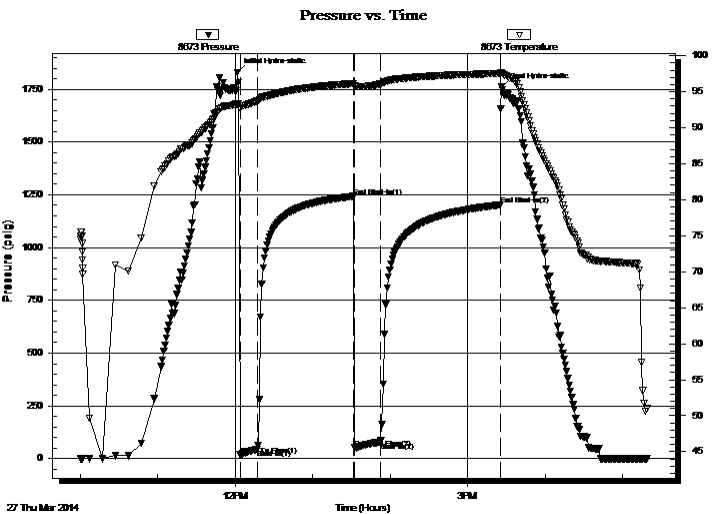
Time Off Btm: 2014.03.27 @ 15:26:00

TEST COMMENT: IF: Weak blow, Built to 2 in. over 10 mins.

IS: No blow back

FF: 1 in. blow over 20 mins

FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1829.76	93.32	Initial Hydro-static
2	18.65	92.69	Open To Flow (1)
16	45.41	93.71	Shut-In(1)
90	1242.85	96.11	End Shut-In(1)
91	51.28	95.76	Open To Flow (2)
111	77.82	96.06	Shut-In(2)
204	1202.19	97.54	End Shut-In(2)
205	1760.03	97.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	sampler-- 2000 ml of mud- 100PSI	0.00
119.00	mud w ith oil specs	0.59
15.00	Ho-100%o	0.21

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary & Assoc. Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE. 700 Denver Co.
80202

Neurnberger #1-1

Job Ticket: 56816

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2014.03.27 @ 10:00:00

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	sampler-- 2000 ml of mud- 100PSI	0.000
119.00	mud w ith oil specs	0.585
15.00	Ho-100%o	0.210

Total Length: 134.00 ft

Total Volume: 0.795 bbl

Num Fluid Samples: 0

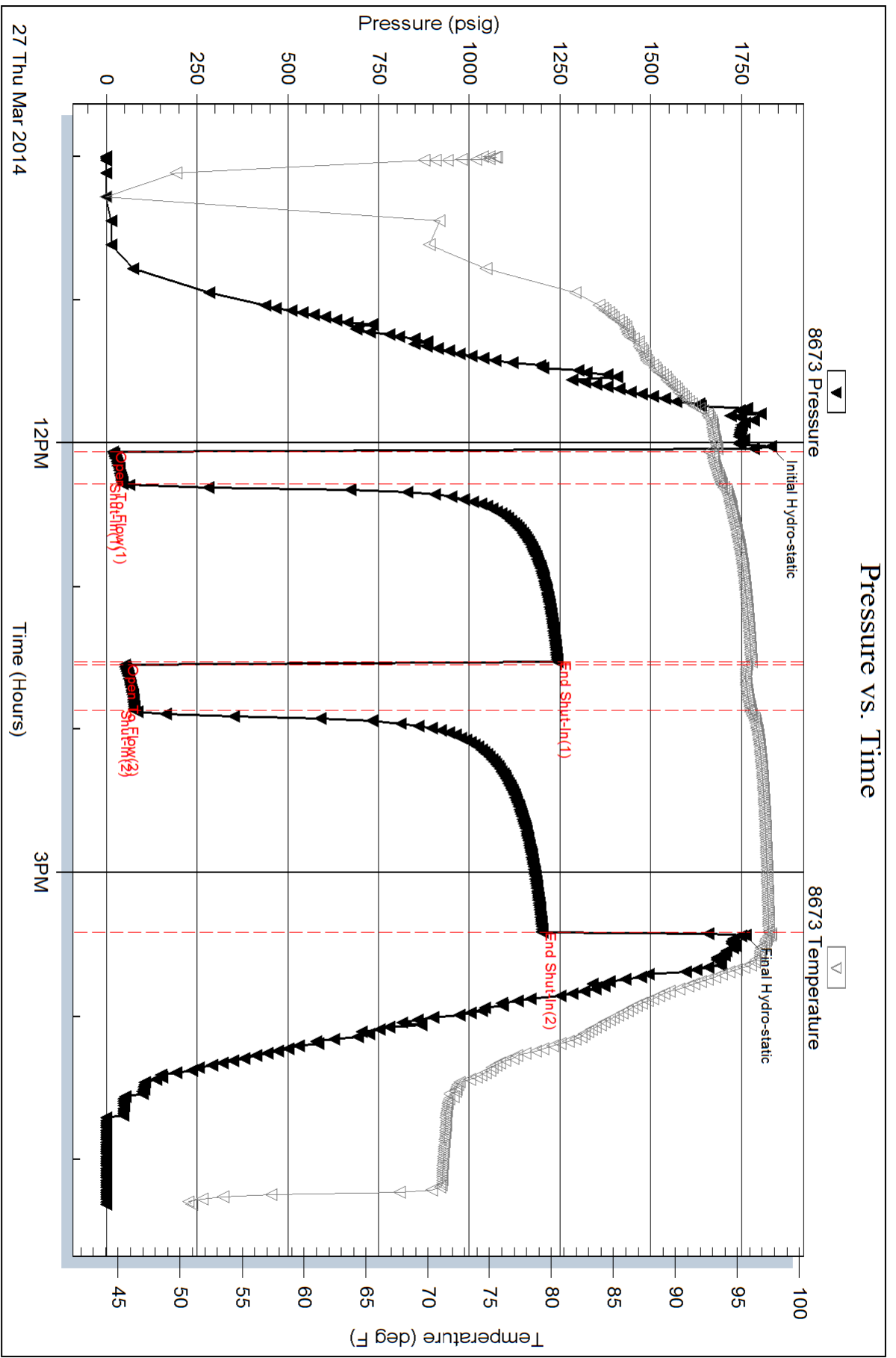
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



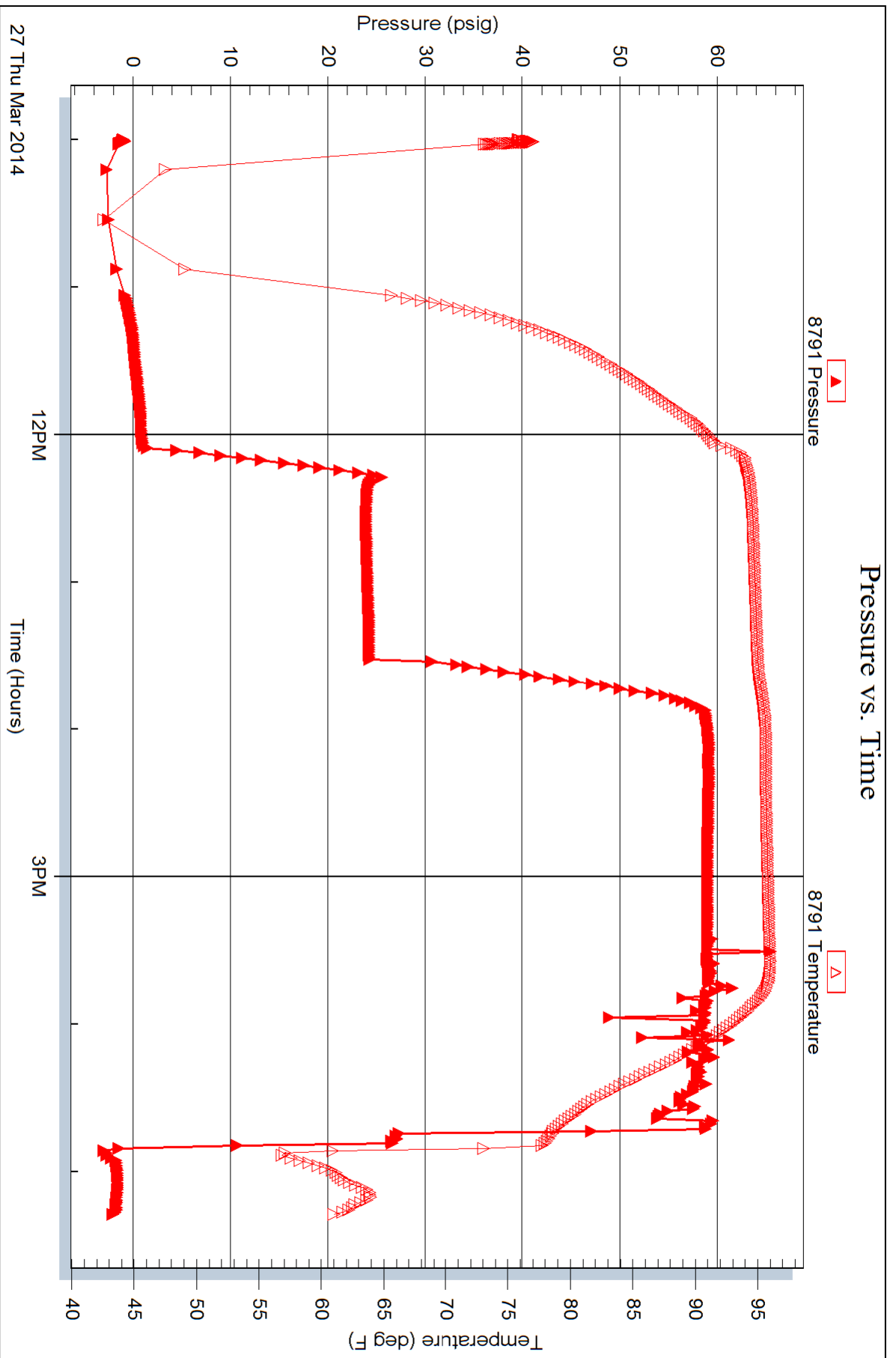
Serial #: 8791

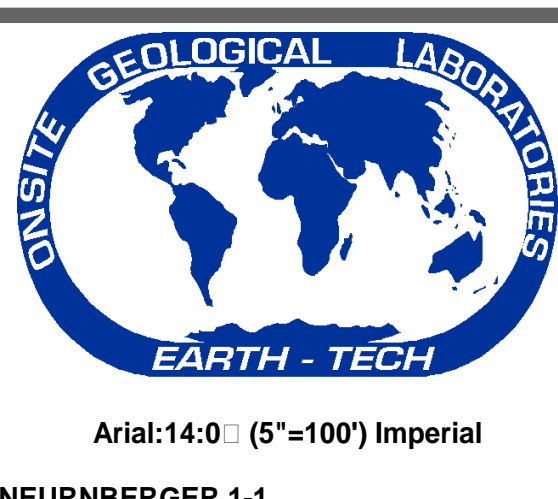
Fluid

Sam Gary & Assoc. Inc.

Neumberger #1-1

DST Test Number: 4





Arial: 14:0 (5"=100') Imperial

Well Name: SGA- NEURNBERGER 1-1
 Location: Sec. 1 -5S-24W Norton County, Kansas
 Licence Number: 15-137-20691-0000
 Spud Date: March 21, 2014
 Surface Coordinates: 1890' FSL / 1655' FEL
 Region: WILDCAT
 Drilling Completed: March 28, 2014

Bottom Hole Coordinates:
 Ground Elevation (ft): 2362' K.B. Elevation (ft): 2370'
 Logged Interval (ft): 3100 To: 3940' Total Depth (ft): 3940'
 Formation: LANSING
 Type of Drilling Fluid: Chemical

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

OPERATOR

Company: Samuel Gary Jr. & Assoc.
 Address: 1515 Wynkoop, Ste. # 700
 Denver, Colo. 80202
 Geo: Clayton Camozzi

GEOLOGIST

Name: Tim Hedrick
 Company: Earth Tech OGL, Inc.
 Address: PO Box 683
 Hooker, Okla. 73945
 OFF: 1-888-543-8378 CELL. 580-754-0062

DST's Report

DST#1 3465-3494 5 60 20 80
 IF-WK SRFC BLO THRU/ISI-NB /FF- WK SRFC BLO 15 MIN/ FSI-NB/ IH- 1748, FH-1708/ IF- 16 TO 22, FF-28 TO 37/ ISI-1255, FSI-1242/ RECOVERED- 25' TF- 25' HMCO-705 O., 30%M., SAMPLER- 2000 ML TF, 1400 ML OIL, 600 ML MUD/ NO GRAVITY LISTED

DST#2 3490- 3510 5 60 5 60 / IF-WK DEAD IN4 MIN./ ISI-NB /FF-WK DEAD IN 4 MIN./FF- NB / IH- 1758, FH-1680/ IF- 18 TO 18, FF-19 TO 22/ ISI- 1025, FSI-964/ RECOV. 5' TF , MUD W/ OIL SPOTS, SAMPLER 2000 ML MUD, 300 PSI

DST's Report

DST#3 3506- 3550 10 75 30 120
 IF-BLT TO 5.5" IN 10 MIN., ISI- NB/ FF- BOB 12 MIN/ FF- NB4
 IH- 1774, FH-1673/ IF-20 TO 57, FF-67 TO 102/ ISI-1265, FSI-1244
 RECOVERED- 231' TF, 119' GOCM, 50' GO 10%G, 90%, 62' GO, 30%G, 70%O., 119' GOCM, 10%G, 40%O., 50% M. GRAVITY 35/ SAMPLER-40% G, 60%O., 700PSI BHT 94

DST's Report

DST#4 3590-3644' 10 75 20 90
 IF- BLT TO 2" 10 MIN. ISI- NB/ FF-1" IN 20 MIN/ FSI- NB
 IH- 1830, FH-1760/ IF-19 TO 45, FF-51 TO 78/ ISI-1243, FSI-1202
 RECOV - 134' TF- 15' HO, 100% O., 119' MUD W/OIL SPCKS
 SAMPLER - 2000ML MUD, 100 PSI, GRAVITY-CORR. 35, BHT 96 DEG.

ROCK TYPES

Anhy	Congl	Mrlst	Ss	Sandylms
Bent	Dol	Salt	Till	Shale
Brec	Gyp	Cephal	Carb sh	Siltstn
Cht	Igne	Shcol	Dol	Silysh
Clyst	Lmst	Shgy	Dtd	Lms
Coal	Meta	Siltst	Gry sh	

ACCESSORIES

MINERAL Anhy	Marl	Belm	Fuss	Lms
MINERAL Arggrn	Minxl	Bioclst	Oomold	Sandylms
MINERAL Arg	Nodule	Brach	STRINGER Anhy	Sh
MINERAL Bent	Phos	Bryozoa	STRINGER Arg	Siltstn
MINERAL Bit	Salt	Coral	STRINGER Bent	TEXTURE Boundst
MINERAL Brefracg	Sandy	Crin	STRINGER Coal	TEXTURE Chalky
MINERAL Calc	Silt	Echin	STRINGER Dol	TEXTURE Cryxln
MINERAL Carb	Sulphur	Foram	STRINGER Gyp	TEXTURE Earthy
MINERAL Chtdk	Chlorite	Fossil	STRINGER Ls	TEXTURE Finexln
MINERAL Chtlt	Dol	Gastro	STRINGER Mrst	TEXTURE Lithogr
MINERAL Dol	Sand	Oolite	STRINGER Ssstrg	TEXTURE Lithoxln
MINERAL Feldspar	FOSSIL Algae	Ostra	STRINGER Carbsh	TEXTURE Mudxtn
MINERAL Ferrpel	FOSSIL Amph	Pellet	STRINGER Clystn	TEXTURE Packst
MINERAL Ferr		Pisolite	STRINGER Grysh	TEXTURE Wackest
MINERAL Glau		Plant	STRINGER Gryslt	
MINERAL Gyp		Strom		
MINERAL Hymyn				
MINERAL Kaol				

OTHER SYMBOLS

POROSITY TYPE Earthy	<input checked="" type="checkbox"/> Vuggy	ROUNDING Rounded	Spotted Ques	Dst
POROSITY TYPE Fenest		ROUNDING Subrnd	Dead	EVENTS Rft
POROSITY TYPE Fracture	<input checked="" type="checkbox"/> SORTING Well	ROUNDING Subang	Gas show	EVENTS Sidewall
POROSITY TYPE Inter	<input checked="" type="checkbox"/> SORTING Moderate	ROUNDING Angular	INTERVALS	
POROSITY TYPE Moldic	<input checked="" type="checkbox"/> SORTING Poor	OIL SHOWS Even	Core	
POROSITY TYPE Organic			Dst	
POROSITY TYPE Pinpoint				

