



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1193617  
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: \_\_\_\_\_

1193617

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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# ALLIED OIL & GAS SERVICES, LLC 061099

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Great Bend

DATE <u>1-13-14</u>	SEC <u>5</u>	TWP. <u>16</u>	RANGE <u>10</u>	CALLED OUT	ON LOCATION	JOB START <u>9:00am</u>	JOB FINISH <u>10pm</u>
LEASE <u>Gambert</u>	WELL # <u>2-5</u>	LOCATION <u>Wilson block Top 9 or 1 1/2 E</u>		COUNTY <u>Ellsworth</u>	STATE <u>KS</u>		
OLD OR NEW (Circle one) <u>NEW</u>			Minto				

CONTRACTOR Duke S OWNER \_\_\_\_\_

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. \_\_\_\_\_

CASING SIZE 8 1/2 DEPTH 343.41

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE 4 1/2 DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. 15 ft

PERFS. \_\_\_\_\_

DISPLACEMENT 20.91 bbl freshwater

**EQUIPMENT**

PUMP TRUCK CEMENTER Josh Isaac

# 398 HELPER Mike Scathorn

BULK TRUCK \_\_\_\_\_

# 609-239 DRIVER MS CJ Guest

BULK TRUCK \_\_\_\_\_

# \_\_\_\_\_ DRIVER \_\_\_\_\_

**REMARKS:**

on location - Rig up - had sitting casing  
from 8 1/2 casing - Break circulation - w/ Righead  
pump 5 bbl freshwater  
mix 275 SES CLASS A 32cc 28 gal  
Drop plug  
Displace 20.91 bbl freshwater  
cement did circulation  
plug down 4:45 pm plug down

CHARGE TO: American Warrant

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To: Allied Oil & Gas Services, LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME X. Steve Stephens

SIGNATURE X. Steve Stephens

Thank you!!

CEMENT AMOUNT ORDERED 275 SK Class A 32cc 28 gal

COMMON	<u>275</u>	@ <u>17.90</u>	<u>4,922.50</u>
POZMIX		@	
GEL	<u>5</u>	@ <u>23.40</u>	<u>117.00</u>
CHLORIDE	<u>775</u>	@ <u>.80</u>	<u>620.00</u>
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>297.35</u>	@ <u>2.48</u>	<u>737.92</u>
MILEAGE	<u>13.57 x 30 x</u>	<u>2.60</u>	<u>1058.46</u>
<b>TOTAL</b>			<u>7,455.38</u>

**SERVICE**

DEPTH OF JOB			
PUMP TRUCK CHARGE		@ <u>1512.35</u>	
EXTRA FOOTAGE		@	
MILEAGE	<u>Hvm 30</u>	@ <u>7.70</u>	<u>231.00</u>
MANIFOLD		@	
	<u>Hvm 30</u>	@ <u>4.40</u>	<u>132.00</u>
		@	

**TOTAL** 1,875.25

**PLUG & FLOAT EQUIPMENT**

<u>Wooden plug</u>	@ <u>107.04</u>	<u>107.04</u>
	@	
	@	
	@	

**TOTAL** 107.04

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 9,437.67

DISCOUNT 1,887.53 IF PAID IN 30 DAYS

7,550.13



CHARGE TO: **AMERICAN WARRIOR INC**  
 ADDRESS:  
 CITY, STATE, ZIP CODE:

TICKET 25810

PAGE 1 OF 2

1. SERVICE LOCATIONS <b>Ness City, Ks</b>	WELL/PROJECT NO. <b>2-5</b>	LEASE <b>GRUBB UNIT</b>	COUNTY/PARISH <b>ELLSWORTH</b>	STATE <b>Ks</b>	CITY	DATE <b>1-19-14</b>	OWNER <b>SAME</b>
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <b>DUKE DRIG #8</b>	RIG NAME/NO.	SHIPPED VIA <b>CT</b>	DELIVERED TO <b>LOCATION</b>	ORDER NO.	
3.	WELL TYPE <b>OIL</b>	WELL CATEGORY <b>DEVELOPMENT</b>	JOB PURPOSE <b>5 1/2" LONGSTRING</b>	WELL PERMIT NO.	WELL LOCATION <b>N/HOLYROOD, Ks</b>		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE # 115		70	MI		6.00	420.00
578		1			PUMP CHARGE		1	JOB	3420	FT	1500.00
221		1			LIQUID KCL		2	GAL		25.00	50.00
281		1			MUD FLOSH		500	GAL		1.25	625.00
402		1			CENTRALIZERS		9	EA	5 1/2"	70.00	630.00
403		1			CEMENT BASKET		1	EA		300.00	300.00
406		1			LATCH DOWN PLUG - BAFFLE		1	EA		275.00	275.00
407		1			INSERT FLOAT SHOE w/AUTO FILL		1	EA		375.00	375.00

**LEGAL TERMS:** Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X *[Signature]*  
 DATE SIGNED: **1-19-14** TIME SIGNED: **1145**  A.M.  P.M.

**REMIT PAYMENT TO:**

**SWIFT SERVICES, INC.**  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

<b>SURVEY</b>	AGREE	UN-DECIDED	DIS-AGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO		
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL #1	4175.00
#2	5197.88
subtotal	9372.88
TAX Ellsworth 7.15%	462.00
<b>TOTAL</b>	<b>9834.88</b>





JOB LOG

SWIFT Services, Inc.

DATE 1-19-14 PAGE NO. 1

CUSTOMER AMERICAN WARRIOR Inc. WELL NO. 2-5 LEASE GROBB UNIT JOB TYPE 5 1/2" LONGSTRING TICKET NO. 25810

CHART NO.	TIME	RATE (BPM)	VOLUME (BBLS) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1145							ON LOCATION
	1245							START 5 1/2" CASING IN WELL
								TD - 3420 SET = 3419
								TP - 3425 5 1/2" 14
								ST - 21
								CENTRALIZERS - 1, 3, 5, 7, 9, 11, 13, 15, 17
								CMT BSKS - 4
	1415							DROP BALL - CIRCULATE
	1503	6	12		✓		400	PUMP 500 GAL MUD FLUSH
	1505	6	20		✓		400	PUMP 20 BBLS KCL - FLUSH
	1510		7					PLUG RH (30SKS)
	1517	4 1/4	35		✓		200	MIX CEMENT - 145 SKS F22 = 15.4 PPG
	1525							WASH OUT PUMP + LINES
	1525							RELEASE LATCH DOWN PLUG
	1530	7 1/2	0		✓			DISPLACE PLUG
	1542	6	82.9				1250	PLUG DOWN - PSE UP LATCH IN PLUG
	1545						OK	RELEASE PSE - HELD
								WASH TRUCK
	1630							JOB COMPLETE

THANK YOU  
WAYNE, JASON, JOHN, JUAN

**JAMES C. MUSGROVE**

Petroleum Geologist  
212 Main Street  
P.O. Box 215  
Clafin, KS 67525

Office (620) 588-4250

Res. Clafin (620) 587-3444

American Warrior Inc.  
Grubb Unit #2-5  
SE-NE-NE-SW (2296' FSL & 2611' FEL)  
Section 5-16s-10w  
Ellsworth County, Kansas  
Page 1

**5 1/2" Production Casing Set**

**Contractor:** Duke Drilling Co. (Rig #9)  
**Commenced:** January 13, 2014  
**Completed:** January 19, 2014  
**Elevation:** 1843' K.B; 1841' D.F; 1835' G.L.  
**Casing program:** Surface; 8 5/8" @ 343'  
Production; 5 1/2" @ 3419'  
**Sample:** Samples saved and examined 2700' to the Rotary Total Depth.  
**Drilling time:** One (1) foot drilling time recorded and kept 2700 ft. to the Rotary Total Depth.  
**Measurements:** All depths measured from the Kelly Bushing.  
**Drill Stem Tests:** There was one (1) Drill Stem Test ran by Trilobite Testing Co.  
**Electric Log:** By Pioneer Energy Services; Dual Induction, Dual Compensated Porosity Log, and Micro Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	643	+1200
Base Anhydrite	670	+1173
Heebner	2862	-1019
Toronto	2879	-1036
Douglas	2893	-1050
Brown Lime	2963	-1120
Lansing	2978	-1135
Base Kansas City	3275	-1432
Arbuckle	3300	-1457
Rotary Total Depth	3420	-1577
Log Total Depth	3420	-1577

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

2700-2862' No shows of oil and/or gas were noted (see attached Geologist Report/Sample Log).



**TORONTO SECTION**

2881-2891' Limestone; cream to tan, few fossiliferous, chalky, poor visible porosity, trace black stain, no show of free oil and no odor in fresh samples.

**LANSING SECTION**

2978-2990' Limestone; tan, fossiliferous, chalky in part, poor visible porosity, no shows.

3011-3021' Limestone; tan, cream, oolitic, oomoldic, good oomoldic and vuggy type porosity, no shows and questionable odor in fresh samples.

3029-3042' Limestone; tan, oolitic, oomoldic, poor to fair oomoldic porosity, no shows.

3052-3060' Limestone; cream, tan, finely crystalline, poor visible porosity no shows.

3075-3084' Limestone; tan, cream, finely crystalline, oolitic, poor to fair porosity, slightly cherty, no shows.

3091-3100' Limestone; cream, white, oolitic, oomoldic, scattered porosity, no shows.

3122-3132' Limestone; tan, brown, finely crystalline, slightly cherty, poor visible porosity, no shows.

3140-3148' Limestone; tan, white, oolitic, chalky, no shows.

3155-3166' Limestone; cream to tan, fossiliferous, chalky, few cherty, no shows.

3197-3204' Limestone; white, cream, oolitic, chalky, poor visible porosity, no shows.

3210-3220' Limestone; as above.

3235-3250' Limestone; cream, white, finely crystalline, slightly cherty, dense.

**ARBUCKLE SECTION**

3310-3317' Dolomite; cream, to tan, finely crystalline, fair intercrystalline porosity, brown stain, show of free oil and faint to fair odor in fresh samples.

Drill Stem Test #1 3272-3317'

Times: 30-30-45-45

Blow: Strong

Recovery: 40' gas in pipe  
660' heavily oil and gas cut watery mud  
(10% mud, 10% water, 40% oil, 40% gas)  
250' muddy water

Pressures: ISIP 843 psi  
FSIP 843 psi  
IFP 113-225 psi  
FFP 251-378 psi  
HSH 1658-1607 psi

- 3317-3340' Dolomite; tan, finely crystalline, sucrosic, fair scattered pinpoint type porosity, good intercrystalline type porosity, brown stain, show of free oil and fair odor in fresh samples.
- 3340-3360' Dolomite; as above, poor visible porosity, trace stain, poor show of free oil and faint odor in fresh samples.
- 3360-3380' Dolomite; tan, finely crystalline, sandy, poor visible porosity, no shows.
- 3380-3400' Dolomite; tan, finely crystalline, poor scattered intercrystalline type porosity, dense, no shows.
- 3400-3420' Dolomite; as above, no shows.

Rotary Total Depth 3420  
Log Total Depth 3420

Recommendations: 5 1/2" production casing was set and cemented on the American Warrior Grubb Unit #2.

Respectfully submitted;

*Wyatt Urban*  
Wyatt Urban,  
Petroleum Geologist



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

3118 Cummins Rd  
Garden City, KS 67845

ATTN: Wyatt Urban

### **Grub Unit #2-5**

#### **5-16s-10w Ellsworth,KS**

Start Date: 2014.01.18 @ 07:20:11

End Date: 2014.01.18 @ 16:57:11

Job Ticket #: 56176                      DST #: 1

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

Printed: 2014.01.22 @ 09:16:10



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc  
3118 Cummins Rd  
Garden City, KS 67845  
ATTN: Wyatt Urban

**5-16s-10w Ellsworth, KS**

**Grub Unit #2-5**

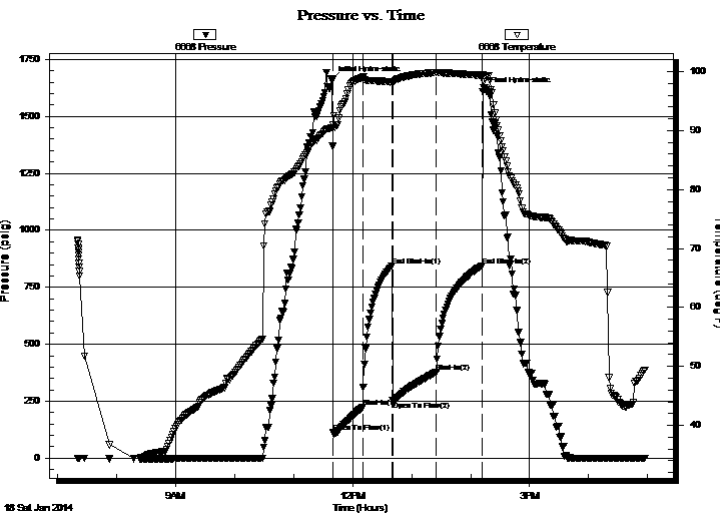
Job Ticket: 56176      **DST#: 1**  
Test Start: 2014.01.18 @ 07:20:11

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 11:40:11  
Time Test Ended: 16:57:11  
Interval: **3272.00 ft (KB) To 3317.00 ft (KB) (TVD)**  
Total Depth: 3317.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Reference Elevations: 1843.00 ft (KB)  
1835.00 ft (CF)  
KB to GR/CF: 8.00 ft  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Tim Phillips  
Unit No: 54

**Serial #: 6668      Inside**  
Press@RunDepth: 377.92 psig @ 3281.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2014.01.18      End Date: 2014.01.18      Last Calib.: 2014.01.18  
Start Time: 07:20:13      End Time: 16:57:11      Time On Btm: 2014.01.18 @ 11:39:11  
Time Off Btm: 2014.01.18 @ 14:12:11

TEST COMMENT: IFP-30- BOB in 7 min  
ISI-30- Dead no blow back  
FF-45-BOB in 2 1/2 min  
FSI-45-Dead no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1658.92	90.47	Initial Hydro-static
1	112.92	90.96	Open To Flow (1)
31	224.85	99.05	Shut-In(1)
61	843.29	98.25	End Shut-In(1)
62	251.44	98.22	Open To Flow (2)
106	377.92	99.87	Shut-In(2)
153	843.36	99.35	End Shut-In(2)
153	1607.11	99.53	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
660.00	GOCM 10%M, 10%W, 40%O, 40%G	9.26
250.00	WCM 10%M, 90%W	3.51
0.00	40ft GIP	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

American Warrior Inc  
3118 Cummins Rd  
Garden City, KS 67845  
ATTN: Wyatt Urban

**5-16s-10w Ellsworth, KS**  
**Grub Unit #2-5**  
Job Ticket: 56176 **DST#: 1**  
Test Start: 2014.01.18 @ 07:20:11

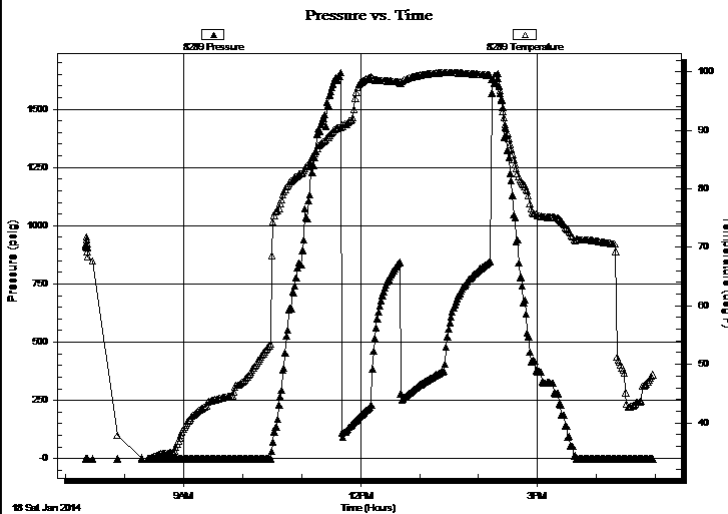
## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 11:40:11  
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Interval: **3272.00 ft (KB) To 3317.00 ft (KB) (TVD)**  
Total Depth: 3317.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches  
Hole Condition: Good  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Tim Phillips  
Unit No: 54  
Reference Elevations: 1843.00 ft (KB)  
1835.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8289 Outside**  
Press@RunDepth:                      psig @ 3281.00 ft (KB)  
Start Date: 2014.01.18 End Date: 2014.01.18  
Start Time: 07:20:19 End Time: 16:57:47  
Capacity: 8000.00 psig  
Last Calib.: 2014.01.18  
Time On Btm:  
Time Off Btm:

TEST COMMENT: IFP-30- BOB in 7 min  
ISI-30- Dead no blow back  
FF-45-BOB in 2 1/2 min  
FSI-45-Dead no blow back

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
660.00	GOCM 10%M, 10%W, 40%O, 40%G	9.26
250.00	WCM 10%M, 90%W	3.51
0.00	40ft GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc

**5-16s-10w Ellsworth,KS**

3118 Cummins Rd  
Garden City, KS 67845

**Grub Unit #2-5**

Job Ticket: 56176

**DST#: 1**

ATTN: Wyatt Urban

Test Start: 2014.01.18 @ 07:20:11

## Tool Information

Drill Pipe:	Length: 3254.00 ft	Diameter: 3.80 inches	Volume: 45.65 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	lb
			<u>Total Volume: 45.65 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	lb
Depth to Top Packer:	3272.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	45.00 ft				
Tool Length:	73.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3245.00	
Shut In Tool	5.00			3250.00	
Hydraulic tool	5.00			3255.00	
Jars	5.00			3260.00	
Safety Joint	2.00			3262.00	
Packer	5.00			3267.00	28.00 Bottom Of Top Packer
Packer	5.00			3272.00	
Stubb	1.00			3273.00	
Perforations	8.00			3281.00	
Recorder	0.00	6668	Inside	3281.00	
Recorder	0.00	8289	Outside	3281.00	
Change Over Sub	1.00			3282.00	
Drill Pipe	31.00			3313.00	
Change Over Sub	1.00			3314.00	
Bullnose	3.00			3317.00	45.00 Bottom Packers & Anchor

**Total Tool Length: 73.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

American Warrior Inc

**5-16s-10w Ellsworth,KS**

3118 Cummins Rd  
Garden City, KS 67845

**Grub Unit #2-5**

Job Ticket: 56176

**DST#: 1**

ATTN: Wyatt Urban

Test Start: 2014.01.18 @ 07:20:11

### 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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4800.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
660.00	GOCM 10%M, 10%W, 40%O, 40%G	9.258
250.00	WCM 10%M, 90%W	3.507
0.00	40ft GIP	0.000

Total Length: 910.00 ft      Total Volume: 12.765 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 6668

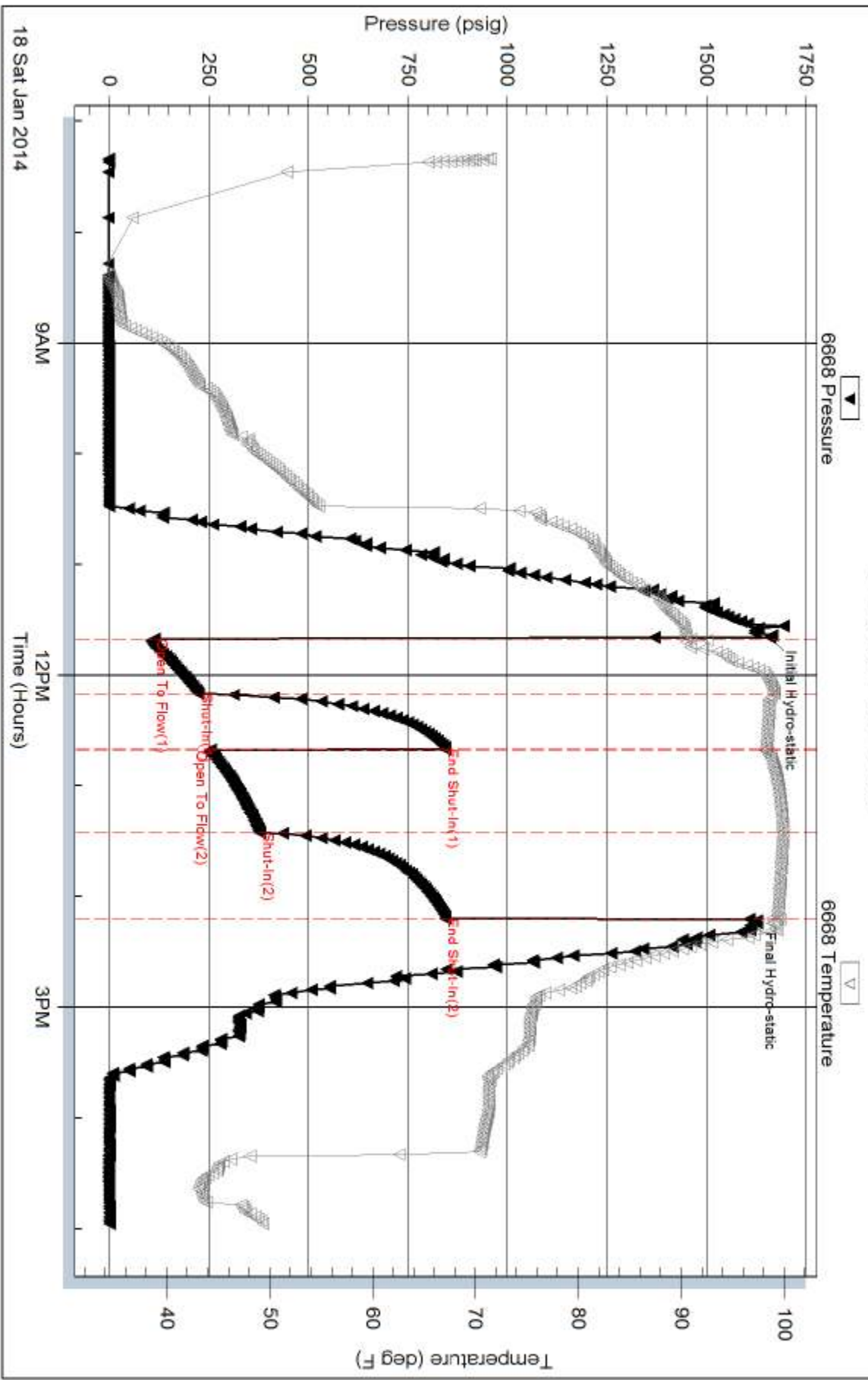
Inside

American Warrior Inc

Grub Unit #2-5

DST Test Number: 1

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 56176

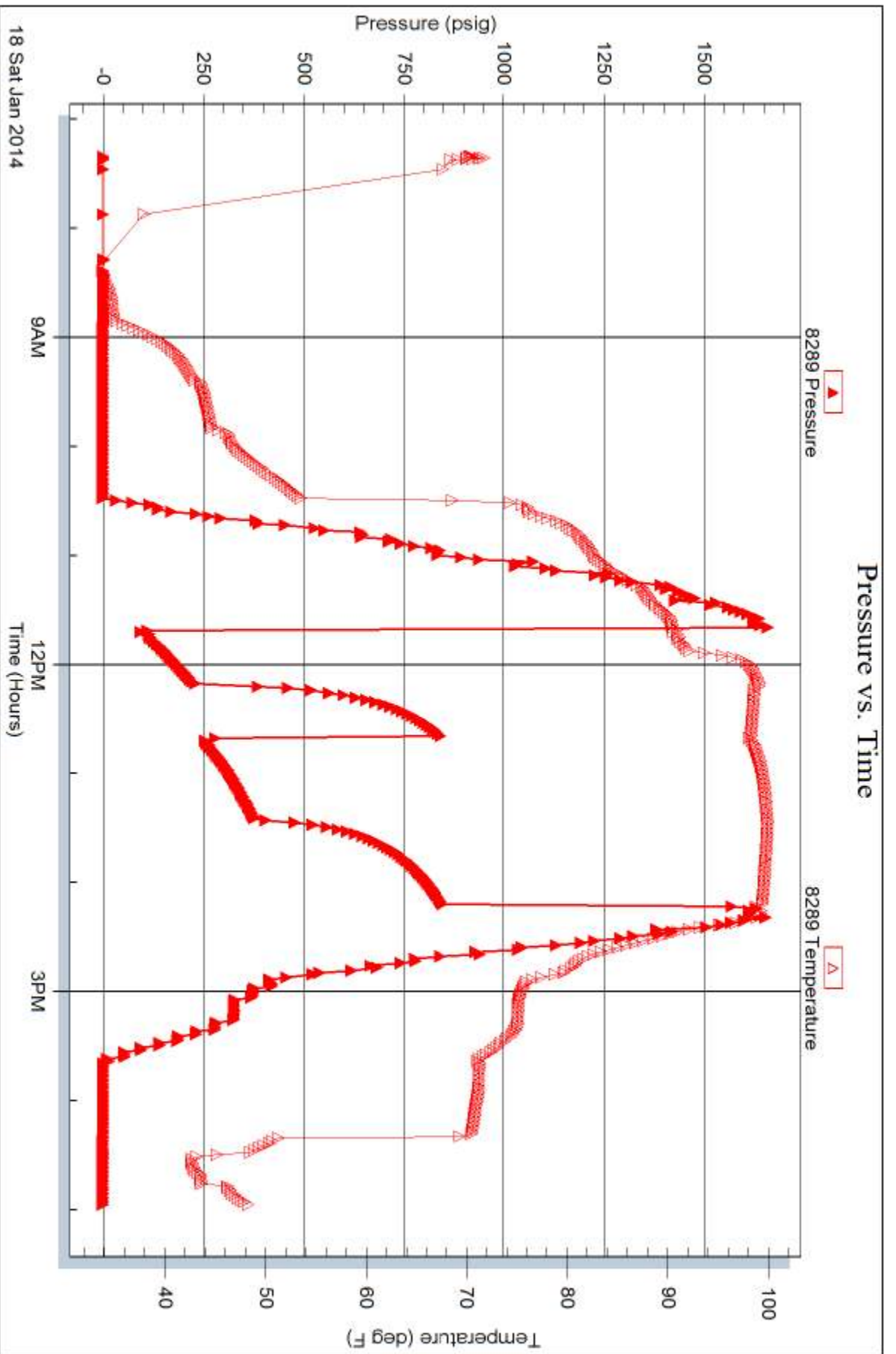
Printed: 2014.01.22 @ 09:16:12

Serial #: 8289

Outside American Warrior Inc

Grub Unit #2-5

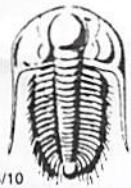
DST Test Number: 1



Tribble Testing, Inc

Ref. No: 56176

Printed: 2014.01.22 @ 09:16:12



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 56176

Well Name & No. GRUB 2-5 Test No. 1 Date 01/18/2014  
 Company AMERICAN WARRIOR Elevation 1843 KB 1835 GL  
 Address 3118 Cummins Rd Garden City, KS 67845  
 Co. Rep / Geo. Wyatt Urban Rig Duke  
 Location: Sec. 5 Twp. 16 Rge. 10 W Co. Ellsworth State KS

Interval Tested 3272 - 3317 Zone Tested Arbuckle  
 Anchor Length 45' Drill Pipe Run 3254 Mud Wt. 9.1  
 Top Packer Depth 3268 Drill Collars Run 0 Vis 55  
 Bottom Packer Depth 3272 Wt. Pipe Run 0 WL 7.2  
 Total Depth 3317 Chlorides 4800 ppm System LCM 0

Blow Description IFP-30-BOB IN 7min  
ISI-30-DEAD NO BLOW BACK  
FF-45-BOB IN 2.5 min  
FSI-45-DEAD NO BLOW BACK

Rec	Feet of	%gas	%oil	%water	%mud
<u>660</u>	<u><del>BOB</del> GOCM</u>	<u>40</u>	<u>40</u>	<u>10</u>	<u>10</u>
<u>250</u>	<u>WCM</u>			<u>90</u>	<u>10</u>
<u>0</u>	<u>40 ft GIP</u>				

Rec Total 910 BHT 99 Gravity — API RW .7 @ 47 °F Chlorides 14,000 ppm

(A) Initial Hydrostatic 1658  Test 1150 T-On Location 0700  
 (B) First Initial Flow 112  Jars 250 T-Started 0720  
 (C) First Final Flow 224  Safety Joint 75 T-Open 1140  
 (D) Initial Shut-In 843  Circ Sub \_\_\_\_\_ T-Pulled 1410  
 (E) Second Initial Flow 251  Hourly Standby \_\_\_\_\_ T-Out 1658  
 (F) Second Final Flow 377  Mileage 124 R/T 192.20 Comments Loaded tool  
 (G) Final Shut-In 843  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1607  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 45  Day Standby \_\_\_\_\_ Total 1667.20  
 Final Shut-In 45  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1667.20

Approved By \_\_\_\_\_ Our Representative Jim Phillips

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