

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 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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OPERATOR

Company: RJM Oil Company
Address: PO Box 256
Claflin, KS 67525

Contact Geologist: Jim Musgrove/Steve Murphy
Contact Phone Nbr: 620-786-0839
Well Name: Tim #1
Location: 7-18s-10w E2-SE-SW-SW
API: 15-159-22885-00-00
Pool:
State: Kansas

Field:
Country: USA



Scale 1:240 Imperial

Well Name: Tim #1
Surface Location: 7-18s-10w E2-SE-SW-SW
Bottom Location:
API: 15-159-22885-00-00
License Number: 30458
Spud Date: 7/5/2022 Time: 12:00 AM
Region: Rice
Drilling Completed: 7/11/2022 Time: 12:00 AM
Surface Coordinates: 330' FSL & 1100' FWL
Bottom Hole Coordinates:
Ground Elevation: 1758.00ft
K.B. Elevation: 1768.00ft
Logged Interval: 2700.00ft To: 3784.00ft
Total Depth: 3810.00ft
Formation: Arbuckle
Drilling Fluid Type: Chemical/Fresh Water Gel

CASING SUMMARY

	Surface	Intermediate	Main		
Bit Size					
Hole Size					
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8 5/8" in	347' ft			
Int Casing					
Prod Casing	5 1/2" in	3420' ft			

CASING SEQUENCE

Type	Hole Size	Casing Size	At
	0.00 in	0.00	0.00 ft

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude:
Latitude:
N/S Co-ord: 330' FSL
E/W Co-ord: 1100' FWL



Company: James C Musgrove Petroleum LLC
 Address: 212 Main Street/PO Box 215
 Claflin, KS 67525

Phone Nbr: 620-588-4250 620-786-0839
 Logged By: KLG #307

Name: James C Musgrove

CONTRACTOR

Contractor: Southwind Drilling
 Rig #: #1
 Rig Type: mud rotary
 Spud Date: 7/5/2022
 TD Date: 7/11/2022
 Rig Release:

Time: 12:00 AM
 Time: 12:00 AM
 Time:

ELEVATIONS

K.B. Elevation: 1768.00ft
 K.B. to Ground: 10.00ft
 Ground Elevation: 1758.00ft

NOTES

Remarks:

The log tops were consistently 6-7 higher than the driller measurement. All Tops corrected to Electric Log Measurement.
 5 1/2' Disposal casing was set and cemented on the RJM Oil Company; Tim #1.

Respectfully yours,

James C Musgrove
 Steve Murphy
 Petroleum Geologists

well comparison sheet

	TIM #1				BUTCH #2				HERTACH #1			
	RJM OIL COMPANY				RJM OIL COMPANY				CASTLE RESOURCES			
	E/2-SE-SW-SW				SE-NW-NE-NW				NE-NW-NE-SW			
	7-18s-10w				18-18s-10w				32-8s-28w			
	1768 KB				1767 KB				1775 KB			
					Structural Relationship				Structural Relationship			
Formation	Log	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea
Anhydrite	548	1220	548	1219	-1							
Base Anhydrite	562	1206										
Heebner	2841	-1073	2842	-1075	-2			2853	-1078	-5		
Toronto	2858	-1090	2859	-1092	-2							
Lansing	2971	-1203	2971	-1204	-1			2983	-1208	-5		
Base Kansas City	3244	-1476	3245	-1478	-2							
Weathered Arbuckle	3268	-1500										
Arbuckle	3274	-1506	3267	-1500	6			3342	-1567	-61		
Rotary Total Depth	3810	-2042	3277	-1510	532							
Log Total Depth	3808	-2040	3273	-1506	534			3353	-1578	462		



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

RUM Oil Company

7-185-10W Rice

PO Box 256
Clarlin, KS 67525

Tim 1

Job Ticket: 68183 DST#: 1

ATTN: Steve Murphy

Test Start: 2022.07.09 @ 20:19:00

GENERAL INFORMATION:

Formation: Arbuckle

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:46:17

Time Test Ended: 04:23:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 72

Interval: 3260.00 ft (KB) To 3286.00 ft (KB) (TVD)

Total Depth: 3285.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1768.00 ft (KB)

1758.00 ft (CP)

KB to GR/CP: 10.00 ft

Serial #: 6752

Inside

Press@RunDepth: 190.86 psig @ 3256.00 ft (KB)

Capacity: psig

Start Date: 2022.07.09 End Date: 2022.07.10

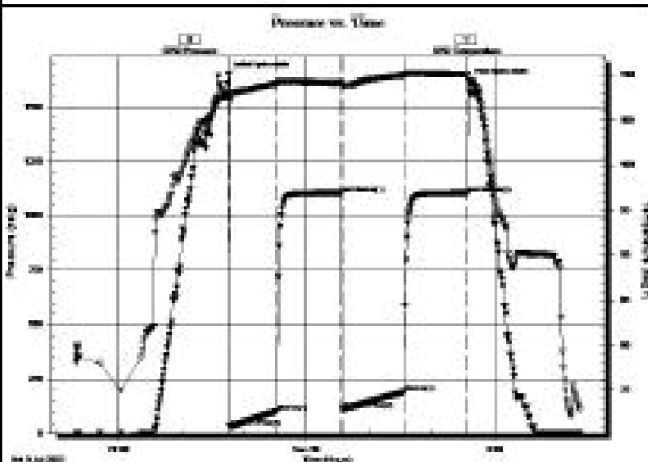
Last Callb.: 2022.07.10

Start Time: 20:19:00 End Time: 04:23:02

Time On Blrm: 2022.07.09 @ 22:45:32

Time Off Blrm: 2022.07.10 @ 02:35:32

TEST COMMENT: IF: Strong Blow, BOB in 25 minutes, Built to 19.52 inches
IS: No Blow Back
FF: Fair Blow, BOB in 33 minutes, Built to 18.48 inches
FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.40	107.61	Initial Hydro-static
1	33.68	107.29	Open To Flow (1)
46	103.09	109.11	Shut-in (1)
108	1103.98	109.14	End Shut-in (1)
109	112.76	108.86	Open To Flow (2)
169	190.86	110.00	Shut-in (2)
229	1104.07	110.08	End Shut-in (2)
230	1618.06	109.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	Water	1.77
63.00	MCM 50%M 50%W	0.88
93.00	50%CM 2%O 48%W 50%M	1.30

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 68183

Printed: 2022.07.10 @ 04:28:12

ROCK TYPES

	Cht		Dolprim		shale, gry		Ss
	Clystgy		Lmst fw7>		Carbon Sh		
	Chtcong1		shale, grn		shale, red		

OTHER SYMBOLS

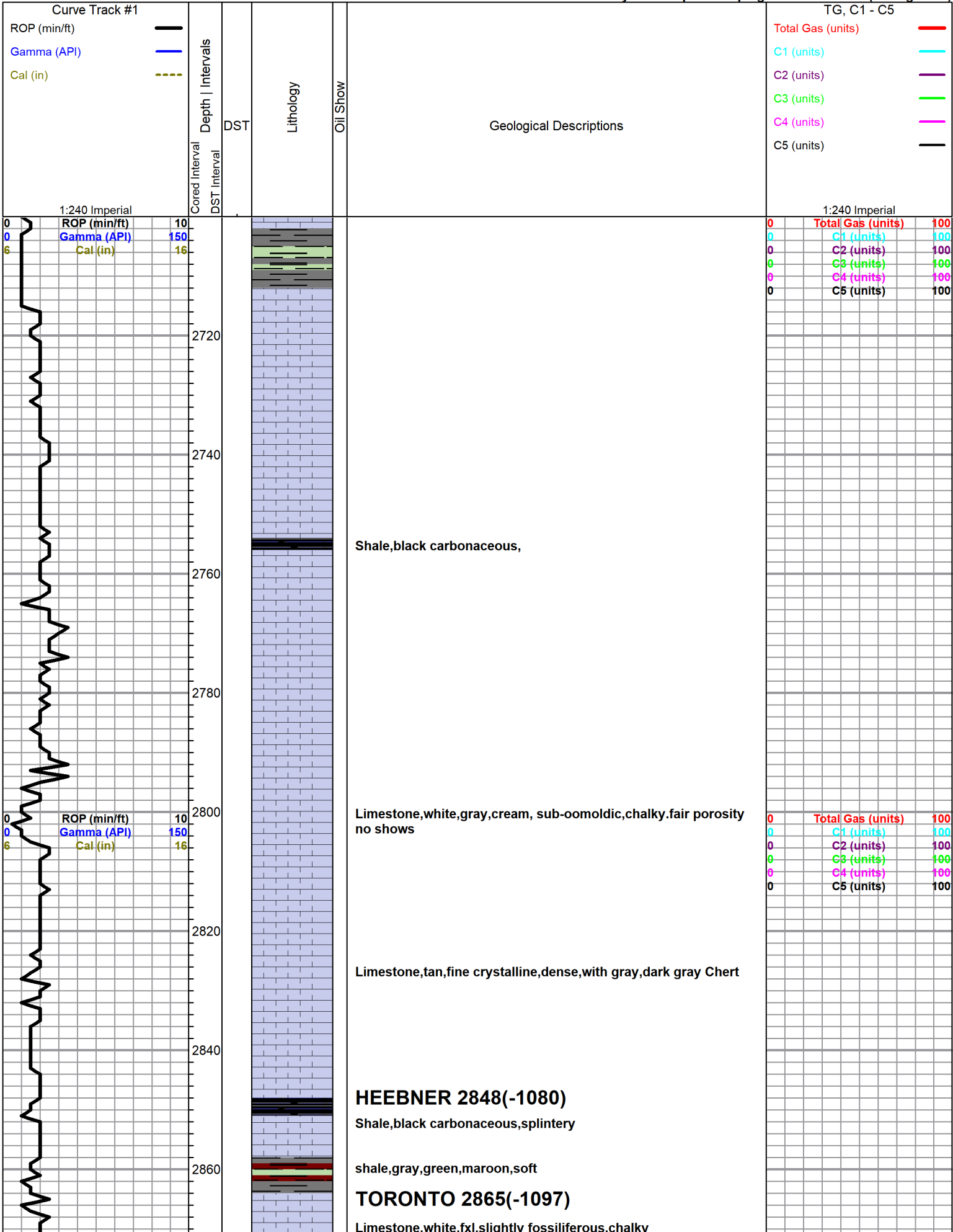
Oil Show

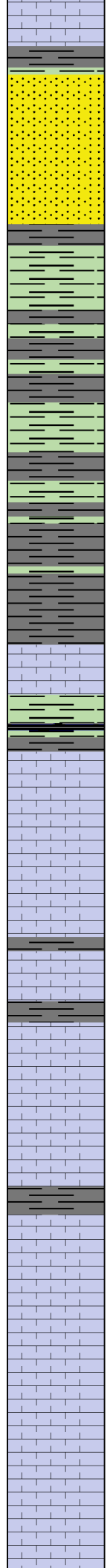
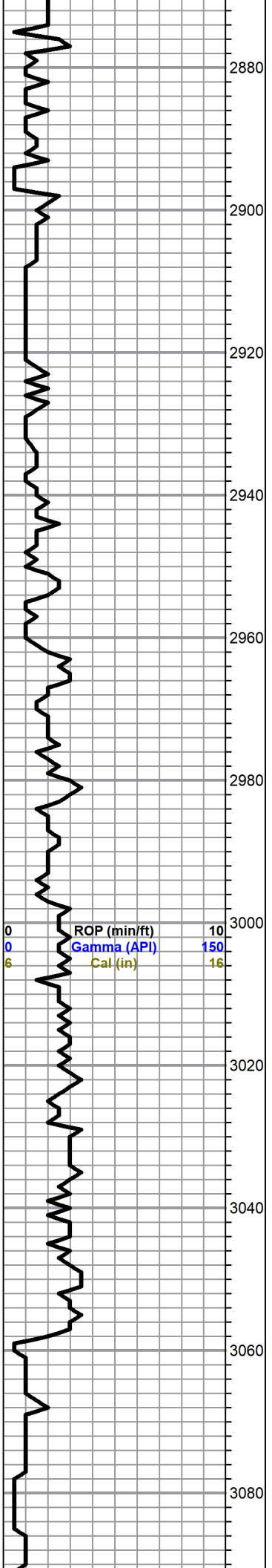
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn

DST

- DST Int
- DST alt
- Core
- || tail pipe

D Dead Oil Stn
 ■ Fluorescence
 * Gas





DOUGLAS 2878(-1110)

Sand,gray,grayish green,very fine grained,calcarous in part,micaeous,fair porosity,no shows

as above

Shale,gray,grayish green,silty,trace pyrite

Shale as above

BROWN LIME 2961(-1193)

Limestone,tan,brown,dense

LANSING 2978(-1210)

Limestone,tan,fossiliferous,chalky,scattered porosity,dark brown stain,trace of free oil no odor in fresh samples

Limeston,gray,white,chalky poor porosity

Limestone,gray,cream,oolitic,oomoldic,chalky,trace spotty brown stain,no free oil and no odor

Limestone,white,gray,fine crystalline,fossiliferous,chalky,poor spotted stain,no free oil and faint odor

Limestone,gray,oolitic,dense

Shale,gray,soft

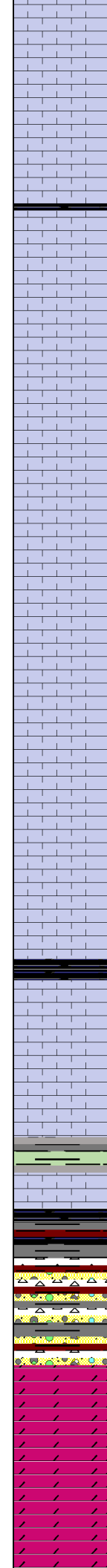
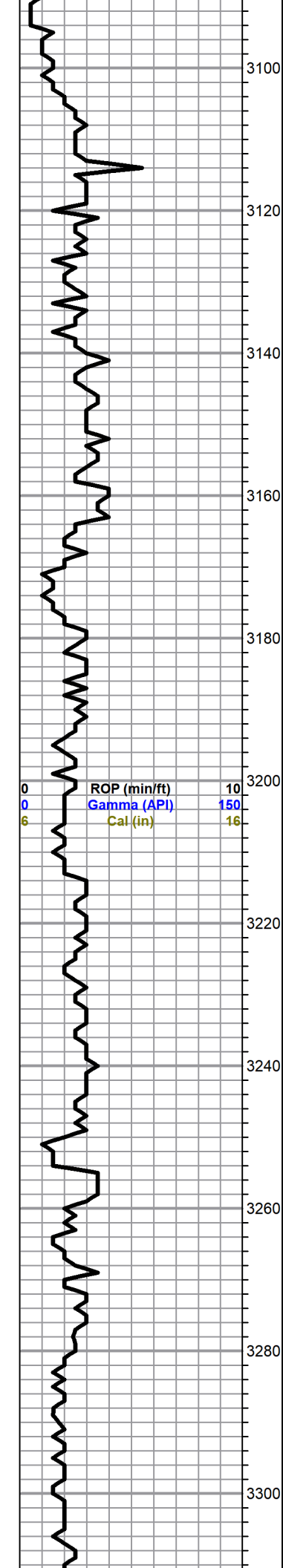
Limestone,tan,gray,chalky,oolitic,poor visible porosity,trace black and dark brown stain,show of free oil (dead) no odor

Limestone,white,gray,oomoldic,slightly chalky,trace brown stain,show of free oil and faint odor in fresh samples

Limestone,as above,no shows with white chalk

diito

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100



Limestone,tan,gray,white,fine crystalline,chalky,poor porosity

Shale,black carbonaceous,

Limestone,tan,white,oolitic,chalky,poor sorted stain,no free oil and no odor

Limestone,tan,gray,oolitic,fossiliferous in part,chalky..no shows

Limestone,tan,gray,oomoldic,chalky,fair oomoldic porosity,no shows

Limestone,gray,tan,oolitic,oomoldic,poor visible porosity,no shows

Limestone,white,gray,oolitic,fair interoolitic type porosity,fair dark brown stain ,show of free oil and no odor

Limestone,white,gray,fossiliferous,chalky with gray,boney chert

Shale,black carbonaceous,

Limestone,white,gray,oolitic,slightly fossiliferous,slight show of free oil and fair odor

BASE KANSAS CITY3251(-1483)
 Shale,gray,green

Shale,gray,black,red

Chert,white,red,boney few weathered

ARBUCKLE 3281(-1513)
 Dolomite,white,tan,medium crystalline, few coarse crystalline, fair intercrystalline porosity,light brown stain,trace of free oil and good odor

Dolomite,white,fxl,fair intercrystalline porosity,scattered porosity, no shows

Dolomite,as above,cherty

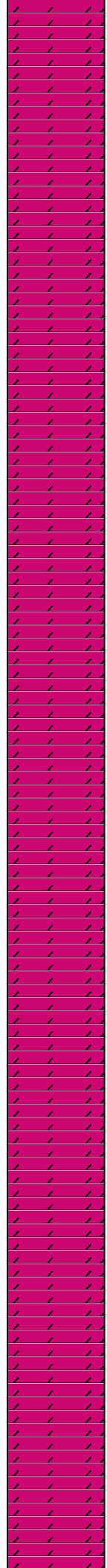
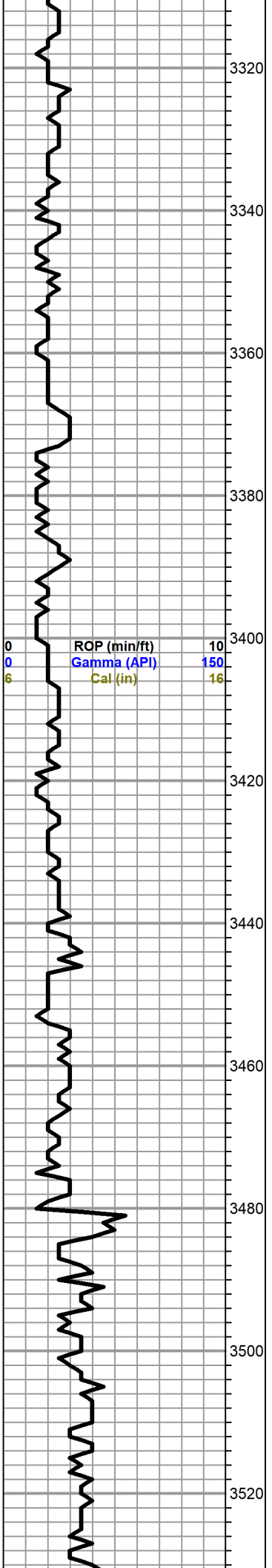
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100

geological supervision from 2700-3240 by Jim Musgrove, 3240-3430 by Steve Murphy 3430 to RTD by Jim Musgrove

DST#1 3250-3285 (corrected to log measurements 3243-3278) 45-60-60-60

Blow,Strong (bob 25mins) 2nd Open; Strong (bob 33 mins)

Recovery; 93' slightly oil cut muddy water



Dolomite,as above

Dolomite,white,tan,fxl,fair porosity, with boney chert

Dolomite and Chert as above

as above chalky luster

Dolomite as above ,increase in chert

Dolomite,white,brown,fxl,fair porosity

Dolomite,tan,brown,fine and medium crystalline,fair intercrystalline porosity, with minor chert

Dolomite as above with white,boney chert

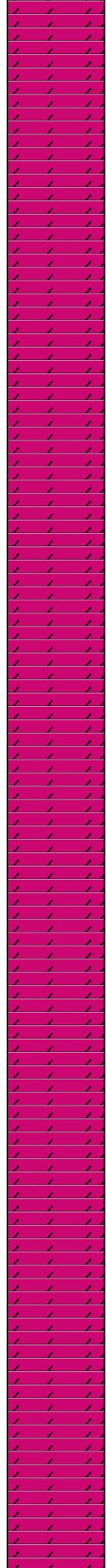
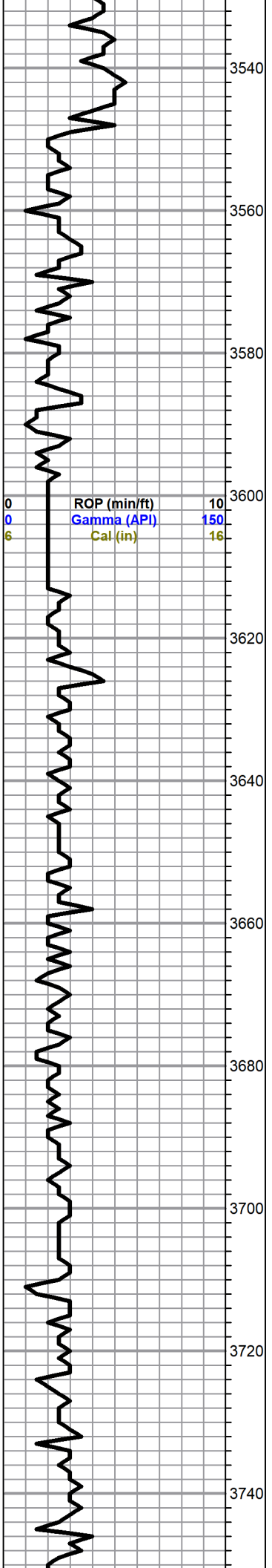
ditto as above

Dolomite,tan,brown,fine and medium crystalline,fair intercrystalline porosity,with tan and white chert

as above

(2% oil,48%
 water,50% mud)
 63' muddy water
 (50% mud,50%
 water)
 126' water
 BHP 1104-
 1104psi
 FP 34-103,113-
 191
 HSH 1650-1618
 psi

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100



Dolomite,tan,cream,sucrosic,fair porosity,with Chert as above

Dolomite,white,gray,fine crystalline,poor to fair porosity,minor pyrite inclusions

as above with white chert

ditto

Dolomite,cream,white,medium and coarse crystalline,fair to good intercrystalline porosity,few with chalky luster

as above with white chalk

as above

as above with pinpoint micro pyrite crystals

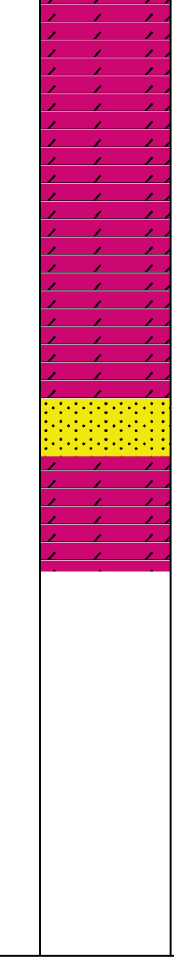
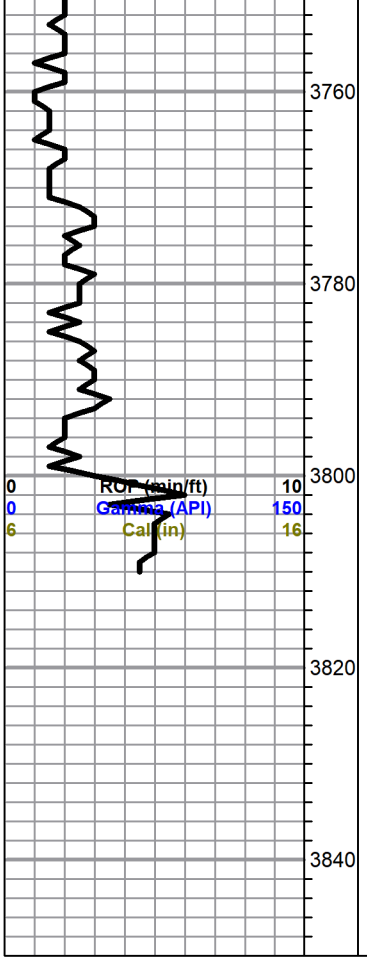
Dolomite,gray,cream,medium and coarse crystalline ,fair porosity,few sandy

Dolomite,white,cream,medium and coarse crystalline,fair porosity,with pyrite

as above poor visible porosity

Dolomite,white,gray,medium crystalline,fair intercrystalline porosity

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100



Dolomite,white,gray,pink,sandy,fair porosity

as above

Sand,white,clear,quartzitic,subrounded,good sorting, friable,fair intergranular porosity.

Dolomite,gray,tan,pink,finely crystalline,slightly cherty

ROTARY TOTAL DEPTH 3810

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100

ROP (in/ft) 10
 Gamma (API) 150
 Cal (in) 16

0
0
6



DRILL STEM TEST REPORT

Prepared For: **RJM Oil Company**

PO Box 256
Claffin, KS 67525

ATTN: Steve Murphy

Tim #1

7-18S-10W Rice,KS

Start Date: 2022.07.09 @ 20:19:00

End Date: 2022.07.10 @ 04:23:02

Job Ticket #: 68183 DST #: 1

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

Printed: 2022.07.11 @ 13:54:08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

RJM Oil Company

7-18S-10W Rice, KS

PO Box 256
Claflin, KS 67525

Tim #1

Job Ticket: 68183

DST#: 1

ATTN: Steve Murphy

Test Start: 2022.07.09 @ 20:19:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:46:17

Time Test Ended: 04:23:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 72

Interval: 3250.00 ft (KB) To 3285.00 ft (KB) (TVD)

Reference Elevations: 1768.00 ft (KB)

Total Depth: 3285.00 ft (KB) (TVD)

1758.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6752 Inside

Press@RunDepth: 190.86 psig @ 3256.00 ft (KB)

Capacity: psig

Start Date: 2022.07.09

End Date: 2022.07.10

Last Calib.: 2022.07.10

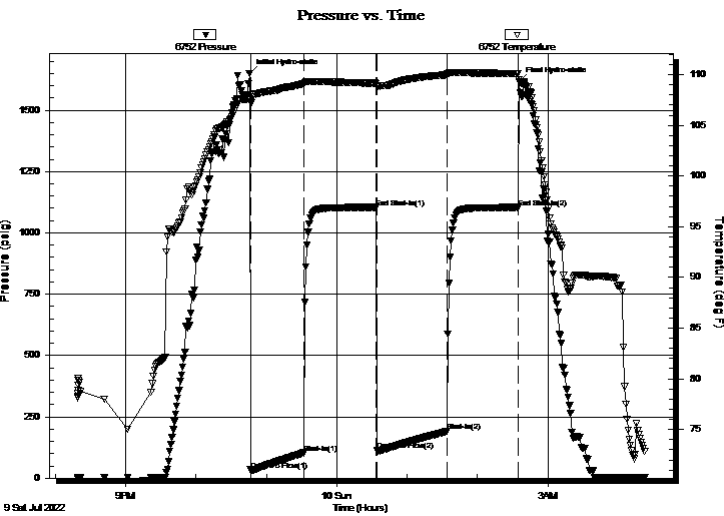
Start Time: 20:19:01

End Time: 04:23:02

Time On Btm: 2022.07.09 @ 22:45:32

Time Off Btm: 2022.07.10 @ 02:35:32

TEST COMMENT: IF: Strong Blow , BOB in 25 minutes, Built to 19.52 inches
IS: No Blow Back
FF: Fair Blow , BOB in 33 minutes, Built to 18.48 inches
FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.40	107.61	Initial Hydro-static
1	33.68	107.29	Open To Flow (1)
46	103.09	109.11	Shut-In(1)
108	1103.98	109.14	End Shut-In(1)
109	112.76	108.86	Open To Flow (2)
169	190.86	110.00	Shut-In(2)
229	1104.07	110.08	End Shut-In(2)
230	1618.06	109.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	Water	1.77
63.00	MCW 50%M 50%W	0.88
93.00	SOWCM 2%O 48%W 50%M	1.30

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

RJM Oil Company

PO Box 256
Clafin, KS 67525

ATTN: Steve Murphy

7-18S-10W Rice,KS

Tim #1

Job Ticket: 68183 **DST#: 1**

Test Start: 2022.07.09 @ 20:19:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 22:46:17 Tester: Leal Cason

Time Test Ended: 04:23:02 Unit No: 72

Interval: 3250.00 ft (KB) To 3285.00 ft (KB) (TVD) Reference Elevations: 1768.00 ft (KB)

Total Depth: 3285.00 ft (KB) (TVD) 1758.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8365 Outside

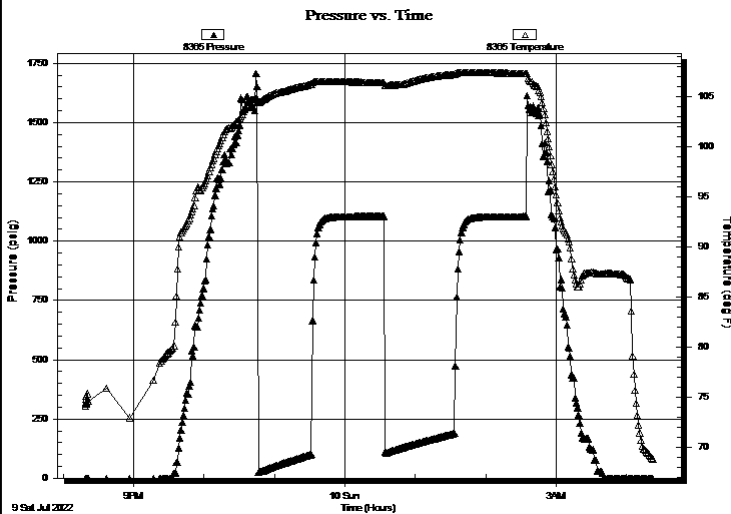
Press@RunDepth: psig @ 3256.00 ft (KB) Capacity: psig

Start Date: 2022.07.09 End Date: 2022.07.10 Last Calib.: 2022.07.10

Start Time: 20:19:01 End Time: 04:23:02 Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 25 minutes, Built to 19.52 inches
IS: No Blow Back
FF: Fair Blow , BOB in 33 minutes, Built to 18.48 inches
FS: No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
126.00	Water	1.77
63.00	MCW 50%M 50%W	0.88
93.00	SOWCM 2%O 48%W 50%M	1.30

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

RJM Oil Company

7-18S-10W Rice,KS

PO Box 256
Clafin, KS 67525

Tim #1

Job Ticket: 68183

DST#: 1

ATTN: Steve Murphy

Test Start: 2022.07.09 @ 20:19:00

Tool Information

Drill Pipe:	Length: 3237.00 ft	Diameter: 3.80 inches	Volume: 45.41 bbl	Tool Weight: 2100.00 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: 50000.00 lb
			<u>Total Volume: 45.41 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3250.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3228.00	
Hydraulic tool	5.00			3233.00	
Jars	5.00			3238.00	
Safety Joint	3.00			3241.00	
Packer	5.00			3246.00	27.00 Bottom Of Top Packer
Packer	4.00			3250.00	
Stubb	1.00			3251.00	
Handling Sub	5.00			3256.00	
Recorder	0.00	6752	Inside	3256.00	
Recorder	0.00	8365	Outside	3256.00	
Perforations	26.00			3282.00	
Bullnose	3.00			3285.00	35.00 Bottom Packers & Anchor

Total Tool Length: 62.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

RJM Oil Company

7-18S-10W Rice,KS

PO Box 256
Clafin, KS 67525

Tim #1

Job Ticket: 68183

DST#: 1

ATTN: Steve Murphy

Test Start: 2022.07.09 @ 20:19:00

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:

19000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
126.00	Water	1.767
63.00	MCW 50%M 50%W	0.884
93.00	SOWCM 2%O 48%W 50%M	1.305

Total Length: 282.00 ft Total Volume: 3.956 bbl

Num Fluid Samples: 0

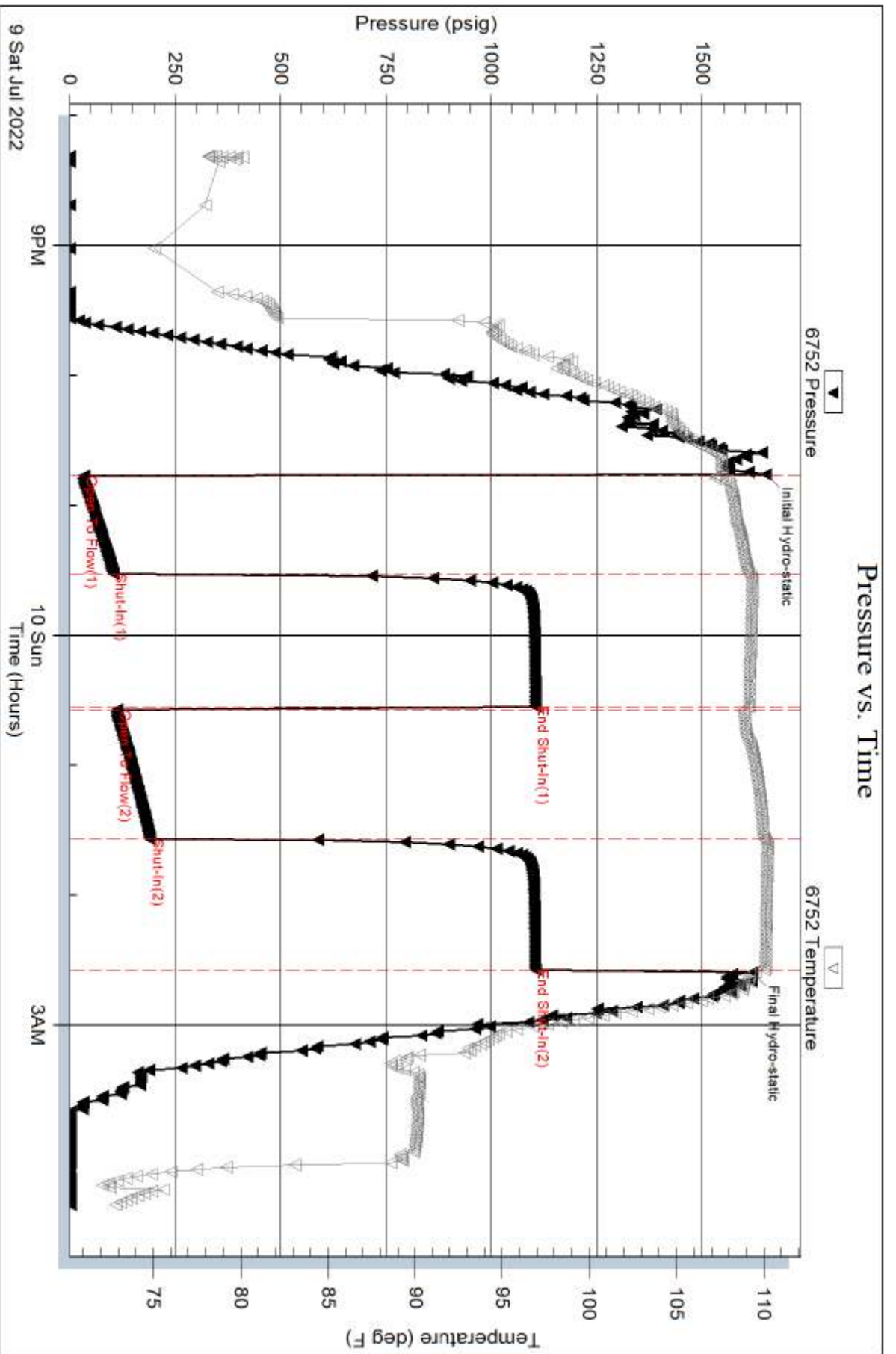
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .3 @ 82 degrees

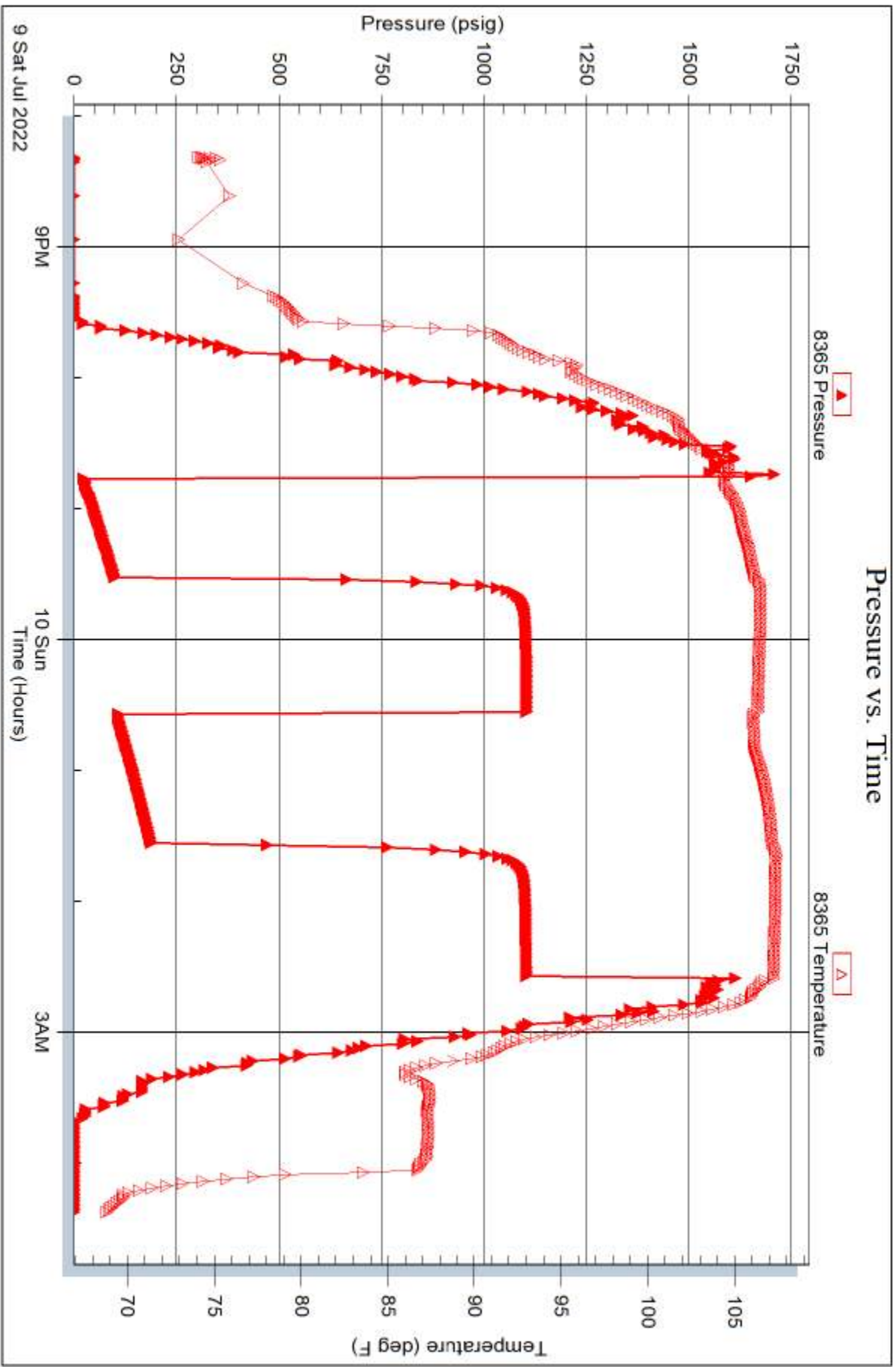


Serial #: 8365

Outside RJM Oil Company

Tim #1

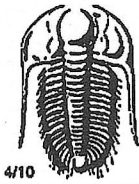
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 68183

Printed: 2022.07.11 @ 13:54:13



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **68183**

Well Name & No. Tim 1 Test No. 1 Date 07/09/22
 Company RJM Oil Company Elevation 1768 KB 1758 GL
 Address PO Box 256 Claflin, KS 67525
 Co. Rep / Geo. Steve Murphy Rig Southwind 1
 Location: Sec. 7 Twp 18S Rge. 10W Co. Rice State KS

Interval Tested 3250 - 3285 Zone Tested Arbuckle
 Anchor Length 35 Drill Pipe Run 3237 Mud Wt. 9.4
 Top Packer Depth 3245 Drill Collars Run 0 Vis 52
 Bottom Packer Depth 3250 Wt. Pipe Run 0 WL 88
 Total Depth 3285 Chlorides 4500 ppm System LCM

Blow Description IF: Strong Blow, BOB in 25 minutes, Built to 19.52 inches
ISI: NO Blow Back
FF: Fair Blow, BOB in 33 minutes, Built to 18.48 inches
FSL: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>93</u>	<u>50 wcm</u>	<u>2</u>	<u>47</u>	<u>50</u>	
<u>63</u>	<u>MCW</u>		<u>50</u>	<u>50</u>	
<u>126</u>	<u>Water</u>				

Rec Total 282 BHT 110 Gravity NIC API RW -3 @ 82 ° F Chlorides 19000 ppm

(A) Initial Hydrostatic <u>1650</u>	<input checked="" type="checkbox"/> Test 1800	T-On Location <u>18:30</u>
(B) First Initial Flow <u>34</u>	<input checked="" type="checkbox"/> Jars 300	T-Started <u>20:19</u>
(C) First Final Flow <u>103</u>	<input type="checkbox"/> Safety Joint	T-Open <u>22:46</u>
(D) Initial Shut-In <u>1104</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>02:34</u>
(E) Second Initial Flow <u>113</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>04:23</u>
(F) Second Final Flow <u>191</u>	<input checked="" type="checkbox"/> Mileage <u>140</u> 130rt 195	Comments _____
(G) Final Shut-In <u>1104</u>	<input type="checkbox"/> Sampler	_____
(H) Final Hydrostatic <u>1618</u>	<input type="checkbox"/> Straddle	<input checked="" type="checkbox"/> EM Tool
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>2295</u>
	Sub Total <u>2295</u>	MP/DST Disc't _____

Approved By [Signature] Our Representative [Signature]
 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.

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. 2918

Date	7-12-22	Sec.	7	Twp.	18	Range	10	County	Rice	State	Ks	On Location		Finish	3:45 AM
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Lease **Tim** Location **Clafin-2E, to 1st Rd, 25 to**

Well No. **1** Owner **CRD, 1/4 E, N1/2**

Contractor **Southwind #1** 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 **Long string** Charge To **RSM Company**

Hole Size **7 7/8"** T.D. **3810'** Csg. **5 1/2"** Depth **3420'** Street

Tbg. Size Depth City State

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

Cement Left in Csg. **10.28'** Shoe Joint **10.28'** Cement Amount Ordered **180 Corn 10% salt 5%**

Meas Line Displace **81 BLS** **Gilsonite - 500 gal mud Clear 48**

EQUIPMENT

Pumptrk **16** No. **Cementer** **Nick** Poz. Mix

Bulktrk **9** No. **Driver** **Ross** Gel.

Bulktrk **P.K.** No. **Driver** **RICK** Calcium

JOB SERVICES & REMARKS

Remarks: **Set triplex shoe @ 1200#** Hulls

Rat Hole **30 5x** Salt **14**

Mouse Hole **20 5x** Flowseal

Centralizers **1-9** Kol-Seal **750#**

Baskets **2,4,6** Mud CLR 48 **500 gal**

D/V or Port Collar **Pipe on bottom break** Sand

Circulation, pump 500 gal mud Handling **20'**

Clear plug Rat hole + Mouse hole Mileage

Cement 5 1/2" Casing w/ 130 5x

FLOAT EQUIPMENT

Shut down wash pump + lines Guide Shoe **Tri-plex shoe**

Displaced plug w/ 81 BLS 420 Centralizer **9**

Released + held. Baskets **3**

Lift + pressure 700 # AFU Inserts

Land plug to 1500 # Float Shoe

Latch Down **1**

Pumptrk Charge **Prod string**

Mileage **30**

Signature **Frank J. Raus** Tax
Discount
Total Charge

Thanks

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.

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. **2912**

Date	6-6-22	Sec.	7	Twp.	18	Range	10	County	Rice	State	Ks	On Location		Finish	4 AM
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Lease Tim Well No. #1 Location Clafin - 2E to 1st Rd, 2S

Contractor Southwind Owner to C Rd, 1/4 E, N into
To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish

Type Job Surface cementer and helper to assist owner or contractor to do work as listed.

Hole Size 12 1/4" T.D. 347' Charge To RJM Company

Csg. 8 5/8" Depth 347' Street

Tbg. Size Depth City State

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

Cement Left in Csg. 20' Shoe Joint 20' Cement Amount Ordered 180 60/40 4% CC 2% Gd

Meas Line Displace 20 3/4 BLS

EQUIPMENT

Pumptrk <u>18</u> No.	Cementer <u>Jordan</u>	Common <u>110</u>
	Helper	Poz. Mix <u>70</u>
Bulktrk <u>15</u> No.	Driver <u>Robert</u>	Gel. <u>07</u>
	Driver	Calcium <u>13</u>
Bulktrk <u>pu</u> No.	Driver <u>Rick</u>	
	Driver	

JOB SERVICES & REMARKS

Remarks: <u>Cement did Circulate</u>	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 <u>190</u>
	Mileage

FLOAT EQUIPMENT

	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down

Pumptrk Charge Surface
Mileage 30

X Signature Frank J. Rose

Thanks

Tax
Discount
Total Charge

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(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.