

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Recompletion Date _____ Date Reached TD _____ Completion Date or Recompletion Date _____

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Jaspar Co.
Well Name	COLE 1
Doc ID	1482004

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
			CIBP Cast Iron Bridge Plug	3432	
1	3328	3329			300 GAL 20% MUD ACID
1	3364				150 GAL 20% MUD ACID
1	3374	3375			300 GAL 20% MUD ACID
1	3457	3458			250 GAL 20% MUD ACID
1	3278	3279			750 GAL 20% NE

Form	ACO1 - Well Completion
Operator	Jaspar Co.
Well Name	COLE 1
Doc ID	1482004

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	220	COMMON	120	80/20 3%CC, 2% GEL
Surface	12.25	8.625	23	220	POZ	30	
Production	7.875	5.5	15.5	3536	COMMON	150	10%SALT, 5%GIL, 750#KOL SEAL,500 GAL MUDCLR
Production	7.875	5.5	15.5	1665	80/20 QMDC	215	#1/4 FLO

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

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

No. 1735

Date	11-2-19	Sec.	1	Twp.	6	Range	20	County	Rooks	State	KS	On Location		Finish	145 AM.
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Location **Stockton - 9N to A Rd, 13 W to S Rd, 3/10th**

Lease	Cole	Well No.	1	Owner	J. E + S to well 1/2 miles on leased
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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	Flex Drilling	Type Job	Surface
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Hole Size	12 1/4"	T.D.	220'	Charge To	Jaspar Company
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Csg.	8 5/8"	Depth	220'	Street	
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Tbg. Size		Depth		City		State	
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Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.		
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Cement Left in Csg.	15'	Shoe Joint	15'	Cement Amount Ordered	150 80/20 3% CC 2% Gel
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Meas Line		Displace	13 BLS
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EQUIPMENT

Pumptrk	5	No.		Cementer	Tom	Helper		Common	120
Bulktrk	15	No.		Driver	Lance	Driver		Poz. Mix	30
Bulktrk	p.u.	No.		Driver	Rick	Driver		Gel.	3
								Calcium	6

JOB SERVICES & REMARKS

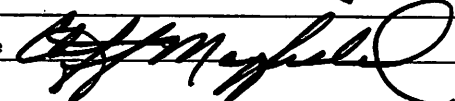
Remarks:	Cement did Circulate	Hulls	
Rat Hole		Salt	
Mouse Hole		Flowseal	
Centralizers		Kol-Seal	
Baskets		Mud CLR 48	
D/V or Port Collar		CFL-117 or CD110 CAF 38	
		Sand	
		Handling	159
		Mileage	

FLOAT EQUIPMENT

		Guide Shoe	
		Centralizer	
		Baskets	
		AFU Inserts	
		Float Shoe	
		Latch Down	

		Pumptrk Charge	Surface
		Mileage	60

		Tax	
		Discount	
		Total Charge	

X Signature 

GENERAL TERMS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

2. More specifically:

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

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



DRILL STEM TEST REPORT

Prepared For: **Jaspar Co**

PO Box 1120
Hays, KS 67601

ATTN: Cameron Brin

Cole #1

1-6s-20w Rooks,KS

Start Date: 2019.11.05 @ 14:45:03

End Date: 2019.11.05 @ 23:12:05

Job Ticket #: 66356 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.11.08 @ 08:21:52



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Cameron Brin

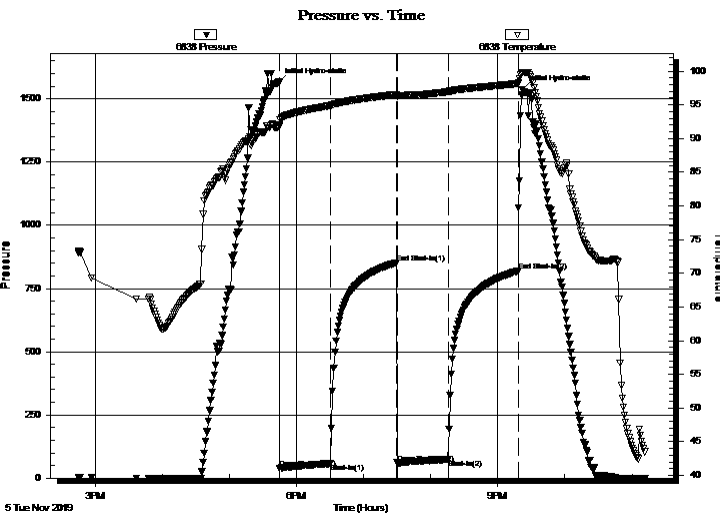
1-6s-20w Rooks,KS
Cole #1
 Job Ticket: 66356 **DST#: 1**
 Test Start: 2019.11.05 @ 14:45:03

GENERAL INFORMATION:

Formation: **Toronto - LKC "D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:44:50
 Time Test Ended: 23:12:05
 Interval: **3249.00 ft (KB) To 3357.00 ft (KB) (TVD)**
 Total Depth: 3357.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Spencer Staab
 Unit No: 84
 Reference Elevations: 2066.00 ft (KB)
 2060.00 ft (CF)
 KB to GR/CF: 6.00 ft

Serial #: 6838 **Inside**
 Press@RunDepth: 75.44 psig @ 3254.00 ft (KB) Capacity: psig
 Start Date: 2019.11.05 End Date: 2019.11.05 Last Calib.: 2019.11.05
 Start Time: 14:45:04 End Time: 23:12:05 Time On Btm: 2019.11.05 @ 17:43:50
 Time Off Btm:

TEST COMMENT: 45 IFP-Slid 8' Weak blow built to 1 1/2" died to 1"
 60 ISI-No blow back
 45 FFP- Weak blow built to 1 1/4"
 60 FSI-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1565.86	91.76	Initial Hydro-static
1	39.12	91.85	Open To Flow (1)
47	58.38	94.91	Shut-In(1)
106	851.96	96.49	End Shut-In(1)
106	60.01	96.28	Open To Flow (2)
152	75.44	96.94	Shut-In(2)
215	819.35	98.17	End Shut-In(2)
219	1536.39	99.75	Initial Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	VSOCM 1%O 99%M	1.75

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Jaspar Co
PO Box 1120
Hays, KS 67601
ATTN: Cameron Brin

1-6s-20w Rooks, KS
Cole #1
Job Ticket: 66356 **DST#: 1**
Test Start: 2019.11.05 @ 14:45:03

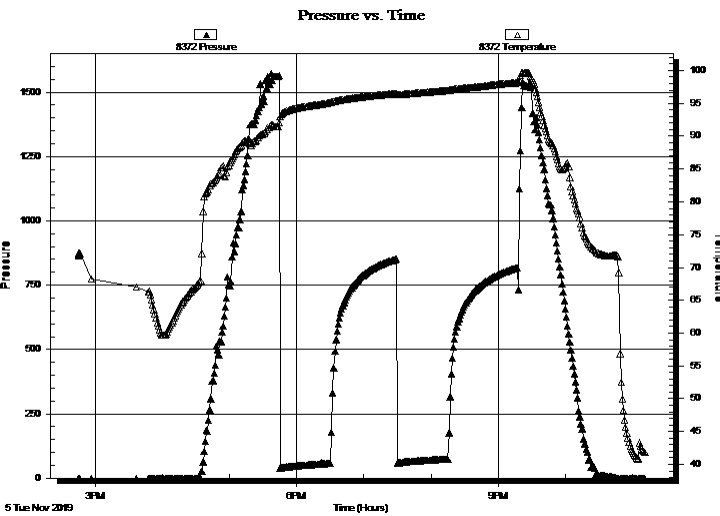
GENERAL INFORMATION:

Formation: **Toronto - LKC "D"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:44:50
Time Test Ended: 23:12:05
Interval: **3249.00 ft (KB) To 3357.00 ft (KB) (TVD)**
Total Depth: 3357.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 2066.00 ft (KB)
2060.00 ft (CF)
KB to GR/CF: 6.00 ft
Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer Staab
Unit No: 84

Serial #: 8372 Outside

Press@RunDepth: psig @ 3254.00 ft (KB) Capacity: psig
Start Date: 2019.11.05 End Date: 2019.11.05 Last Calib.: 2019.11.05
Start Time: 14:44:50 End Time: 23:11:51 Time On Btm:
Time Off Btm:

TEST COMMENT: 45 IFP-Slid 8" Weak blow built to 1 1/2" died to 1"
60 ISI-No blow back
45 FFP- Weak blow built to 1 1/4"
60 FSI-No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	VSOCM 1%O 99%M	1.75

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Jaspar Co
PO Box 1120
Hays, KS 67601

1-6s-20w Rooks,KS

Cole #1

Job Ticket: 66356

DST#: 1

ATTN: Cameron Brin

Test Start: 2019.11.05 @ 14:45:03

Tool Information

Drill Pipe:	Length: 3239.00 ft	Diameter: 3.88 inches	Volume: 47.37 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 115000.0 lb
			<u>Total Volume: 47.37 bbl</u>	Tool Chased 8.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3249.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	108.00 ft			
Tool Length:	135.00 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			3223.00	
Shut In Tool	5.00			3228.00	
Hydraulic tool	5.00			3233.00	
Gap Sub	4.00			3237.00	
Safety Joint	3.00			3240.00	
Packer	5.00			3245.00	27.00 Bottom Of Top Packer
Packer	4.00			3249.00	
Stubb	1.00			3250.00	
Perforations	3.00			3253.00	
Change Over Sub	1.00			3254.00	
Recorder	0.00	6838	Inside	3254.00	
Recorder	0.00	8372	Outside	3254.00	
Blank Spacing	96.00			3350.00	
Change Over Sub	1.00			3351.00	
Perforations	2.00			3353.00	
Bullnose	4.00			3357.00	108.00 Bottom Packers & Anchor
Total Tool Length:	135.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

1-6s-20w Rooks,KS

PO Box 1120
Hays, KS 67601

Cole #1

Job Ticket: 66356

DST#: 1

ATTN: Cameron Brin

Test Start: 2019.11.05 @ 14:45:03

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	VSOCM 1%O 99%M	1.755

Total Length: 120.00 ft Total Volume: 1.755 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

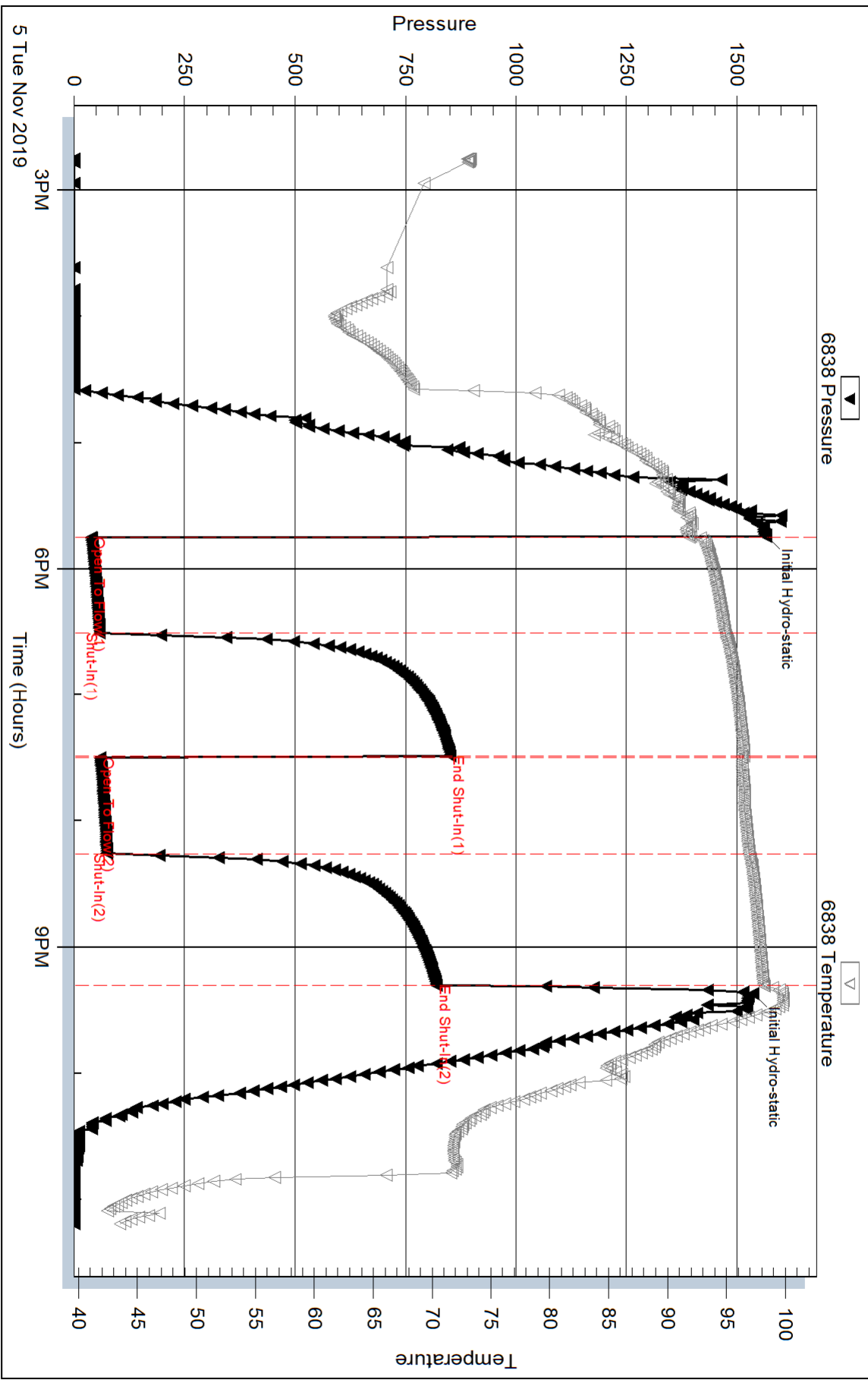
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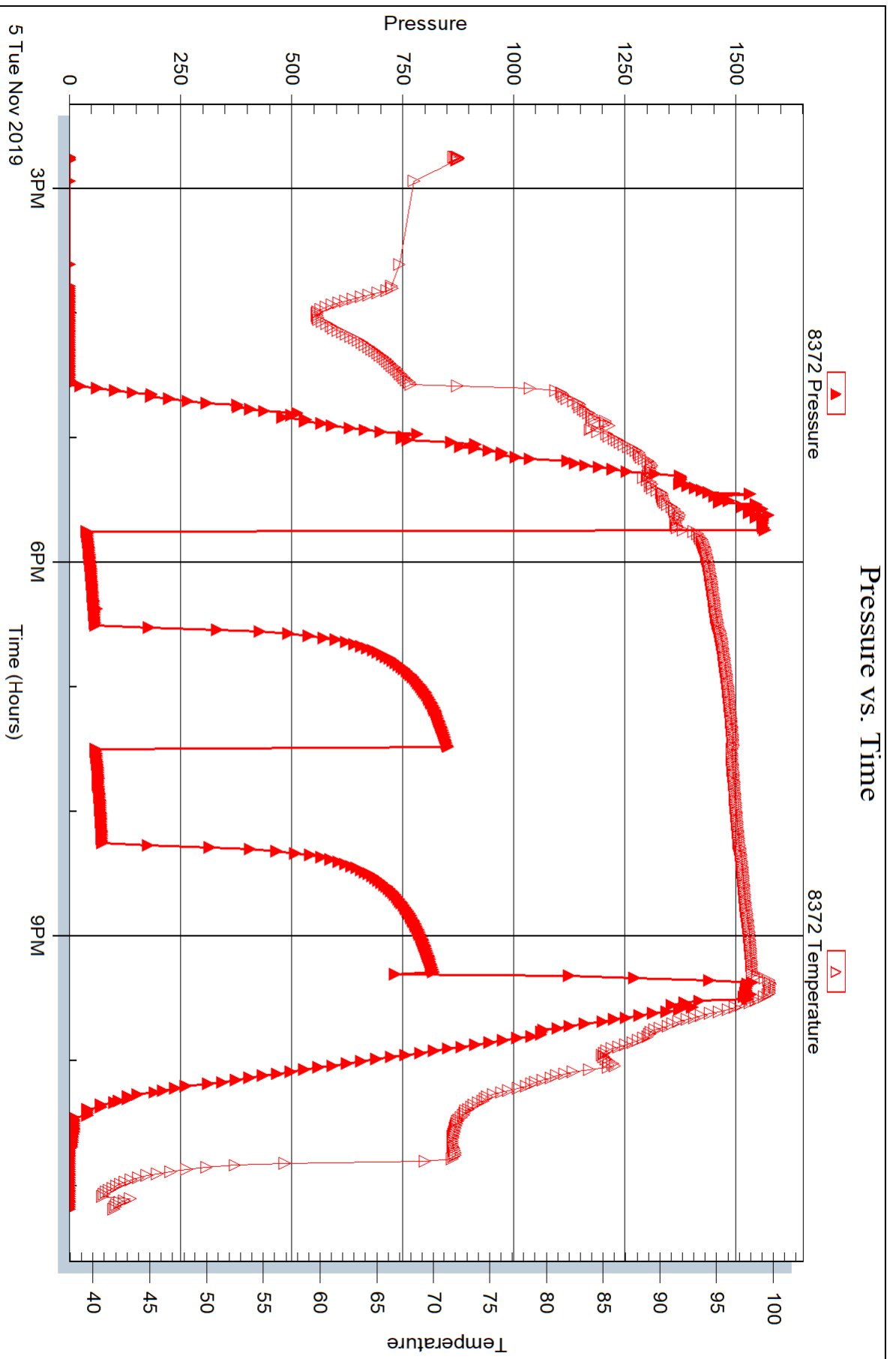
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Jaspar Co**

PO Box 1120
Hays, KS 67601

ATTN: Cameron Brin

Cole #1

1-6s-20w Rooks,KS

Start Date: 2019.11.06 @ 07:15:00

End Date: 2019.11.06 @ 13:02:02

Job Ticket #: 66357 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.11.08 @ 08:17:57

Jaspar Co
1-6s-20w Rooks,KS
Cole #1
DST # 2
LKC-E-F
2019.11.06



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Cameron Brin

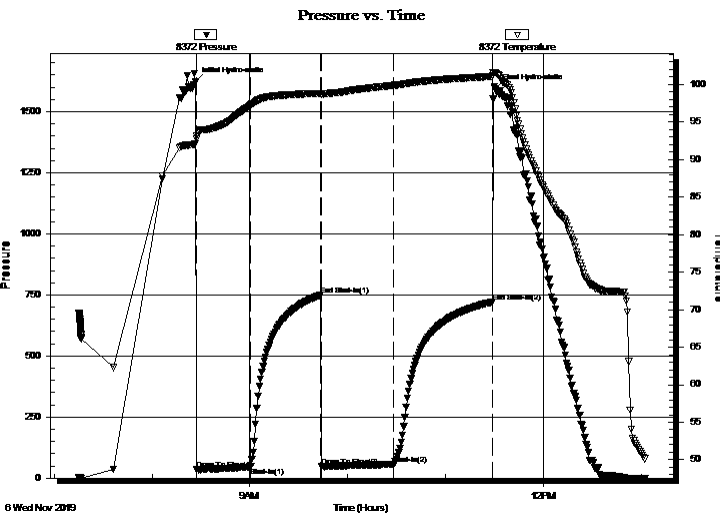
1-6s-20w Rooks,KS
Cole #1
 Job Ticket: 66357 **DST#: 2**
 Test Start: 2019.11.06 @ 07:15:00

GENERAL INFORMATION:

Formation: **LKC 'E-F'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:27:17
 Time Test Ended: 13:02:02
 Interval: **3355.00 ft (KB) To 3378.00 ft (KB) (TVD)**
 Total Depth: 3378.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Spencer J Staab
 Unit No: 84
 Reference Elevations: 2066.00 ft (KB)
 2060.00 ft (CF)
 KB to GR/CF: 6.00 ft

Serial #: 8372 **Outside**
 Press@RunDepth: 57.90 psig @ 3356.00 ft (KB) Capacity: psig
 Start Date: 2019.11.06 End Date: 2019.11.06 Last Calib.: 2019.11.06
 Start Time: 07:15:01 End Time: 13:02:02 Time On Btm: 2019.11.06 @ 08:26:47
 Time Off Btm: 2019.11.06 @ 11:30:17

TEST COMMENT: 30-IF-Weak; Built to 1"
 45-ISI-No Return
 45-FF-Weak; Built to 3"
 60-FSI-No Return



PRESSURE SUMMARY

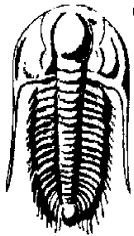
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1621.63	92.09	Initial Hydro-static
1	34.67	92.66	Open To Flow (1)
34	44.63	97.19	Shut-In(1)
77	748.97	98.77	End Shut-In(1)
77	48.92	98.68	Open To Flow (2)
122	57.90	99.84	Shut-In(2)
182	721.50	101.08	End Shut-In(2)
184	1595.13	101.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	SWCM w / oil spots 4%W 96%M	0.57
50.00	OCM 7%O 93%M	0.71
2.00	Clean Oil	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Jaspar Co
PO Box 1120
Hays, KS 67601
ATTN: Cameron Brin

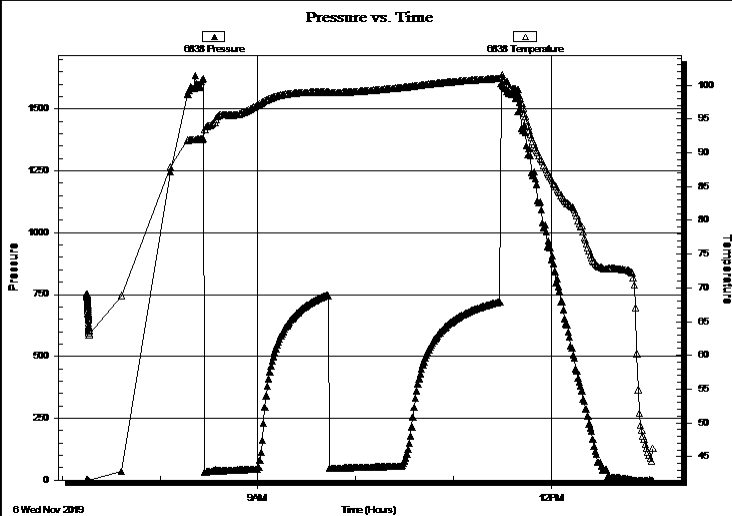
1-6s-20w Rooks,KS
Cole #1
Job Ticket: 66357 **DST#: 2**
Test Start: 2019.11.06 @ 07:15:00

GENERAL INFORMATION:

Formation: **LKC 'E-F'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:27:17
Time Test Ended: 13:02:02
Interval: **3355.00 ft (KB) To 3378.00 ft (KB) (TVD)**
Total Depth: 3378.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Reference Elevations: 2066.00 ft (KB)
2060.00 ft (CF)
KB to GR/CF: 6.00 ft
Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J Staab
Unit No: 84

Serial #: 6838 **Inside**
Press@RunDepth: psig @ 3356.00 ft (KB) Capacity: psig
Start Date: 2019.11.06 End Date: 2019.11.06 Last Calib.: 2019.11.06
Start Time: 07:15:01 End Time: 13:02:02 Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-Weak; Built to 1"
45-ISI-No Return
45-FF-Weak; Built to 3"
60-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	SWCM w / oil spots 4%W 96%M	0.57
50.00	OCM 7%O 93%M	0.71
2.00	Clean Oil	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Jaspar Co
PO Box 1120
Hays, KS 67601
ATTN: Cameron Brin

1-6s-20w Rooks,KS
Cole #1
Job Ticket: 66357 **DST#: 2**
Test Start: 2019.11.06 @ 07:15:00

Tool Information

Drill Pipe:	Length: 3334.00 ft	Diameter: 3.82 inches	Volume: 47.26 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	95000.00 lb
			<u>Total Volume:</u>	Tool Chased	ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	67000.00 lb
Depth to Top Packer:	3355.00 ft			Final	68000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	23.00 ft				
Tool Length:	51.00 ft				
Number of Packers:	1	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3328.00	
Shut In Tool	5.00			3333.00	
Hydraulic tool	5.00			3338.00	
Gap Sub	4.00			3342.00	
Safety Joint	3.00			3345.00	
Packer	5.00			3350.00	28.00 Bottom Of Top Packer
Packer	5.00			3355.00	
Stubb	1.00			3356.00	
Recorder	0.00	6838	Inside	3356.00	
Recorder	0.00	8372	Outside	3356.00	
Perforations	18.00			3374.00	
Bullnose	4.00			3378.00	23.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

1-6s-20w Rooks,KS

PO Box 1120
Hays, KS 67601

Cole #1

Job Ticket: 66357

DST#: 2

ATTN: Cameron Brin

Test Start: 2019.11.06 @ 07:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
40.00	SWCM w / oil spots 4%W 96%M	0.567
50.00	OCM 7%O 93%M	0.709
2.00	Clean Oil	0.028

Total Length: 92.00 ft

Total Volume: 1.304 bbl

Num Fluid Samples: 0

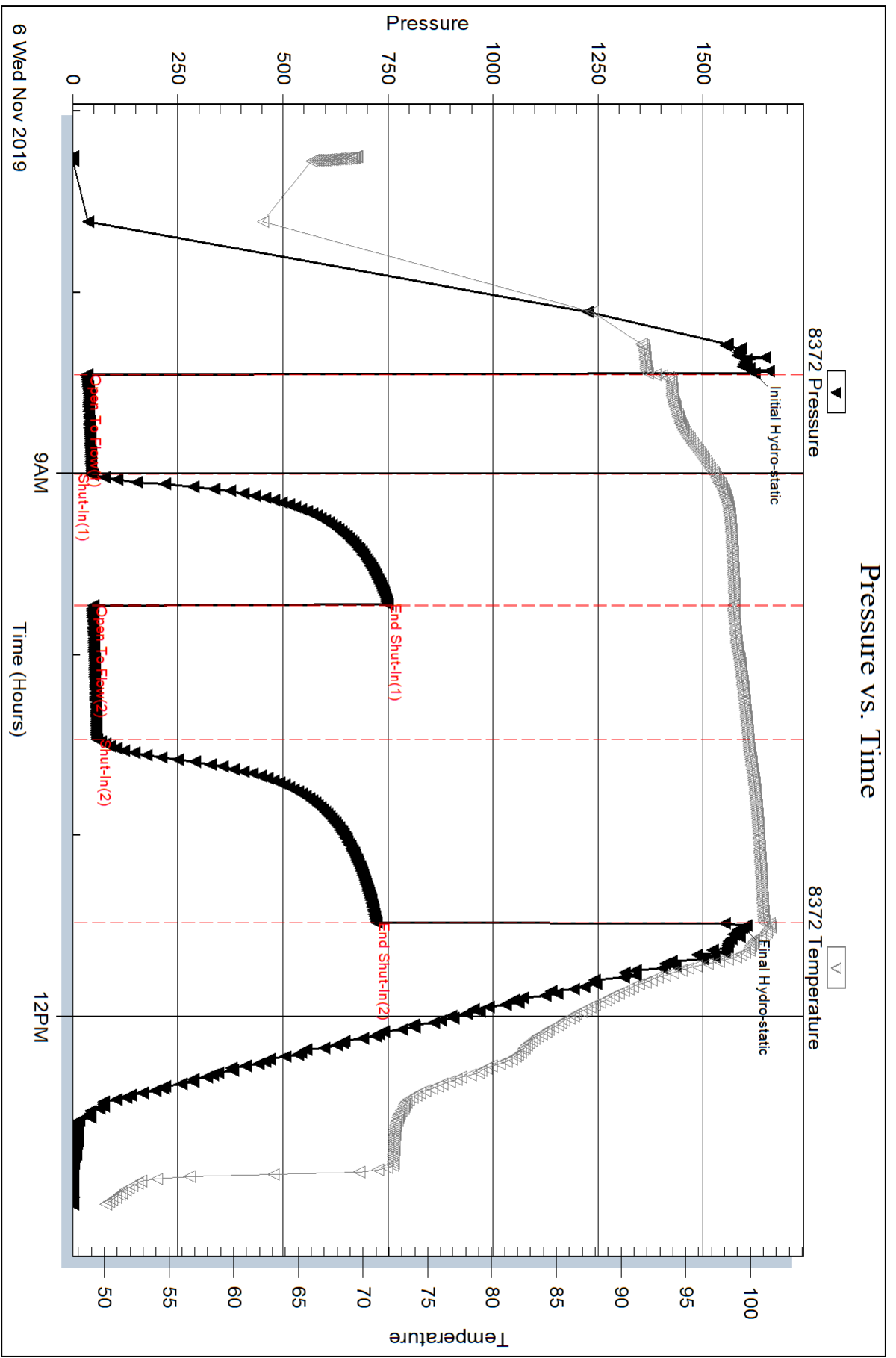
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2#LCM

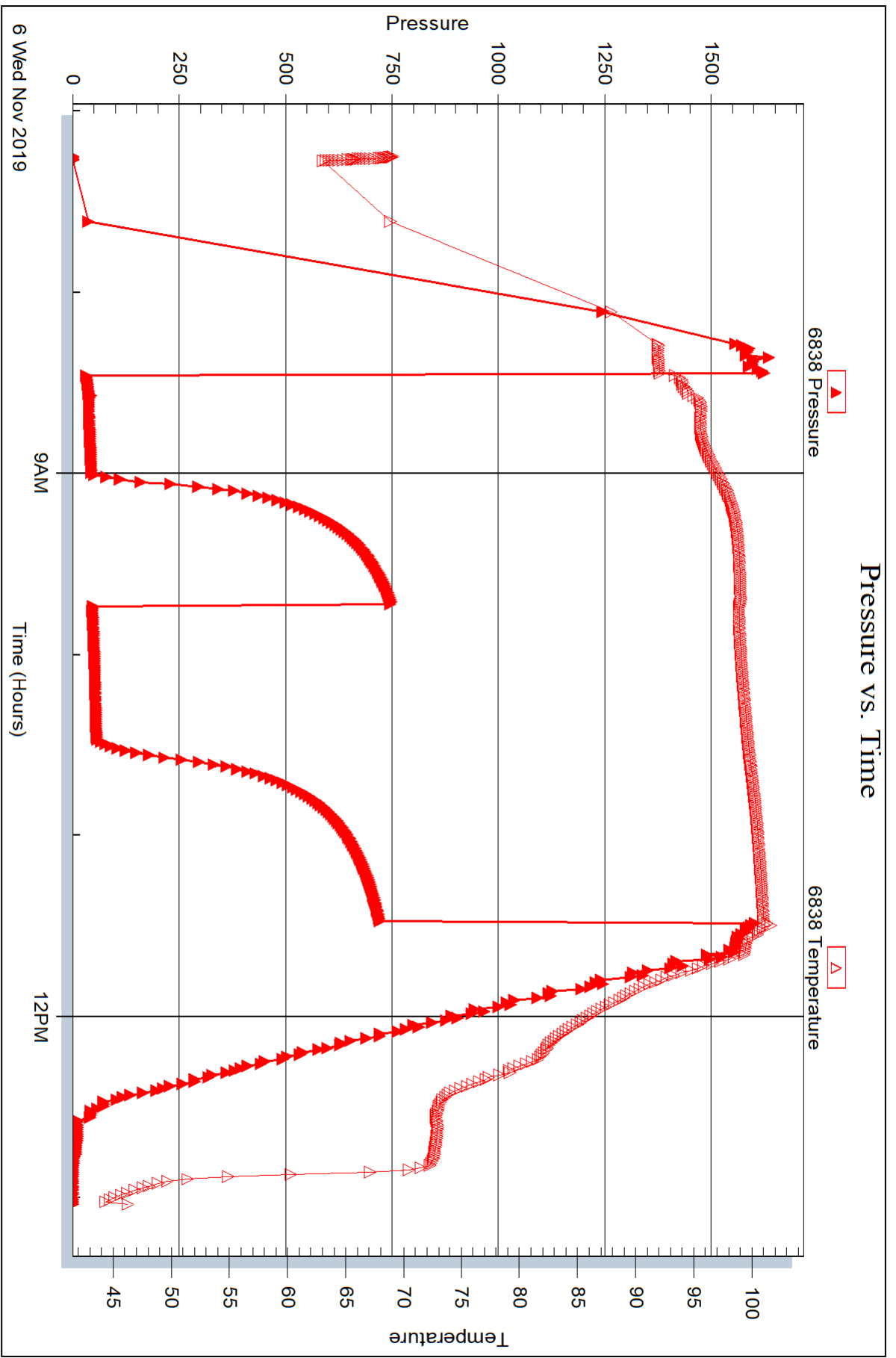


Serial #: 6838

Inside Jasper Co

Cole #1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Jaspar Co**

PO Box 1120
Hays, KS 67601

ATTN: Cameron Brin

Cole #1

1-6s-20w Rooks,KS

Start Date: 2019.11.07 @ 02:35:00

End Date: 2019.11.07 @ 08:28:02

Job Ticket #: 66358 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.11.08 @ 08:17:25

Jaspar Co
1-6s-20w Rooks,KS
Cole #1
DST # 3
LKC '1-'
2019.11.07



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Cameron Brin

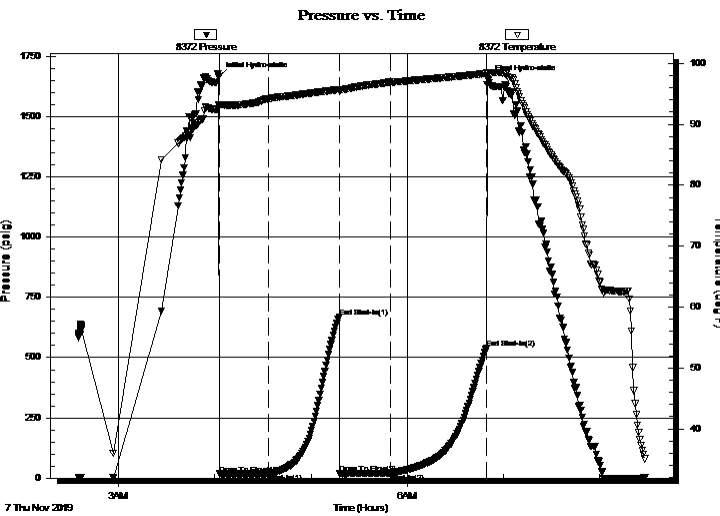
1-6s-20w Rooks,KS
Cole #1
 Job Ticket: 66358 **DST#: 3**
 Test Start: 2019.11.07 @ 02:35:00

GENERAL INFORMATION:

Formation: **LKC 'I-J'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:03:02
 Time Test Ended: 08:28:02
Interval: 3430.00 ft (KB) To 3467.00 ft (KB) (TVD)
 Total Depth: 3378.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Spencer J Staab
 Unit No: 84
 Reference Elevations: 2066.00 ft (KB)
 2060.00 ft (CF)
 KB to GR/CF: 6.00 ft

Serial #: 8372 Outside
 Press@RunDepth: 20.73 psig @ 3431.00 ft (KB) Capacity: psig
 Start Date: 2019.11.07 End Date: 2019.11.07 Last Calib.: 2019.11.07
 Start Time: 02:35:01 End Time: 08:28:02 Time On Btm: 2019.11.07 @ 04:02:32
 Time Off Btm: 2019.11.07 @ 06:50:17

TEST COMMENT: 30-IF-Weak; Built to 1/4"; Died back to Surface
 45-ISI-No Return
 30-FF-Weak Surface; Died 2 mins in
 60-FSI-No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1667.15	93.13	Initial Hydro-static
1	16.96	93.17	Open To Flow (1)
31	17.95	94.15	Shut-In(1)
75	668.25	95.68	End Shut-In(1)
76	19.90	95.56	Open To Flow (2)
107	20.73	96.96	Shut-In(2)
167	540.22	98.35	End Shut-In(2)
168	1653.56	98.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
9.00	OCM 10%O 90%M	0.13
1.00	Clean Oil 100%O	0.01

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Jaspar Co
PO Box 1120
Hays, KS 67601
ATTN: Cameron Brin

1-6s-20w Rooks,KS
Cole #1
Job Ticket: 66358 **DST#: 3**
Test Start: 2019.11.07 @ 02:35:00

GENERAL INFORMATION:

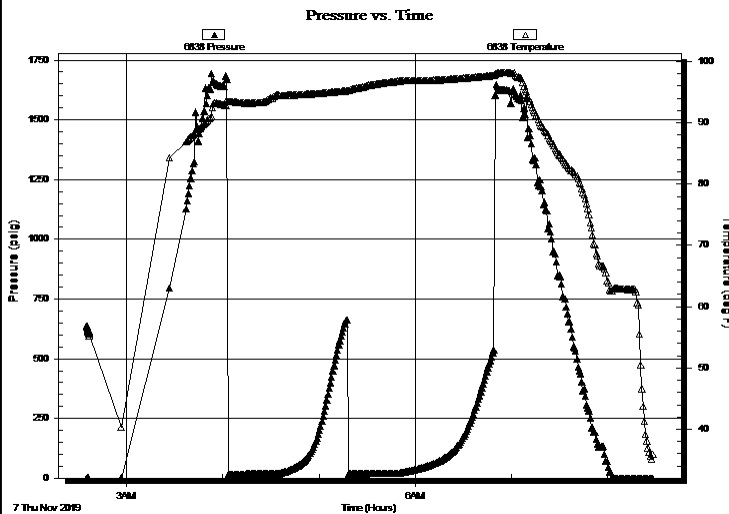
Formation: LKC 'I-J'		Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock: ft (KB)		Tester: Spencer J Staab
Time Tool Opened: 04:03:02		Unit No: 84
Time Test Ended: 08:28:02		Reference Elevations: 2066.00 ft (KB) 2060.00 ft (CF)
Interval: 3430.00 ft (KB) To 3467.00 ft (KB) (TVD)		KB to GR/CF: 6.00 ft
Total Depth: 3378.00 ft (KB) (TVD)		
Hole Diameter: 7.88 inches Hole Condition: Poor		

Serial #: 6838

Inside

Press@RunDepth: psig @ 3431.00 ft (KB)	Capacity:	psig
Start Date: 2019.11.07	End Date: 2019.11.07	Last Calib.: 2019.11.07
Start Time: 02:35:01	End Time: 08:28:02	Time On Btm:
		Time Off Btm:

TEST COMMENT: 30-IF-Weak; Built to 1/4"; Died back to Surface
45-ISI-No Return
30-FF-Weak Surface; Died 2 mins in
60-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
9.00	OCM 10%O 90%M	0.13
1.00	Clean Oil 100%O	0.01

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Jaspar Co
PO Box 1120
Hays, KS 67601
ATTN: Cameron Brin

1-6s-20w Rooks,KS
Cole #1
Job Ticket: 66358 **DST#: 3**
Test Start: 2019.11.07 @ 02:35:00

Tool Information

Drill Pipe:	Length: 3430.00 ft	Diameter: 3.82 inches	Volume: 48.62 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	88000.00 lb
			<u>Total Volume:</u>	Tool Chased	ft
				String Weight: Initial	68000.00 lb
Drill Pipe Above KB:	28.00 ft			Final	68000.00 lb
Depth to Top Packer:	3430.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	37.00 ft				
Tool Length:	65.00 ft				
Number of Packers:	1	Diameter: 6.75 inches			

Tool Comments:

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

Shut In Tool	5.00			3407.00	
Hydraulic tool	5.00			3412.00	
Gap Sub	4.00			3416.00	
Safety Joint	3.00			3419.00	
Change Over Sub	1.00			3420.00	
Packer	5.00			3425.00	28.00 Bottom Of Top Packer
Packer	5.00			3430.00	
Stubb	1.00			3431.00	
Recorder	0.00	6838	Inside	3431.00	
Recorder	0.00	8372	Outside	3431.00	
Perforations	32.00			3463.00	
Bullnose	4.00			3467.00	37.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co
PO Box 1120
Hays, KS 67601
ATTN: Cameron Brin

1-6s-20w Rooks,KS
Cole #1
Job Ticket: 66358 **DST#: 3**
Test Start: 2019.11.07 @ 02:35:00

Mud and Cushion Information

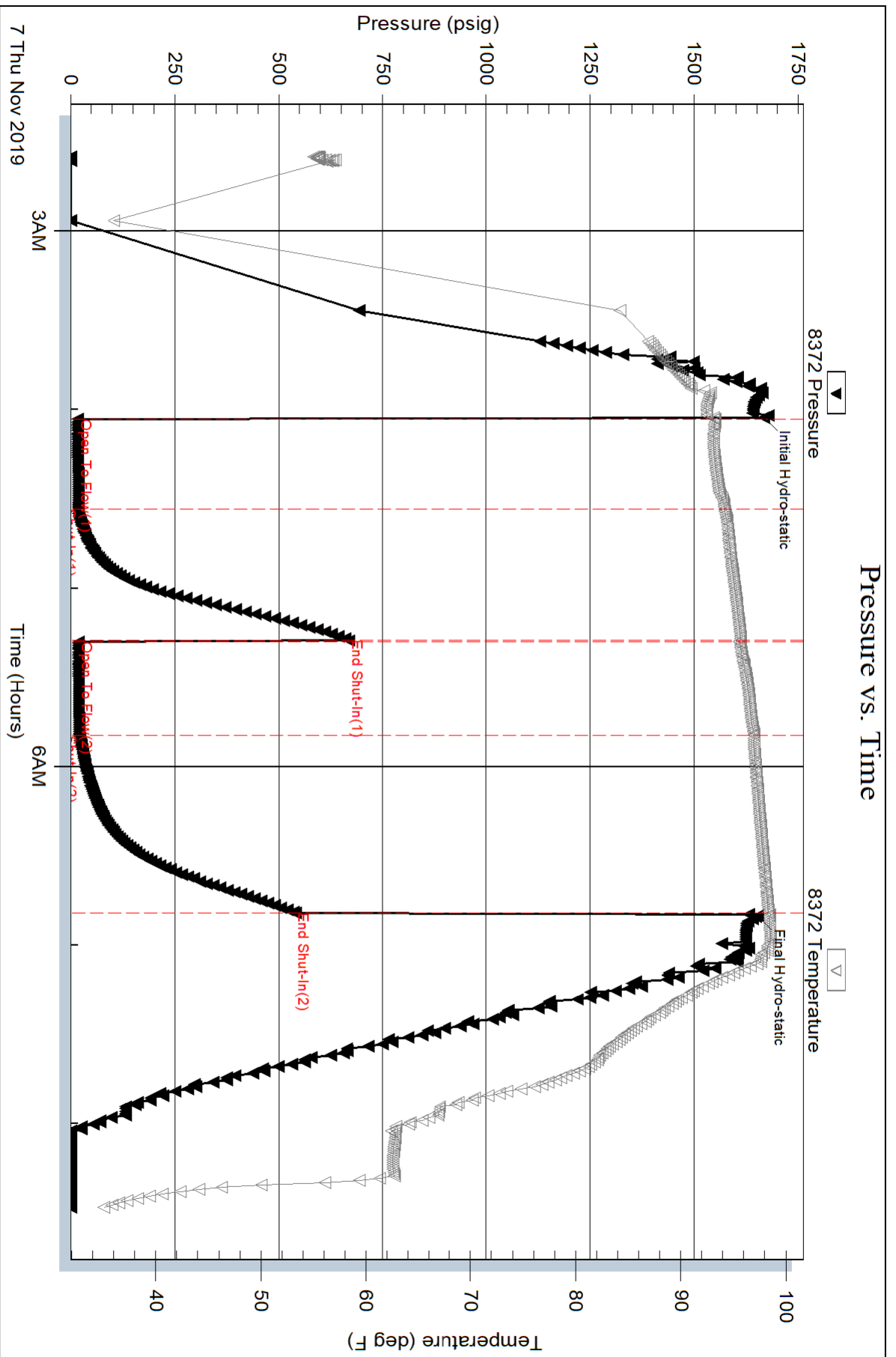
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.39 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
9.00	OCM 10%O 90%M	0.128
1.00	Clean Oil 100%O	0.014

Total Length: 10.00 ft Total Volume: 0.142 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: 2#LCM



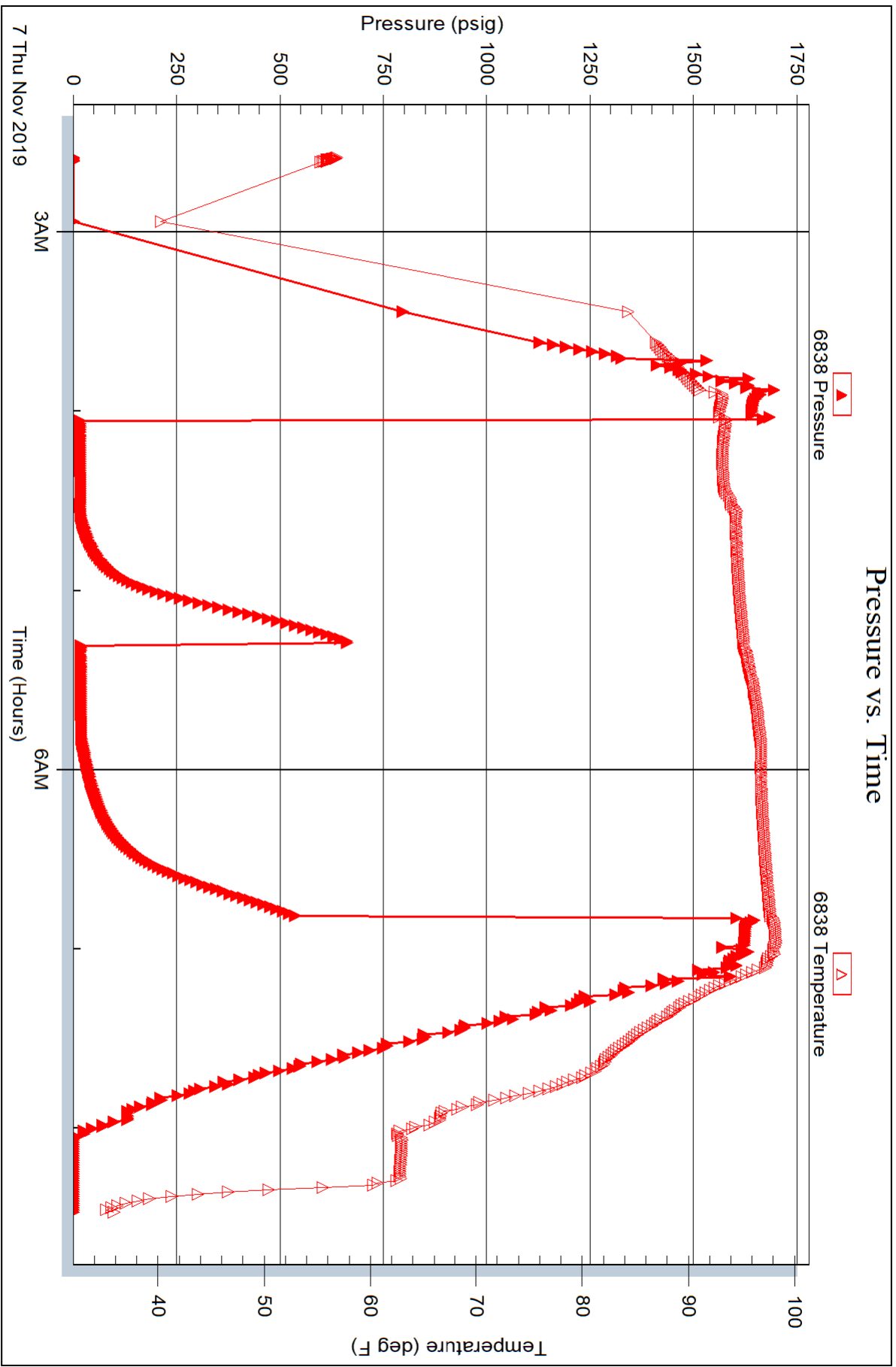
Serial #: 6838

Inside

Jaspar Co

Cole #1

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 66356

NO.

Well Name & No. Cole #1 Test No. 1 Date 11/5/2019
 Company Jaspan Co Elevation 2066' KB 2066' GL
 Address PO Box 1120 Hays Ms 67601 +1120
 Co. Rep / Geo. Cameron Brim Rig Flex #1
 Location: Sec. 1 Twp 6S Rge. 20W Co. Rooks State KS

Interval Tested 3249' - 3357' Zone Tested Toronto - JKC 'D'
 Anchor Length 108' Drill Pipe Run 3239' Mud Wt. 8.7
 Top Packer Depth 3244' Drill Collars Run - Vis 52
 Bottom Packer Depth 3249' Wt. Pipe Run - WL 8.0
 Total Depth 3357' Chlorides 1000 ppm System LCM 2#

Blow Description J7 Slid 8ft; Weak Blow Built to 1 1/2"; Dnd back to 1"
JSD - No Return
F7 Weak; Built to 1 1/4"
FSD - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>120'</u>	<u>VSOXM</u>	<u>1</u>		<u>99</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 120' BHT 98° Gravity - API RW - @ - °F Chlorides - ppm
 (A) Initial Hydrostatic 1566 Test 1200 T-On Location 13:30
 (B) First Initial Flow 39 Jars _____ T-Started 14:18
 (C) First Final Flow 58 Safety Joint _____ T-Open ~~15:45~~ 17:15
 (D) Initial Shut-In 851 Circ Sub _____ T-Pulled 20:45
 (E) Second Initial Flow 59 Hourly Standby X1 T-Out 22:43
 (F) Second Final Flow 73 Mileage 13427 134 Comments _____
 (G) Final Shut-In 819 Sampler _____
 (H) Final Hydrostatic 1537 Straddle _____ EM Tool 350 first successful
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 45
 Initial Shut-In 60
 Final Flow 45
 Final Shut-In 60
 Sub Total 1334
 Total 1334
 MP/DST Disc't _____

Approved By _____ Our Representative Spencer J. Shook Thanks!
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

785-259-0056



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 66357

NO.

Well Name & No. Cole #1 Test No. 2 Date 11/6/2019
 Company Jasper Co Elevation 2066 KB 2060 GL
 Address PO Box 1120 Hays KS 67601 + 1120
 Co. Rep / Geo. Cameron Brim Rig Flex #1
 Location: Sec. 1 Twp 6S Rge. 20W Co. Hooks State KS

Interval Tested 3355' - 3378' Zone Tested LHC 'E+7'
 Anchor Length 23' Drill Pipe Run 3334' Mud Wt. 8.8
 Top Packer Depth 3350' Drill Collars Run - Vis 54
 Bottom Packer Depth 3355' Wt. Pipe Run - WL 8.4
 Total Depth 3378' Chlorides 1000 ppm System LCM 2#

Blow Description D7- Weak; Built to 1"
DSD - No Return
F7- Weak; Built to 3"
FSD - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>40'</u>	<u>SWCM w/oil spots</u>		<u>4</u>	<u>96</u>	
<u>50'</u>	<u>OCM</u>		<u>7</u>	<u>93</u>	
<u>2'</u>	<u>Clean Oil</u>	<u>100</u>			

Rec Total 92' BHT 101° Gravity 38 API RW - @ - °F Chlorides - ppm
 (A) Initial Hydrostatic 1621 Test 1200 T-On Location 06:55
 (B) First Initial Flow 34 Jars _____ T-Started 07:15
 (C) First Final Flow 44 Safety Joint _____ T-Open 08:28
 (D) Initial Shut-In 748 Circ Sub _____ T-Pulled 11:28
 (E) Second Initial Flow 48 Hourly Standby _____ T-Out 13:02
 (F) Second Final Flow 57 Mileage 134 Comments _____
 (G) Final Shut-In 721 Sampler _____
 (H) Final Hydrostatic 1595 Straddle _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 45 Extra Packer _____
 Final Flow 45 Extra Recorder _____
 Final Shut-In 60 Day Standby _____
 Sub Total 1334 Accessibility _____
 Sub Total 1334 EM Tool 350
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 350
 Total 1684
 MP/DST Disc't _____

Approved By _____ Our Representative Spencer Steal Thanks!
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

785-259-0056



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 66358

NO.

Well Name & No. Cole #1 Test No. 3 Date 11/7/2019
 Company Jasper Co Elevation 2066 KB 2066 GL
 Address PO Box 120 Hays Mo 67601+1120
 Co. Rep / Geo. Cameron Brim Rig Flex
 Location: Sec. 1 Twp 6S Rge. 20W Co. Rooks State Mo

Interval Tested 3430'-3467' Zone Tested LHC 'd + j'
 Anchor Length 37' Drill Pipe Run 3430' Mud Wt. 8.8
 Top Packer Depth 3425' Drill Collars Run - Vis 54
 Bottom Packer Depth 3430' Wt. Pipe Run - WL 8.4
 Total Depth 3467' Chlorides 1000 ppm System LCM 27

Blow Description 77- Weak; Built to '4"; Died to Surface
7SD - No Return
77- Weak Surface; Died 2min in
7SD - No Return

Rec	Feet of	%gas	%oil	%water	%mud
9'	OCM	10		90	
1'	Clean Oil	100			

Rec Total 10' BHT 99° Gravity - API RW - @ - °F Chlorides - ppm
 (A) Initial Hydrostatic 1667 Test 1200 T-On Location 02:04
 (B) First Initial Flow 16 Jars - T-Started 02:35
 (C) First Final Flow 17 Safety Joint - T-Open 03:59
 (D) Initial Shut-In 668 Circ Sub - T-Pulled 06:44
 (E) Second Initial Flow 19 Hourly Standby - T-Out 08:25
 (F) Second Final Flow 20 Mileage 134+134 Comments Loaded tools
 (G) Final Shut-In 540 Sampler - @ 2:00 11/8/2019
 (H) Final Hydrostatic 1653 Straddle -

Initial Open 30 Shale Packer - EM Tool -
 Initial Shut-In 45 Extra Packer - Ruined Shale Packer -
 Final Flow 30 Extra Recorder - Ruined Packer -
 Final Shut-In 60 Day Standby - Extra Copies -
 Sub Total 0
 Total 1468
 Sub Total 1468

Approved By _____ Our Representative Spencer J. Stead Thanks!
 TriLOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

785-259-0758

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071

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

No. 1612

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
11-8-2019	1	6	20	ROOK'S	KANSAS		5:00 PM.

Location STOCKTON 9N 13W 1/2S 1E & S INTO

Lease <u>Cole</u>	Well No. <u>#1</u>	Owner
Contractor <u>Flex DRG. Rig #1 "Cliff M."</u>		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 <u>PRODUCTION STRING</u>		

Hole Size <u>7 7/8</u>	T.D. <u>3536'</u>	Charge To <u>JASPAR Co.</u>
Csg. <u>5 1/2 15.50#</u>	Depth <u>3534'</u>	Street

Tbg. Size	Depth	City	State
Tool <u>LATCH DOWN</u>	Depth <u>3512' 23</u>		

Cement Left in Csg. <u>21'</u>	Shoe Joint <u>21'</u>	Cement Amount Ordered <u>150 SK. Com. 10% SALT 5% GILSA</u>
Meas Line <u>83.6' / BBL</u>	Displace <u>83.6' / BBL</u>	

EQUIPMENT

Pumptrk # <u>20</u>	No.	Cementer	<u>Glenn G.</u>	Common <u>130</u>
		Helper	<u>Tony P.</u>	Poz. Mix
Bulktrk # <u>9</u>	No.	Driver	<u>Mike P.</u>	Gel.
		Driver		Calcium

JOB SERVICES & REMARKS

Remarks: <u>JOINTS 84, 86, 89, OUT.</u>	Hulls
Rat Hole <u>30 SX</u>	Salt <u>13</u>
Mouse Hole <u>15 SX</u>	Flowseal
Centralizers <u>1, 3, 5, 9, 44, 46, 51</u>	Kol-Seal <u>750#</u>
Baskets <u>2, 6, 46, 52, 41</u>	Mud CLR 48 <u>500 GAL</u>
DN or Port Collar <u>1670. - Joint # 45 collar</u>	CFL-117 or CD110 CAF 38
	Sand
	Handling <u>170</u>
	Mileage

FLOAT EQUIPMENT

Received Circulation, CIRC ON BOTTOM FOR <u>3/4 HR.</u>	Guide Shoe
Pump MUD CLR 48, Plug Rat-mouse hole	Centralizer - <u>7</u>
Cement Down Hole w/ 105 SX Cent.	Baskets - <u>4</u>
Clear-Line Release LATCH DN.	AFU Inserts
Plug. & Displaced a TOTAL OF <u>83 3/4 BBL H₂O</u>	Float Shoe - <u>1</u>
HAD <u>650# LIFT #</u>	Latch Down - <u>1</u>
LAND Plug @ <u>1500#</u>	PORT COLLAR - <u>1</u>

Release Pressure & AFU - Plug (HELD) <u>1</u>	Pumptrk Charge <u>prod string</u>
<u>THANKS!</u>	Mileage <u>60</u>

X Signature <u>Shane Velje</u>	Tax
	Discount
	Total Charge

GENERAL TERMS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

2. More specifically:

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

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



Scale 1:240 Imperial

Well Name: COLE #1
Surface Location: SW SW SW, Sec. 1- T6S- R20W
Bottom Location:
API: 15-163-24404
License Number: 34903
Spud Date: 11/1/2019 Time: 5:45 PM
Region: ROOKS COUNTY
Drilling Completed: 11/7/2019 Time: 3:40 PM
Surface Coordinates: 330' FSL & 330' FWL
Bottom Hole Coordinates:
Ground Elevation: 2060.00ft
K.B. Elevation: 2066.00ft
Logged Interval: 3000.00ft To: 3536.00ft
Total Depth: 3536.00ft
Formation: REAGAN SAND/ LKC
Drilling Fluid Type: CHEMICAL

OPERATOR

Company: JASPAR CO. INC
Address: P.O. BOX 1120

Contact Geologist: SHANE VEHIGE
Contact Phone Nbr: (785) 632-6982
Well Name: COLE #1
Location: SW SW SW, Sec. 1- T6S- R20W
API: 15-163-24404
Pool: Field: WILDCAT
State: KS Country:

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: -99.50771
Latitude: 39.55437
N/S Co-ord: 330' FSL
E/W Co-ord: 330' FWL

LOGGED BY

Company:
Address: 2717 HICKORY
HAYS, KS 67601
Phone Nbr: (785) 639-0721
Logged By: Geologist Name: CAMERON BRIN

CONTRACTOR

Contractor: FLEX DRILLING INC.
Rig #: 1
Rig Type: MUD ROTARY
Spud Date: 11/1/2019 Time: 5:45 PM
TD Date: 11/7/2019 Time: 3:40 PM
Rig Release: 11/8/2019 Time: 6:00 PM


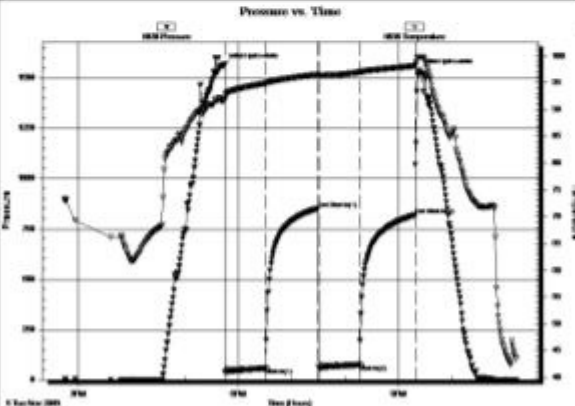
ELEVATIONS

K.B. Elevation: 2066.00ft Ground Elevation: 2060.00ft
K.B. to Ground: 6.00ft


NOTES

AFTER REVIEWING THE LOGS AND STRUCTURAL COMPARISON TO NEARBY WELLS, DESCISION WAS MADE TO RUN 5 1/2" PRODUCTION CASING FURTHER EVALUATE THE COLE #1 WELL.

DST #1 TORONTO- LKC D

	DRILL STEM TEST REPORT																																						
	Jasper Co PO Box 1120 Hays, KS 67601 ATTN: Cameron Brin	1-6s-20w Rooks,KS Cole #1 Job Ticket: 66356 DST#: 1 Test Start: 2019.11.05 @ 14:45:03																																					
GENERAL INFORMATION:																																							
Formation: Toronto - LKC "D" Deviated: No Whipstock: ft (KB) Time Tool Opened: 17:44:50 Time Test Ended: 23:12:05		Test Type: Conventional Bottom Hole (Initial) Tester: Spencer Staab Unit No: 84																																					
Interval: 3249.00 ft (KB) To 3357.00 ft (KB) (TVD) Total Depth: 3357.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Good		Reference Elevations: 2066.00 ft (KB) 2060.00 ft (CF) KB to GR/CF: 6.00 ft																																					
Serial #: 6838 Inside																																							
Press@RunDepth: 75.44 psig @ 3254.00 ft (KB) Start Date: 2019.11.05 End Date: 2019.11.05 Start Time: 14:45:04 End Time: 23:12:05	Capacity: psig Last Calib.: 2019.11.05 Time On Btm: 2019.11.05 @ 17:43:50 Time Off Btm:																																						
TEST COMMENT: 45 IFP-Sld 8' Weak blow built to 1 1/2" died to 1" 60 ISI-No blow back 45 FFP- Weak blow built to 1 1/4" 60 FSI-No blow back																																							
		PRESSURE SUMMARY																																					
		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Time (Min.)</th> <th>Pressure (psig)</th> <th>Temp (deg F)</th> <th>Annotation</th> </tr> </thead> <tbody> <tr><td>0</td><td>1565.86</td><td>91.76</td><td>Initial Hydro-static</td></tr> <tr><td>1</td><td>39.12</td><td>91.85</td><td>Open To Flow (1)</td></tr> <tr><td>47</td><td>58.38</td><td>94.91</td><td>Shut-in(1)</td></tr> <tr><td>106</td><td>851.96</td><td>96.49</td><td>End Shut-in(1)</td></tr> <tr><td>106</td><td>60.01</td><td>96.28</td><td>Open To Flow (2)</td></tr> <tr><td>152</td><td>75.44</td><td>96.94</td><td>Shut-in(2)</td></tr> <tr><td>215</td><td>819.35</td><td>98.17</td><td>End Shut-in(2)</td></tr> <tr><td>219</td><td>1536.39</td><td>99.75</td><td>Initial Hydro-static</td></tr> </tbody> </table>	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation	0	1565.86	91.76	Initial Hydro-static	1	39.12	91.85	Open To Flow (1)	47	58.38	94.91	Shut-in(1)	106	851.96	96.49	End Shut-in(1)	106	60.01	96.28	Open To Flow (2)	152	75.44	96.94	Shut-in(2)	215	819.35	98.17	End Shut-in(2)	219	1536.39	99.75	Initial Hydro-static	
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Recovery		Gas Rates																																					
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120.00	VSOOM 1%O 99%M	1.75																																					
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)																																				

DST #2 LKC E-F

	DRILL STEM TEST REPORT		
	Jasper Co PO Box 1120 Hays, KS 67601 ATTN: Cameron Brin	1-6s-20w Rooks,KS Cole #1 Job Ticket: 66357 DST#: 2 Test Start: 2019.11.06 @ 07:15:00	
GENERAL INFORMATION:			
Formation: LKC "E-F" Deviated: No Whipstock: ft (KB) Time Tool Opened: 08:27:17 Time Test Ended: 13:02:02		Test Type: Conventional Bottom Hole (Initial) Tester: Spencer J Staab Unit No: 84	

Interval: 3355.00 ft (KB) To 3378.00 ft (KB) (TVD)
 Total Depth: 3378.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2066.00 ft (KB)
 2060.00 ft (CF)
 KB to GR/CF: 6.00 ft

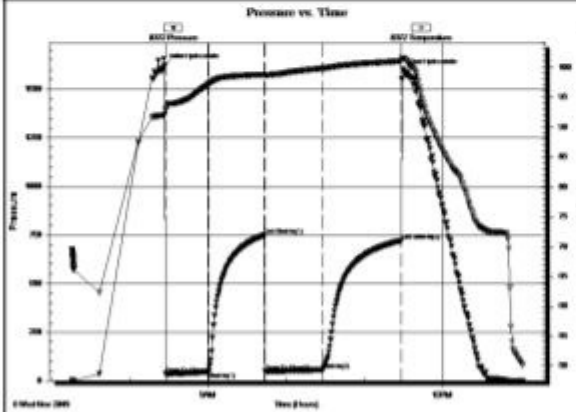
Serial #: 8372

Outside

Press@RunDepth: 57.90 psig @ 3356.00 ft (KB)
 Start Date: 2019.11.06 End Date: 2019.11.06
 Start Time: 07:15:01 End Time: 13:02:02

Capacity: psig
 Last Calib.: 2019.11.06
 Time On Btm: 2019.11.06 @ 08:26:47
 Time Off Btm: 2019.11.06 @ 11:30:17

TEST COMMENT: 30-F-Weak; Built to 1"
 45-ISI-No Return
 45-FF-Weak; Built to 3"
 60-FSI-No Return



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1621.63	92.09	Initial Hydro-static
1	34.67	92.66	Open To Flow (1)
34	44.63	97.19	Shut-in(1)
77	748.97	98.77	End Shut-in(1)
77	48.92	98.68	Open To Flow (2)
122	57.90	99.84	Shut-in(2)
182	721.50	101.08	End Shut-in(2)
184	1595.13	101.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	SWCM w / oil spots 4%W 96%M	0.57
50.00	OCM 7%O 93%M	0.71
2.00	Clean Oil	0.03

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)

DST #3 LKC I-J

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jaspar Co **1-6s-20w Rooks,KS**

PO Box 1120 **Cole #1**
 Hays, KS 67601

Job Ticket: 66358 **DST#:3**

ATTN: Cameron Brin Test Start: 2019.11.07 @ 02:35:00

GENERAL INFORMATION:

Formation: **LKC 'I-J'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:03:02
 Time Test Ended: 08:28:02
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Spencer J Staab
 Unit No: 84

Interval: 3430.00 ft (KB) To 3467.00 ft (KB) (TVD)
 Total Depth: 3378.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Reference Elevations: 2066.00 ft (KB)
 2060.00 ft (CF)
 KB to GR/CF: 6.00 ft

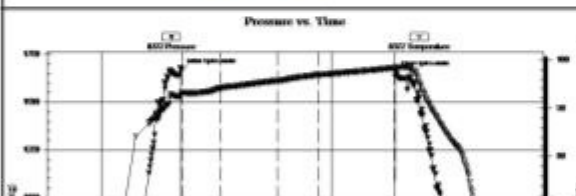
Serial #: 8372

Outside

Press@RunDepth: 20.73 psig @ 3431.00 ft (KB)
 Start Date: 2019.11.07 End Date: 2019.11.07
 Start Time: 02:35:01 End Time: 08:28:02

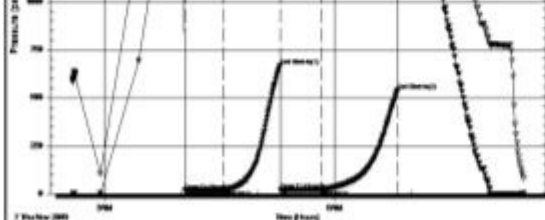
Capacity: psig
 Last Calib.: 2019.11.07
 Time On Btm: 2019.11.07 @ 04:02:32
 Time Off Btm: 2019.11.07 @ 06:50:17

TEST COMMENT: 30-F-Weak; Built to 1/4"; Died back to Surface
 45-ISI-No Return
 30-FF-Weak Surface; Died 2 mins in
 60-FSI-No Return



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1667.15	93.13	Initial Hydro-static
1	16.96	93.17	Open To Flow (1)
31	17.95	94.15	Shut-in(1)
75	668.25	95.68	End Shut-in(1)



76	19.90	95.56	Open To Flow (2)
107	20.73	96.96	Shut-in(2)
167	540.22	98.35	End Shut-in(2)
168	1653.56	98.43	Final Hydro-static

Recovery

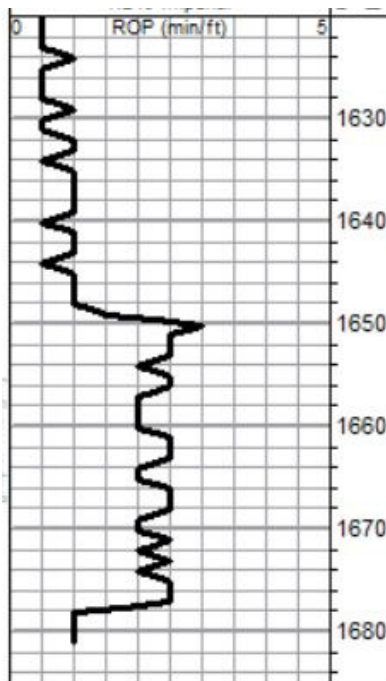
Length (ft)	Description	Volume (bbl)
9.00	OCM 10%O 90%M	0.13
1.00	Clean Oil 100%O	0.01

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)

ANHYDRITE



**ANHYDRITE: SPL 1649' (+417) LOG 1647' (+419)
BASE: SPL 1677' (+389) LOG 1676' (+390)**



FORMATION	COLE #1				P&A 4/9/2012				P&A 3/30/2018				AMES ENERGY EXPLORATION									
	2066		2060		HANSEN ESTATE #1				K&E PETROLEUM				AMES ENERGY EXPLORATION									
	KB	GL	GL	2060	N2 SE SW SE, Sec. 2-T6S-R20W				E2 SE NE NE, Sec. 11-T6S R20W				W2 E2 SE SW, Sec. 2-T6S-R18W				SE NW SE, Sec. 2-T6S-R20W					
LOG TOPS	DEPTH	DATUM	SAMPLE TOPS	DEPTH	DATUM	LOG CORR.	SMPL CORR.	DEPTH	DATUM	LOG CORR.	SMPL CORR.	LOGS	DEPTH	DATUM	LOG CORR.	SMPL CORR.	COMP. CARD	DEPTH	DATUM	LOG CORR.	SMPL CORR.	
ANHYDRITE TOP	1647	419	1649	417	1666	416	+ 3	+ 1	1692	414	+ 5	+ 3	1725	406	+ 13	+ 11	1721	417	+ 2	+ 0		
ANHYDRITE BASE	1676	390	1677	389					1722	384	+ 6	+ 5	1736	395	- 5	- 6	1751	387	+ 3	+ 2		
TOPEKA	3056	-990	3058	-992	3070	-988	- 2	- 4	3092	-986	- 4	- 6	3118	-987	- 3	- 5	3129	-991	+ 1	- 1		
HEEBNER SHALE	3254	-1188	3255	-1189	3266	-1184	- 4	- 5	3289	-1183	- 5	- 6	3315	-1184	- 4	- 5	3328	-1190	+ 2	+ 1		
TORONTO	3276	-1210	3278	-1212	3289	-1207	- 3	- 5	3312	-1206	- 4	- 6	3339	-1208	- 2	- 4	3351	-1213	+ 3	+ 1		
LKC	3290	-1224	3293	-1227	3304	-1222	- 2	- 5	3325	-1219	- 5	- 8	3353	-1222	- 2	- 5	3365	-1227	+ 3	+ 0		
BKC	3487	-1421	3487	-1421	3500	-1418	- 3	- 3	3520	-1414	- 7	- 7	3546	-1415	- 6	- 6	3559	-1421	+ 0	+ 0		
REAGAN SAND					3554	-1472			3577	-1471			3599	-1468			3616	-1478				
TOTAL DEPTH	3525	-1459	3536	-1470	3557	-1475	+ 16	+ 5	3575	-1469	+ 10	- 1	3603	-1472	+ 13	+ 2	3618	-1480	+ 21	+ 10		

ROCK TYPES

	Cht vari		shale, grn		Carbon Sh
	Lmst fw7>		shale, gry		shale, red

ACCESSORIES

MINERAL

- Sandy
- △ Chert White

FOSSIL

- F Fossils < 20%
- φ Oolite

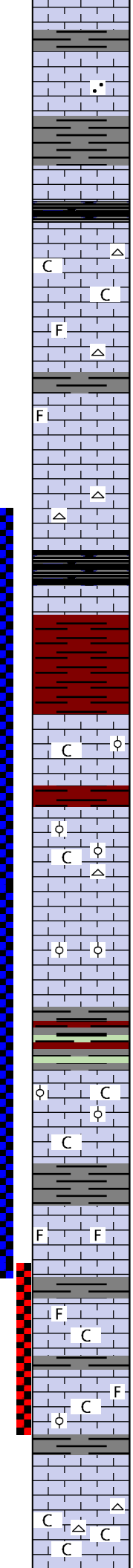
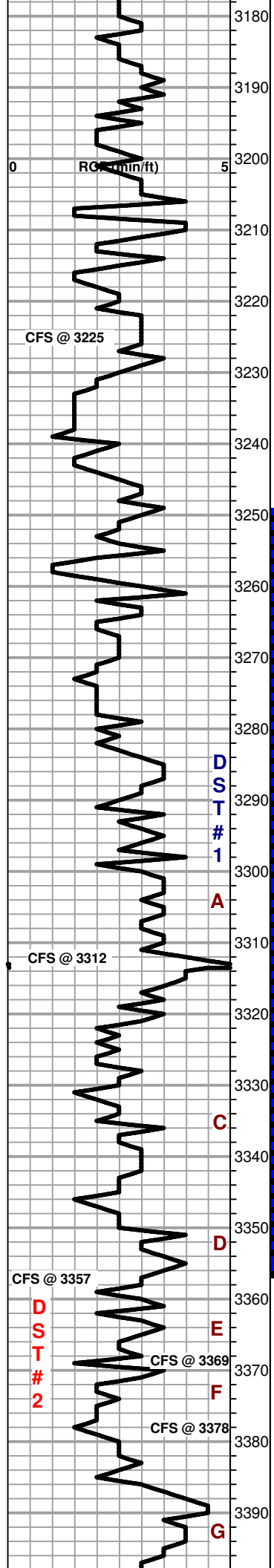
STRINGER

- ~~~~ Chert

TEXTURE

- C Chalky

Curve Track #1 ROP (min/ft)	Depth Intervals Cored Interval DST Interval	DST	Lithology	Oil Show	Geological Descriptions	Curve Track #3
<p>1:240 Imperial</p>	<p>0 5</p> <p>3010</p> <p>3020</p> <p>3030</p> <p>3040</p> <p>3050</p> <p>3060</p> <p>3070</p> <p>3080</p> <p>3090</p> <p>3100</p> <p>3110</p> <p>3120</p> <p>3130</p> <p>3140</p> <p>3150</p> <p>3160</p> <p>3170</p>				<p><u>START 1' DRILL TIME FROM 1620'-1700' FOR ANHYDRITE</u> <u>START 1' DRILL TIME FROM 3000'- RTD</u> <u>START 10' WET/ DRY SAMPLES FROM 3030'- RTD</u></p> <p>Sh- gray, sltly sandy</p> <p>Lm- gray, fnxln, dense</p> <p>Sh- gray- red, muddy red wash in part</p> <p>Sh- gray, sltly muddy, scat well consolidated Ss clusters</p> <p>Sh- red, muddy, soft</p> <p><u>TOPKEA: SPL 3058' (-992) LOG 3056' (-990)</u></p> <p>Lm- crm- gray, fnxln, scat foss, some dense, sandy in prt</p> <p>Lm- A/A</p> <p>Lm- gray- crm, fnxln, foss, scat sandy, few scat Ss clusters, cherty in prt</p> <p>Sh- gray</p> <p>Lm- gray- crm, fnxln, scat foss, scat sandy, mostly soft</p> <p>Sh- gray, sandy in prt</p> <p>Lm- crm, v. fn-fnxln, few scat pcs w/ pr inxln por, NSO</p> <p>Sh- gray</p> <p>Lm- crm- gray, fnxln- sltly granular, foss, few scat pcs w/ ppt por, NSO</p> <p>Lm- crm, fnxln- sltly granular, foss throughout, sandy, few pcs w/ pr inxln por, NSO</p> <p>Lm- crm, fnxln, foss throughout, scat chert, mostly dense</p> <p>Lm- crm, vfn-fnxln, foss, mostly dense, sandy in prt</p> <p>Lm- crm-gray, fnxln, soft, chalky, sandy</p>	<p>1:240 Imperial</p> <p>GEO ON LOCATION @ 2:00 P.M. 9/4/19</p> <p>8 5/8" SURFACE CASING SET @ 220' w/ 150 SKS 80/20, 3% cc, 2% GEL. DID CIRCULATE</p> <p>SURVERY @ 221' 1/2°</p>



Sh- gray- green

Lm- crm, v. fn-fnxln, sltly sandy

Sh- gray

Sh- blk, carb

Lm- crm, fnxln, foss, chalky in prt, cherty in prt, v. few scat pcs w/ pr ppt por, pr brn stn, NSFO, fr odor, fr streaming dry cut, fr yellow flour.

Lm- crm- v. fnxln, tight, scat foss, scat chert

Lm- crm, fnxln, sltly foss

Lm- crm, fnxln, dense cherty

HEEBNER: SPL 3255' (-1189) LOG 3254' (-1188)

Sh- blk, carb

Lm- crm- tan, fnxln, dense

Sh- red, gummy, muddy red wash

TORONTO: SPL 3278' (-1212) LOG 3276' (-1210)

Lm- crm, fnxln, oolitic, mostly tight, sltly chlky, few scat pcs w/ pr inxln por, pr brn stn, fr SFO upon crush, no odor, good streaming dry cut, dull yellow flour

LKC: SPL 3293' (-1227) LOG 3290' (-1224)

Lm- wt-crm, v. fn-fnxln, oolitic in prt, sltly chlky, sltly cherty, mostly v. barren & tight, few scat pcs w/ pr ppt-inxln por, pr brn stn, few FO droplets upon crush, slight odor, fr streaming dry cut, dull yellow flour

Lm- wt- crm- fnxln, oolitic, v. barren

Sh- maroon- gray- green

Lm- crm, fnxln, oolitic, chalky, few scat pcs w/ pr inxln-inoolitic por 1-2 pcs fr inoolitic por, few scat pcs w/ pr brn stn, FO droplets upon crush, fr odor, scat pcs w/ dead blk flaky oil

Sh- maroon- gray

Lm- crm- fnxln, foss, scat pr- fr infoss-inxln por w/ a few scat vugs, mostly pr w/ a few fr brn stn, FO droplets upon crush, pr odor

Lm-wt, fnxln, chalky throughout, foss, few scat pcs w/ pr infoss por, 1-2 pcs w/ v. pr brn stn, NSFO, no odor

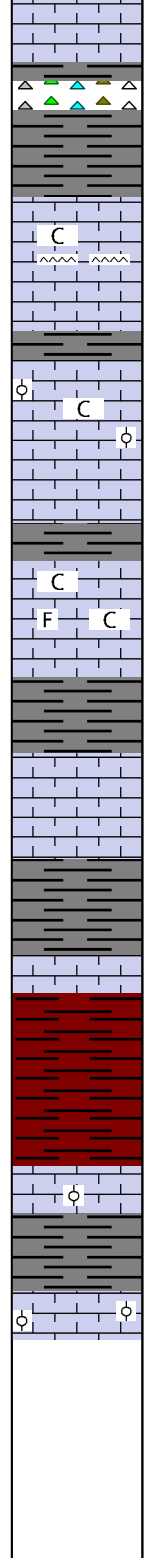
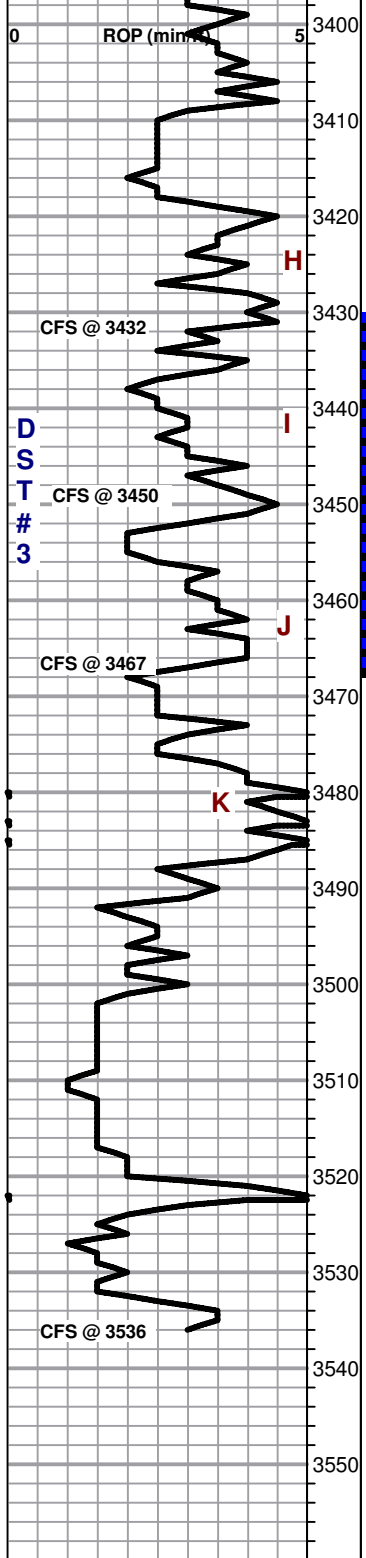
Lm- crm- fnxln, foss, oolitic, chalky in prt, scat mostly pr w/ a few scat fr pcs inxln-inoolitic por, mostly pr w/ a few pcs fr brn stn, fr SFO droplets upon crush, pr- fr odor, good streaming dry cut, dull yellow flour

Lm- crm- fnxln, chalky, cherty in prt, barren

Lm- crm-tan- fnxln, A/A

WT 8.6
VIS 55
LCM 2#

SURVEY @ 3357' 3/4°



Chert- brn- orange

Sh- gray red

Lm- crm- tan, fnxln, chalky in prt, chert throughout, slightly oolitic, NSO

Lm- crm- fnxln, chalky in prt, sltly foss, oolitic, scat pr w/ a few pcs fr inoolitic-inxln por, pr- fr brn stn, fr FO dropltes upon crush, slight odor, fr streaming dry cut, v dull yellow flour

Lm- crm- fnxln, slightly chlky, foss in prt, scat pr- fr inxln-ppt- infoss por, pr- fr brn stn, pr-fr SFO droplets upon crush, slit odor, fr streaming dry cut, dull yellow flour

Lm- crm, v. fn- fnxln, v clean and barren, tight

BKC: SPL 3487' (-1421) LOG 3487' (-1421)

Sh- gray

Lm- crm- fnxln, barren

Sh- red-gray, trashy, muddy red wash

Lm- crm- fnxln, dense, slightly oolitic

Lm- crm- lt purple, fnxln, oolitic in prt, some clastic mix

RTD: SPL 3536' (-1470) LOG 3525' (-1459)

FILL IN THE BOTTOM OF THE HOLE CAUSED THE LOGGING TOOL TO LAND 11' SHORT OF RTD

WT 8.9
VIS 59
LCM 4#

SURVEY @ 3536' 1 1/4°

PIPE STRAP @ RTD
-0.87 TO BOARD

GEO OFF LOCATION
@ 12:15 A.M. 11/8/19

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

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

No. 1931

Date	2-6-20	Sec.	1	Twp.	6	Range	20	County	ROCKS	State	KS	On Location		Finish	1:00pm
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Location: STACK ON SN ERD 13W 5RD

Lease	<u>Col</u>	Well No.	<u>1</u>	Owner	<u>3 1/2 U Finto</u>
Contractor	<u>Maverick</u>	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	<u>Port Collar</u>	Charge To <u>Jasper Company</u>			
Hole Size	<u>7 7/8</u>	T.D.		Street	
Csg.	<u>5 1/2</u>	Depth		City	State
Tbg. Size	<u>2 7/8</u>	Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Tool	<u>Reinhardt's Chas m</u>	Depth	<u>1666</u>	Cement Amount Ordered <u>425 8 3/20 QMDC 1/4 #10</u>	
Cement Left in Csg.		Shoe Joint			

Meas Line	Displace	<u>8BL</u>	used	<u>215</u>
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EQUIPMENT			
Pumptrk	No.	Cementor	Common
<u>20</u>		<u>Eric's</u>	<u>215 8 3/20 QMDC</u>
		Helper	Poz. Mix
Bulktrk	No.	Driver	Gel.
		<u>DICK</u>	
Bulktrk	No.	Driver	Calcium
<u>19</u>		<u>Tony</u>	

JOB SERVICES & REMARKS	
Remarks:	<u>KCC Pat Bodore</u>
Rat Hole	
Mouse Hole	
Centralizers	
Baskets	
DAV or Port Collar	
	<u>Port Collar @ Wellb. Test to 1000# Pump 8BL mud to test circulation.</u>
	<u>Mix 215 SK Cement Circulated</u>
	<u>Displace 8BL. Close Tool.</u>
	<u>Pressure to 1000#.</u>
	<u>Run 5 joints x wash clean.</u>

FLOAT EQUIPMENT	
Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	<u>port collar job</u>
Mileage	<u>60</u>

Signature	<u>Dane Veljez</u>	Tax	
		Discount	
		Total Charge	

X Signature

GENERAL TERMS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

2. More specifically:

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

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