

Confidentiality Requested:

☒ Yes ☐ NoKANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed
Form must be Signed
All blanks must be FilledWELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 3293
 Name: Russell Oil, Inc.
 Address 1: PO BOX 8050
 Address 2: _____
 City: EDMOND State: OK Zip: 73083 + 8050 _____
 Contact Person: LeRoy Holt II
 Phone: (405) 752-7600
 CONTRACTOR: License # 33350
 Name: Southwind Drilling, Inc.
 Wellsite Geologist: Kitt Noah
 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 #: _____

6/1/2022 6/9/2022 6/9/2022
 Spud Date or Date Reached TD Completion Date or
 Recompletion Date Recompletion Date

API No.: 15-167-24121-00-00

Spot Description: _____

SE - NE - NE - NW Sec. 33 Twp. 15 S. R. 14 ☐ East ☒ West
388 Feet from ☒ North / ☐ South Line of Section
2644 Feet from ☒ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☒ NE ☐ NW ☐ SE ☐ SWGPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84County: RussellLease Name: NUSS-DIETZ UNIT Well #: 1-33Field Name: NussProducing Formation: naElevation: Ground: 1895 Kelly Bushing: 1905Total Vertical Depth: 3462 Plug Back Total Depth: _____Amount of Surface Pipe Set and Cemented at: 903 FeetMultiple 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: 33000 ppm Fluid volume: 650 bblsDewatering method used: Evaporated

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: 07/20/2022
☐ Confidential Release Date: 07/19/2024
☒ Wireline Log Received ☒ Drill Stem Tests Received
☒ Geologist Report / Mud Logs Received
☐ UIC Distribution
 ALT ☒ I ☐ II ☐ III Approved by: David Befort Date: 07/21/2022

Operator Name: Russell Oil, Inc. Lease Name: NUSS-DIETZ UNIT Well #: 1-33
 Sec. 33 Twp. 15 S. R. 14 ☐ East ☒ West County: Russell

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 (Attach Additional Sheets)	☒ Yes ☐ No	☒ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☐ Yes ☒ No	Name Attached	Top Attached	Datum Attached
Cores Taken	☐ Yes ☒ No			
Electric Log Run	☒ Yes ☐ No			
Geologist Report / Mud Logs	☒ Yes ☐ No			
List All E. Logs Run:				
Compensated Density Neutron Dual Induction Microlog				

CASING RECORD ☒ New ☐ 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
Surface	12.875	8.625	23	903	80/20 poz	350	3% cc,2%gel

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate				
☐ Protect Casing	-			
☐ Plug Back TD				
☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (Explain) _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease (If vented, Submit ACO-18.)	METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. (Submit ACO-5) ☐ Commingled (Submit ACO-4)	PRODUCTION INTERVAL: Top Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record (Amount and Kind of Material Used)
TUBING RECORD: Size: Set At: Packer At:					

Form	ACO1 - Well Completion
Operator	Russell Oil, Inc.
Well Name	NUSS-DIETZ UNIT 1-33
Doc ID	1657096

Tops

Name	Top	Datum
Anhydrite	905	+1000
B/Anhydrite	936	+969
Topeka	2824	-919
Heebner	3056	-1151
Toronto	3072	-1167
Lansing	3119	-1214
B/KC	3346	-1441
Arbuckle	3376	-1471
RTD	3460	-1555
LTD	3462	-1557

Form	ACO1 - Well Completion
Operator	Russell Oil, Inc.
Well Name	NUSS-DIETZ UNIT 1-33
Doc ID	1657096

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	12.875	8.625	23	903	80/20 poz	350	3% cc,2%gel

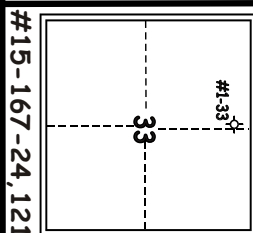
KITT NOAH

PETROLEUM GEOLOGIST

Kansas License #229



ELEVATION: KB: **1905**
GL: **1895**
MEASURED FROM: KB



GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

OPERATOR: **Russell Oil, Inc.**

LEASE: **Nuss-Dietz Unit** WELL NO: **#1-33**

LOCATION: **388'FN & 2644'FE**

SEC: **33** TWP: **15S** RNG: **14W**

COUNTY: **Russell** STATE: **Kansas**

CASING RECORD:

SURFACE: **8 5/8" set at 903' w/350 sx.**

PRODUCTION: **None**

DV TOOL: _____

FORMATION

TOP DATUM

Anhydrite 905 (+1000)

B/Anhydrite 936 (+969)

Topeka 2824 (-919)

Heebner 3056 (-1151)

Toronto 3072 (-1167)

Lansing 3119 (-1214)

B/KC 3346 (-1441)

Arbuckle 3376 (-1471)

RTD 3460 (-1555)

LTD 3462 (-1557)

CONTRACTOR: **Southwind Drilling Rig #1**

COMM: **6-1-2022** COMPL: **6-9-2022**

RTD: **3460** LTD: **3462**

SAMPLES SAVED FROM: **2700 to TD**

DRILLING TIME SAVED FROM: **2700 to TD**

SAMPLES EXAMINED FROM: **2700 to TD**

GEOLOGICAL SUPERVISION FROM: **2700 to TD**

MUD UP: **2621** MUD TYPE: **chemical**

Mudco - Gary Schmidberger

DRILL STEM TESTS TAKEN: **5**

Trilobite - Leal Cason

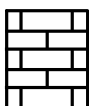
SURVEYS: **ELI Wireline**

Compensated Density Neutron

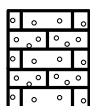
Dual Induction

Microlog

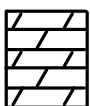
LEGEND



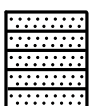
Limestone



Ool Lime



Dolomite



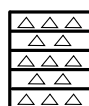
Sandstone



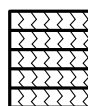
Shale



Carb Shale



Chert



Anhydrite

DEPTH

DRILLING TIME IN MINUTES PER FOOT

Rate of penetration increases

5" 10" 15" 20"

SAMPLE DESCRIPTIONS

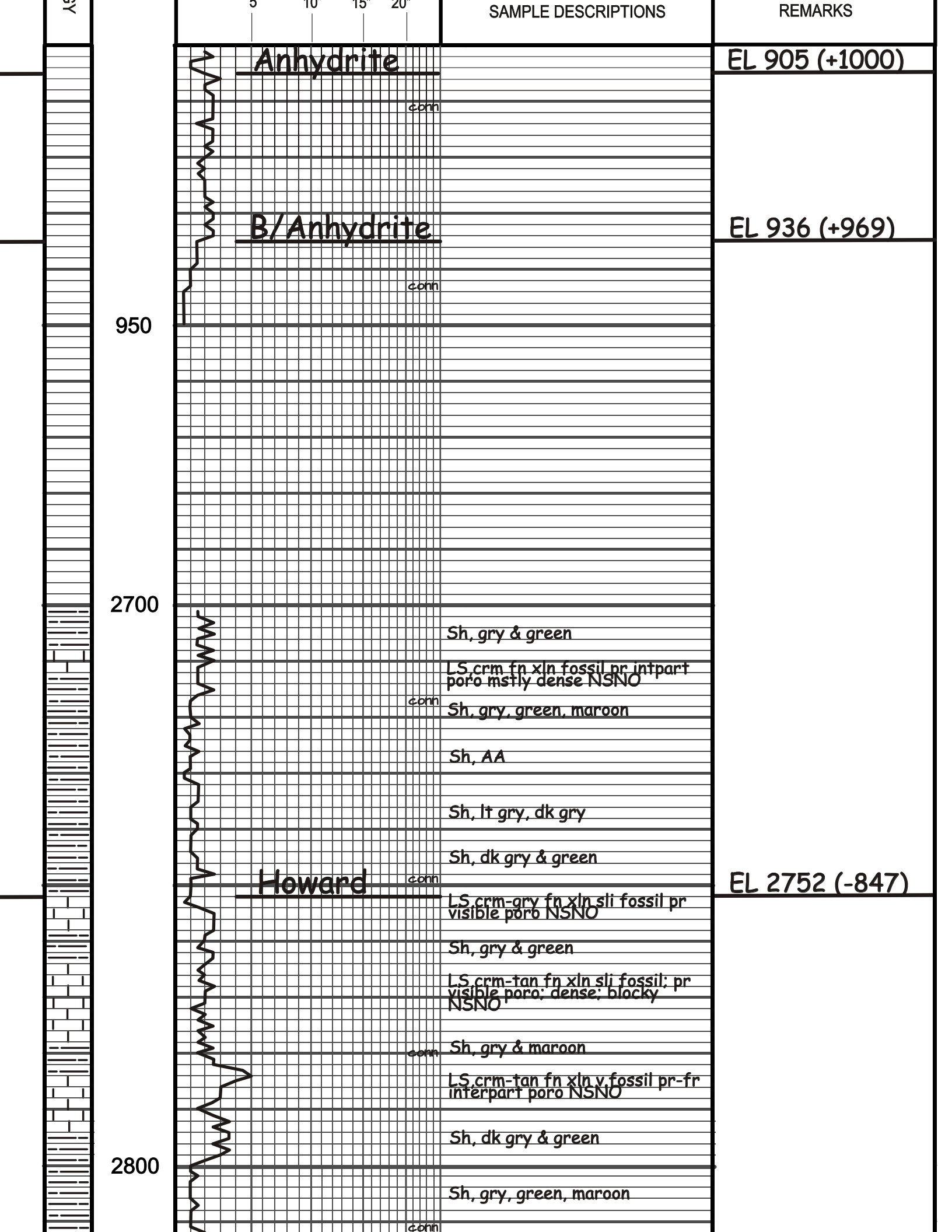
REMARKS

Anhydrite

EL 905 (+1000)

B/Anhydrite

EL 936 (+969)



2800

Sh, dk gry & green

Sh, gry, green, maroon

conn

Sh, dk gry & green

TopekaLS, crm-tan fn xln fossil & ool;
pr-fr interpart poro; NSNO

Sh, gry & green

Sh, dk gry, green, maroon

conn

LS, crm-tan xln sli oolitic pr
pr interpart poro; barren NSNO

LS, AA

LS, crm-tan fn xln v. dense pr
visible poro NSNO;

conn

LS, crm-gry fn xln sli fossil pr
visible poro; NSNOLS; crm; fn xln; v. fossil & ool;
pr-sc fr interpart poro; barren
NSNO; abund dk gry & tan chert

LS, crm-gry AA

2900

Sh, blk carbonaceous

conn

LS, crm fn xln fossil pr-fr
interpart poro; 2-3 pieces lt
brwn spty stn; flaky oil on brk;
no show of free oil; no odorLS, crm fn xln v. fossil; pr
interpart poro NSNO

Sh, lt. gry & green

LS, crm fn xln sli fossil pr
interpart poro mstly dense
NSNO

conn

Sh, dk gry & green

LS, crm-tan fn xln sli fossil pr
interpart poro; NSNOLS, crm fn xln sli fossil pr
interpart poro NSNO

conn

Sh, blk carbonaceous

LS, crm-tan fn xln fossil pr -fr
interpart poro NSNOLS, crm fn xln sli fossil pr visible
poro NSNO sc tan chert

Sh, dk gry & green

LS, crm fn xln fossil pr-fr
interpart poro barren NSNO
abund tan chert

3000

conn

LS, crm fn xln fossil pr visible
poro; blocky NSNO

EL 2824 (-919)

3000

LS,crm fn xln fossil pr-fr
interpart poro barren NSNO
abun tan chert

LS,crm fn xln fossil pr visible
poro; blocky NSNO

LS,crm fn xln fossil & ool; pr
interpart poro; subchalky; 1-2
pieces lt-med brwn spty stn;
SSFO; no odor

LS,crm AA; abund pieces wht
chalk

LS,crm fn xln fossil; chalky; pr
interpart poro; 1 pc poss edge
stn NSNO sc pieces tan chert

LS,AA

Heebner

Sh, blk carbonaceous

Sh, gry, green, maroon

Toronto

LS,crm fn xln sli fossil rare iso
pinpoint poro; overall pr interpart
poro; dense; blocky; 1-2 pieces
med brwn spty edge stn; SSFO;
no odor

Sh, gry, green & maroon

Sh, abund dk gry & maroon

Sh, lt gry & green

Lansing

LS,crm-wht fn xln v. fossil;
pr-fr fossilcast poro; barren
NSFO; no odor

LS,AA

Sh, gry & green

LS,crm fn xln y. ool; pelletoid
pr-fr interpart poro; few pieces
lt brwn subsat stn; S-FSFO --
active gas bubbles; sli-fr odor

Sh, gry & green

LS,crm fn xln ool; dolomitic;
subooliclastic; pr-fr interpart
poro; 2-3 pieces lt. brwn spty
stn; S-FSFO -- gas on brk;
sli-fr odor

LS,crm-tan fn xln sli fossil pr
interpart poro; dense NSNO

Sh, blk carbonaceous

LS,crm-tan fn xln fossil & ool;
pr interpart poro; 1-2 pieces lt
brwn spty stn; VSSFO -- flaky
oil on brk; sli odor

LS,crm fn xln fossil; pr interpart
poro; fr pinpoint poro; iso vld; fr
amt med brwn subsat-sat stn;
F-GSFO w/abund gas bubbles on
brk in 40" circ sample; gd odor;
LS,crm-tan fn xln fossil sli ool

EL 3056 (-1151)

EL 3072 (-1167)

EL 3119 (-1214)

DST #1: (3125-3165)
1st Op: Weak Bldg 7½";
Tool Slid 15'
No Blowback
2nd Op: No Blow
No Blowback

Rec:
66' Mud

IFP: 41-55#/30"
ISIP: 374#/30"
FFP: 55-56#/30"
FSIP: 473#/60"

Pipe Strap at 3165'
.78 Long to Board

DST #2: (3177-3217)
1st Op: Weak Bldg 1.79"
No Blowback
2nd Op: Weak Bldg .85"
No Blowback

Rec:
30' VSOSM
(1%O, 99%M)

IFP: 25-25#/30"
ISIP: 76#/30"

3100

3200

3200

"E"

Sh, blk carbonaceous

"F"

LS crm-tan fn xln fossil & ool;
pr interpart poro: 1-2 pieces lt
brwn sply stn; VSSFO -- flaky
oil on brk; sli odor

LS crm fn xln fossil; pr interpart
poro: fr pinpoint poro; iso vug; fr
amt med brwn subsat-sat stn;
F-GSFO w/abun gas bubbles on
brk in 40" circ sample; gd odor;

LS crm-tan fn xln fossil sli ool
overall pr interpart poro; mstly
dense; NSNO; sc pieces sharp
tan chert

"G"

Sh, gry & green

LS crm-wht fn xln v. oolitic;
sm pr oolitic; barren; abun
wht chalk; few pieces wht chert;
40" circ sample few pieces finely
ool poro; barren

LS crm fn xln sli fossil pr
visible poro NSNO sc pieces
mushy wht chalk

LS crm fn xln sli fossil pr
visible poro NSNO abun pieces
dk gry chert

Muncie Crk

LS,AA

"H"

Sh, blk carbonaceous

LS crm-tan fn xln fossil & ool
pr-fr pinpoint poro; iso vugular
poro; few pieces med-dk brwn
sat stn; SSFO; sli odor; sli yellow
flur; abun blue-gray chert

"I"

Sh, gry, green, maroon

LS crm fn xln fossil; v. ool; iso
vugular poro; pr-fr interpart &
pinpoint poro; gd amt golden brwn
mstly sat stn; S-FSFO -- gas on
brk; fr odor; yellow flur

"J"

Sh, gry, green, maroon

LS crm fn xln v. ool; dolomitic
fr-gd oolitic poro; gd amt lt.
brwn subsat-sat stn--show
becomes sply in 40" circ sample;
SSFO on brk; fr-gd gassy odor;
yellow flur

3300

LS crm-tan fn xln sli oolitic;
pr interpart poro; v. dense
NSNO

Sh, blk carbonaceous & dk gry

"K"

LS crm fn xln v. ool; pr visible
poro; rare oolitic poro; NS
barren

"L"

B/KC

LS crm-tan fn xln pr interpart
poro; blocky; 1-2 pieces sply stn;
VSSFO; v. sli odor

Sh, dk gry, kelly green, maroon;
2-3 pieces tite dolo; few pieces
chert; samples washing red

Sh, gry, green, red; 2-3 pieces
subsat stn dolo; pink and red
cherts; samples washing red

Arbuckle

Sh, AA; 3 pieces sat dolo; SSFO;
sli-fr odor

Circ 3376: Dolo, crm pr xln flood of dolo in
40" circ sample; 1-2 pieces saturated stain;
appears tite overall. Will DST here to test
productive datums of surrounding wells

Circ 3382: Dolo, crm fn-med xln sucrosic; sev
pieces lt golden brwn sat stn; SSFO; fr odor;
bright yellow flur

Circ 3388: Dolo, crm fn-med xln sucrosic; v.
friable; sm rhombic; fr amt lt brwn sat stn;
S-FSFO; pr has FO on brk; fr odor in stop
sample; 20" sample; Dolo AA; appears
more tite; VSSFO; fr odor; yellow flur

Dolo, crm fn-med xln iso vugular poro; pr-fr
poro; gd amt subsat-sat stn; SSFO; fr odor

1st Op: Weak Bldg 1.79"
No Blowback
2nd Op: Weak Bldg .85"
No Blowback

Rec:
30' VSOSM
(1%O, 99%M)

IFP: 25-25#/30"
ISIP: 76#/30"
FFP: 36-38#/30"
FSIP: 58#/30"

EL 3256 (-1351)

DST #3: (3271-3310)
1st Op: BOB 12"
No Blowback
2nd Op: BOB 20"
No Blowback

Rec:
6' SOMCW
(5%O, 55%W, 40%M)
124' MCW
(70%W, 30%M)
248' MCW
(90%W, 10%M)
378' Total Fluid

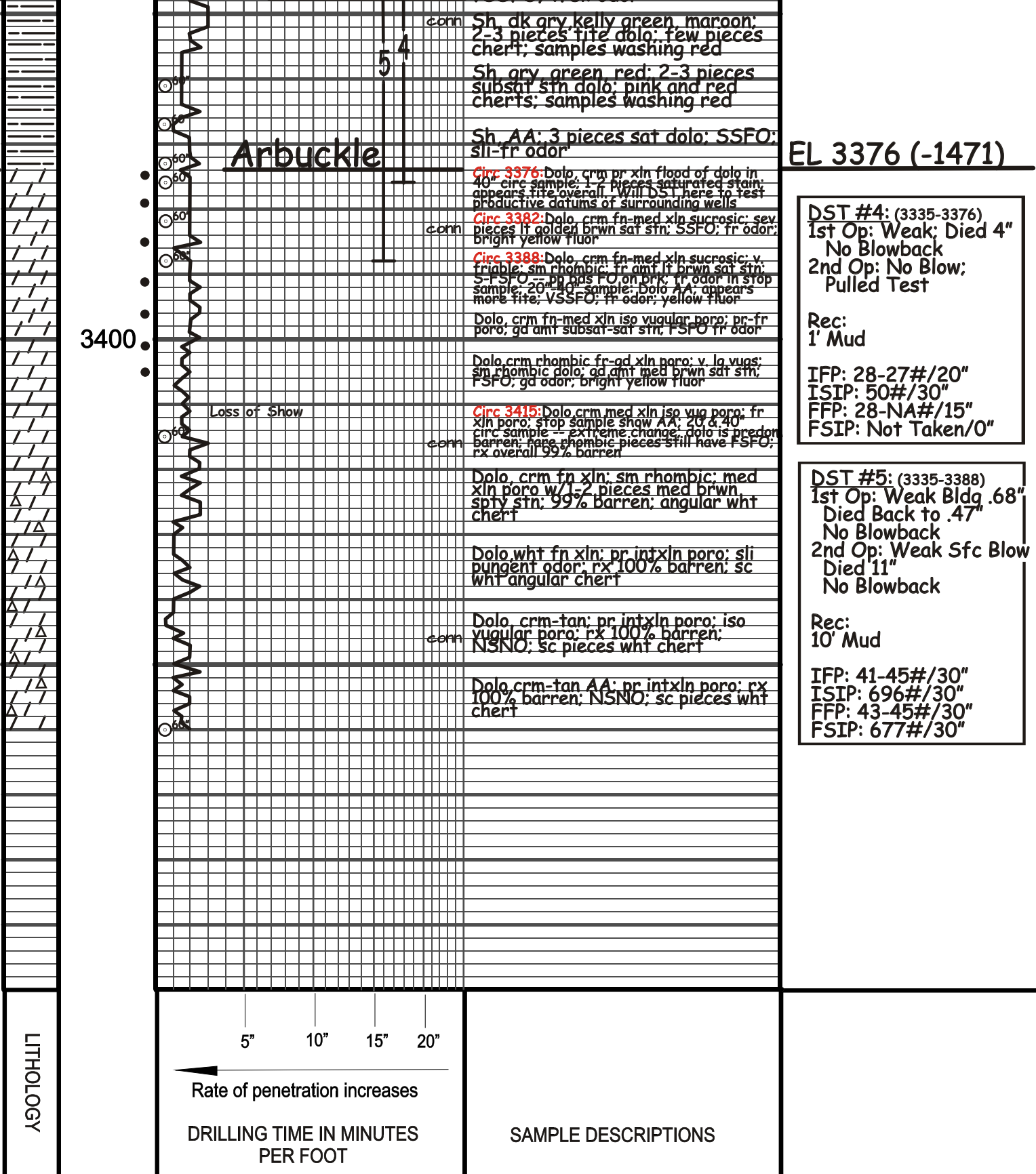
IFP: 38-128#/45"
ISIP: 932#/45"
FFP: 135-205#/45"
FSIP: 909#/45"
Chlor: 66,000 ppm

EL 3346 (-1441)

EL 3376 (-1471)

DST #4: (3335-3376)
1st Op: Weak; Died 4"
No Blowback
2nd Op: No Blow;
Pulled Test

Rec:



EL 3376 (-1471)

DST #4: (3335-3376)
1st Op: Weak; Died 4"
No Blowback
2nd Op: No Blow;
Pulled Test

Rec:
1' Mud

IFP: 28-27#/20"
ISIP: 50#/30"
FFP: 28-NA#/15"
FSIP: Not Taken/0"

DST #5: (3335-3388)
1st Op: Weak Bldg .68"
Died Back to .47"
No Blowback
2nd Op: Weak Sfc Blow
Died 11"
No Blowback

Rec:
10' Mud

IFP: 41-45#/30"
ISIP: 696#/30"
FFP: 43-45#/30"
FSIP: 677#/30"

OPERATOR: Russell Oil, Inc.
LEASE: Nuss-Dietz Unit WELL NO: #1-33
API: 15-167-24,121 FIELD: Wildcat

ELEVATION: KB 1905
LOCATION: 388'FN & 2644'FE
SEC: 33 TWP: 15S RNG: 14W
COUNTY: Russell STATE: Kansas



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russel Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

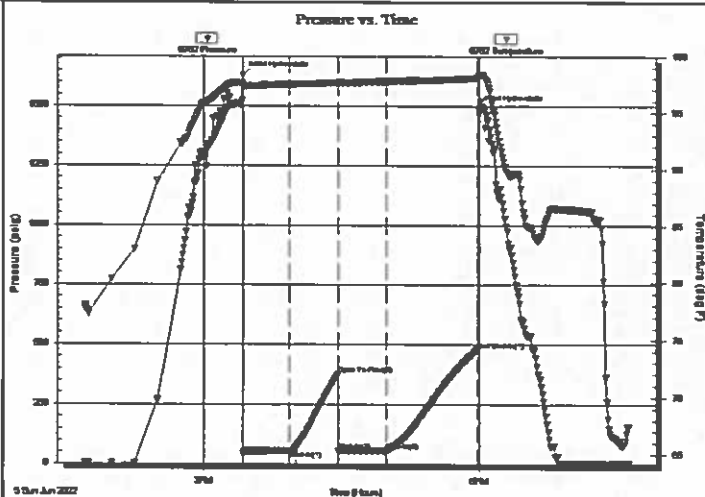
33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65442 DST#: 1
Test Start: 2022.06.05 @ 13:42:00

GENERAL INFORMATION:

Formation: LKC "B-C"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:25:47
Time Test Ended: 19:38:02
Interval: 3125.00 ft (KB) To 3165.00 ft (KB) (TVD)
Total Depth: 3165.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Leal Cason
Unit No: 72
Reference Elevations: 1905.00 ft (KB)
1897.00 ft (CF)
KB to GRVCF: 8.00 ft

Serial #: 6752 Inside
Press@RunDepth: 54.65 psig @ 3131.00 ft (KB)
Start Date: 2022.06.05 End Date: 2022.06.05
Start Time: 13:42:01 End Time: 19:38:02
Capacity: psig
Last Calib.: 2022.06.05
Time On Btm: 2022.06.05 @ 15:25:32
Time Off Btm: 2022.06.05 @ 17:59:32

TEST COMMENT: IF: Weak Blow, Built to 7.6 inches, Died Off to 5.73 inches
ISI: No Blow
FF: No Blow
FSI: No Blow



PRESSURE SUMMARY

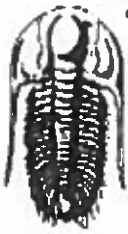
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1629.63	97.61	Initial Hydro-static
1	41.41	97.25	Open To Flow (1)
30	54.65	97.49	Shut-In(1)
63	374.44	97.64	Open To Flow (2)
63	54.71	97.64	Shut-In(2)
94	55.86	97.75	Shut-In(3)
154	473.37	98.09	End Shut-In(1)
154	1486.27	98.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
66.00	Mud	0.93

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russel Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

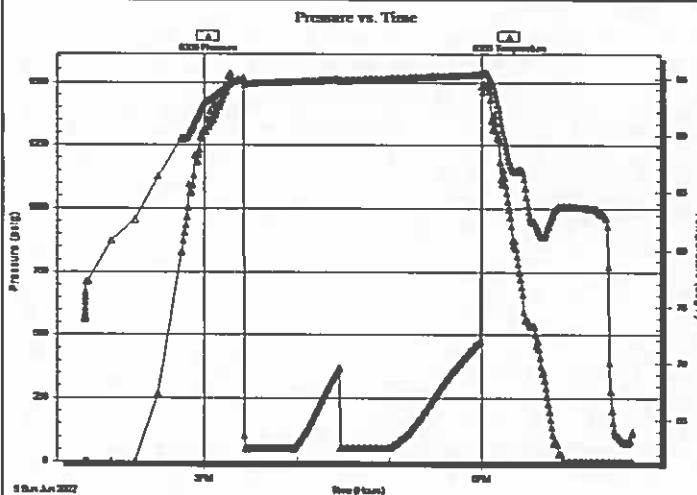
33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65442 DST#: 1
Test Start: 2022.06.05 @ 13:42:00

GENERAL INFORMATION:

Formation: LKC "B-C"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:25:47
Time Test Ended: 19:38:02
Interval: 3125.00 ft (KB) To 3165.00 ft (KB) (TVD)
Total Depth: 3165.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Leal Cason
Unit No: 72
Reference Elevations: 1905.00 ft (KB)
1897.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8365 Outside
Press@RunDepth: psig @ 3131.00 ft (KB)
Start Date: 2022.06.05 End Date: 2022.06.05
Start Time: 13:42:01 End Time: 19:38:02
Capacity: psig
Last Calib.: 2022.06.05
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Weak Blow, Built to 7.6 inches, Died Off to 5.73 inches
IS: No Blow
FF: No Blow
FS: No Blow



PRESSURE SUMMARY

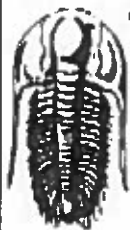
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
66.00	Mud	0.93

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russel Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65442 DST#: 1
Test Start: 2022.06.05 @ 13:42:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 49.00 sec/qt
Water Loss: 6.00 in³
Resistivity: ohm.m
Salinity: 4800.00 ppm
Filter Cake: 0.02 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig
Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
66.00	Mud	0.926

Total Length: 66.00 ft Total Volume: 0.926 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

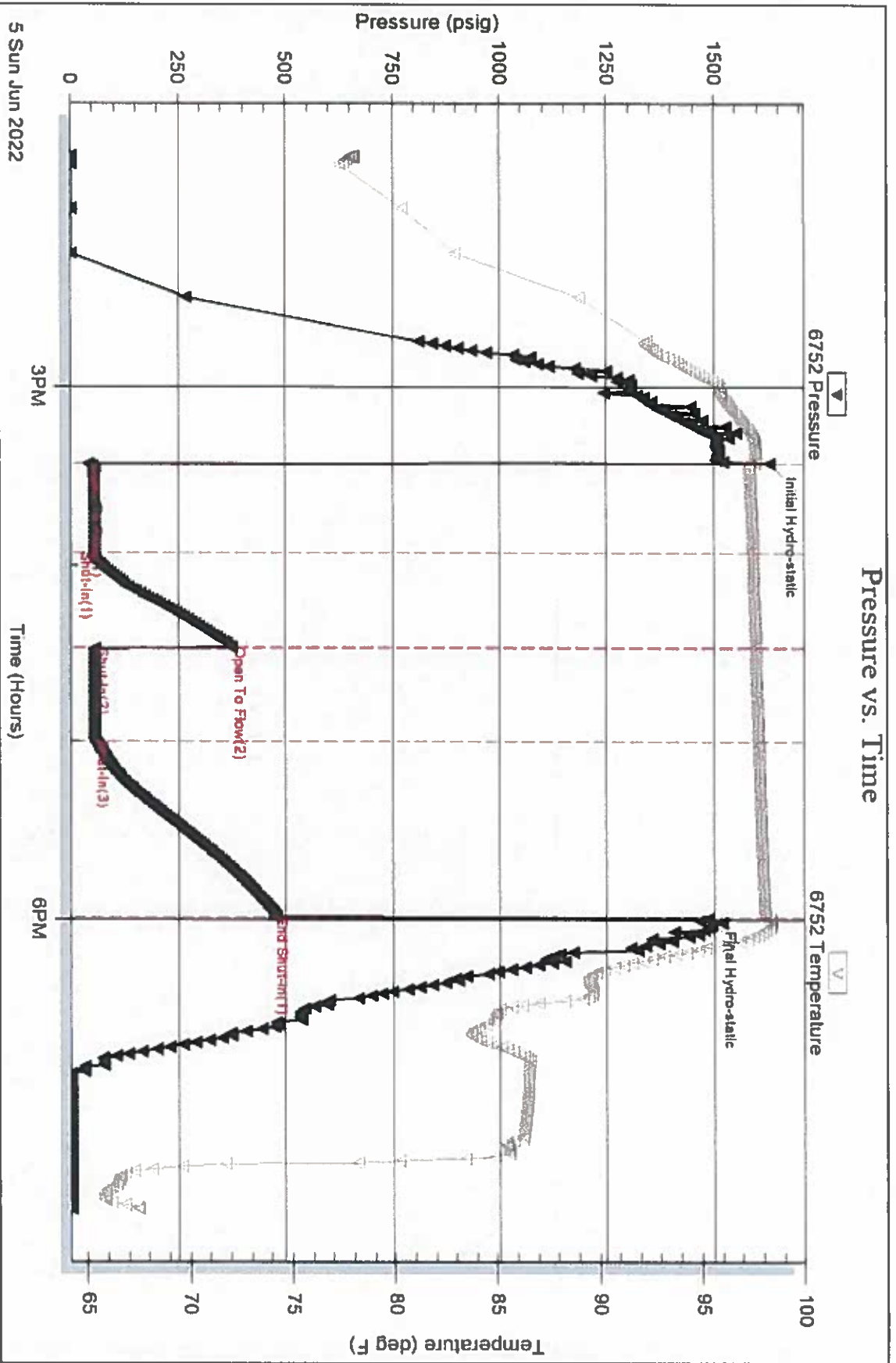
Serial #: 6752

Inside

Russel Oil Inc

Muss-Dez Unit 1-33

DST Test Number: 1

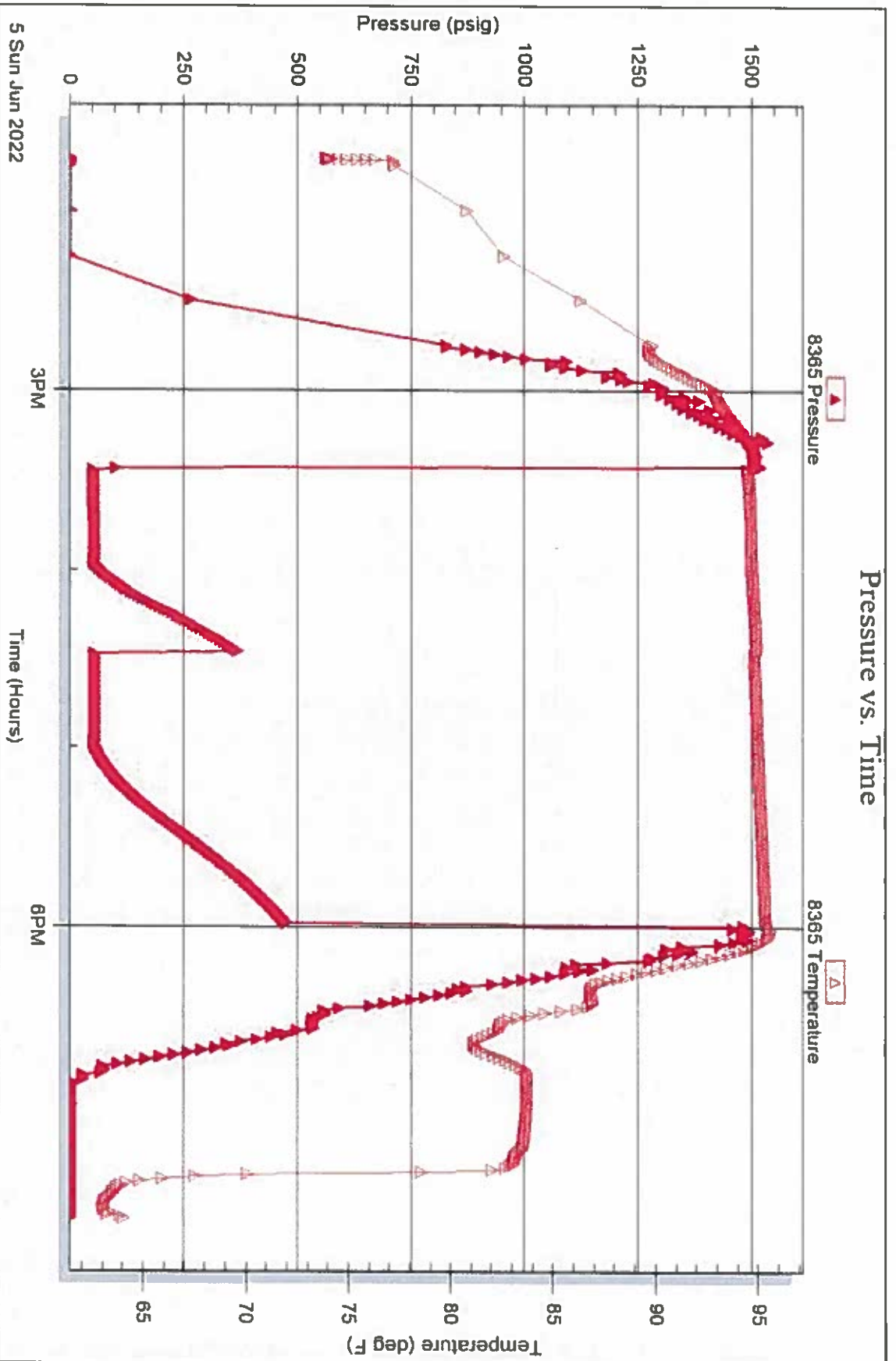


Serial #: 8365

Outside Russel Oil Inc

Nuss-Deitz Unit 1-33

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russel Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

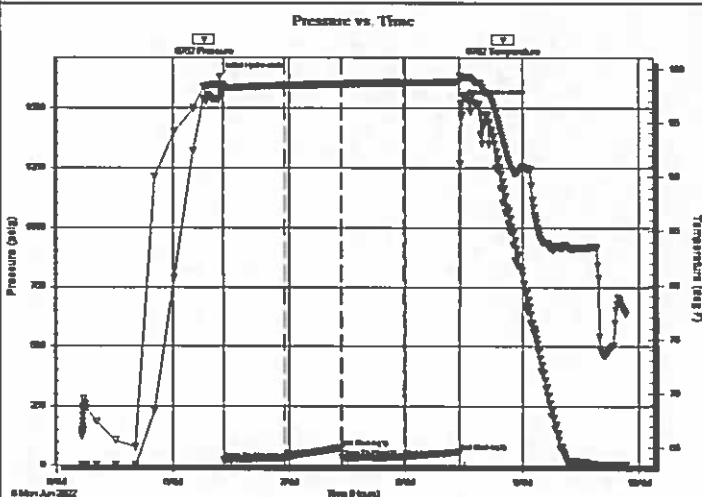
33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65443 DST#: 2
Test Start: 2022.06.06 @ 05:13:00

GENERAL INFORMATION:

Formation: LKC "E-F"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:26:17
Time Test Ended: 09:53:17
Interval: 3177.00 ft (KB) To 3217.00 ft (KB) (TVD)
Total Depth: 3217.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Leal Cason
Unit No: 72
Reference Elevations: 1905.00 ft (KB)
1897.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6752 Inside
Press@RunDepth: 37.53 psig @ 3183.00 ft (KB)
Start Date: 2022.06.06 End Date: 2022.06.06
Start Time: 05:13:01 End Time: 09:53:17
Capacity: psig
Last Calib.: 2022.06.06
Time On Btm: 2022.06.06 @ 06:24:17
Time Off Btm: 2022.06.06 @ 08:28:17

TEST COMMENT: IF: Weak Blow, Built to 1.79 inches
IS: No Blow
FF: Weak Blow, Built to .85 inches
FS: No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1635.44	98.53	Initial Hydro-static
2	24.60	98.33	Open To Flow (1)
34	34.76	98.45	Shut-In(1)
63	76.01	98.59	End Shut-In(1)
63	36.18	98.59	Open To Flow (2)
95	37.53	98.72	Shut-In(2)
124	57.94	98.85	End Shut-In(2)
124	1519.47	99.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	VSOSM 1%O 99%M	0.42

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Russel Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

33-15S-14W Russel
Nuss-Dietz Unit 1-33
 Job Ticket: 65443 **DST#: 2**
 Test Start: 2022.06.06 @ 05:13:00

Formation: LKC "E-F"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:26:17
Time Test Ended: 09:53:17

Test Type: Conventional Bottom Hole (Reset)
Tester: Leal Cason
Unit No: 72

Interval: 3177.00 ft (KB) To 3217.00 ft (KB) (TVD)
Total Depth: 3217.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1905.00 ft (KB)
1897.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8365	Outside	
Press@RunDepth:	psig @	3183.00 ft (KB)
Start Date:	2022.06.06	End Date:
Start Time:	05:13:01	End Time:

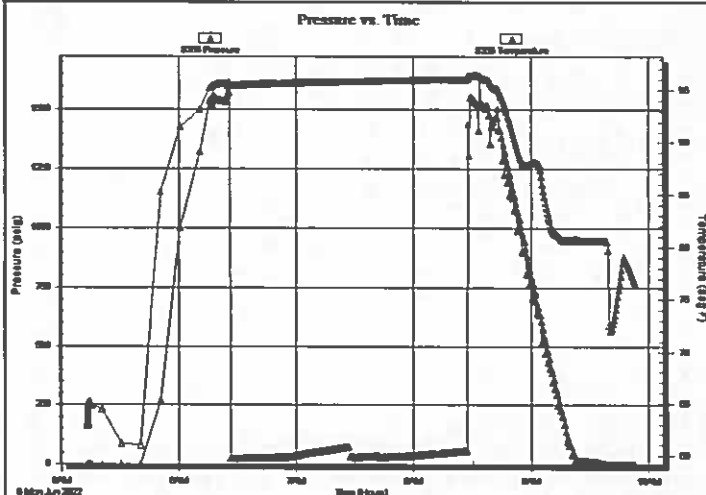
Capacity:

Last Calib.: 2022.06.06

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak Blow, Built to 1.79 inches
IS: No Blow
FF: Weak Blow, Built to .85 inches
FS: No Blow



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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[illegible]

Length (ft)	Description	Volume (bbl)
30.00	VSOSM 1%O 99%M	0.42

* Recovery from multiple tests

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russel Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65443 DST#: 2
Test Start: 2022.06.06 @ 05:13:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 6.00 in³
Resistivity: ohm.m
Salinity: 4800.00 ppm
Filter Cake: 0.02 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig
Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	VSOSM 1%O 99%M	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6752

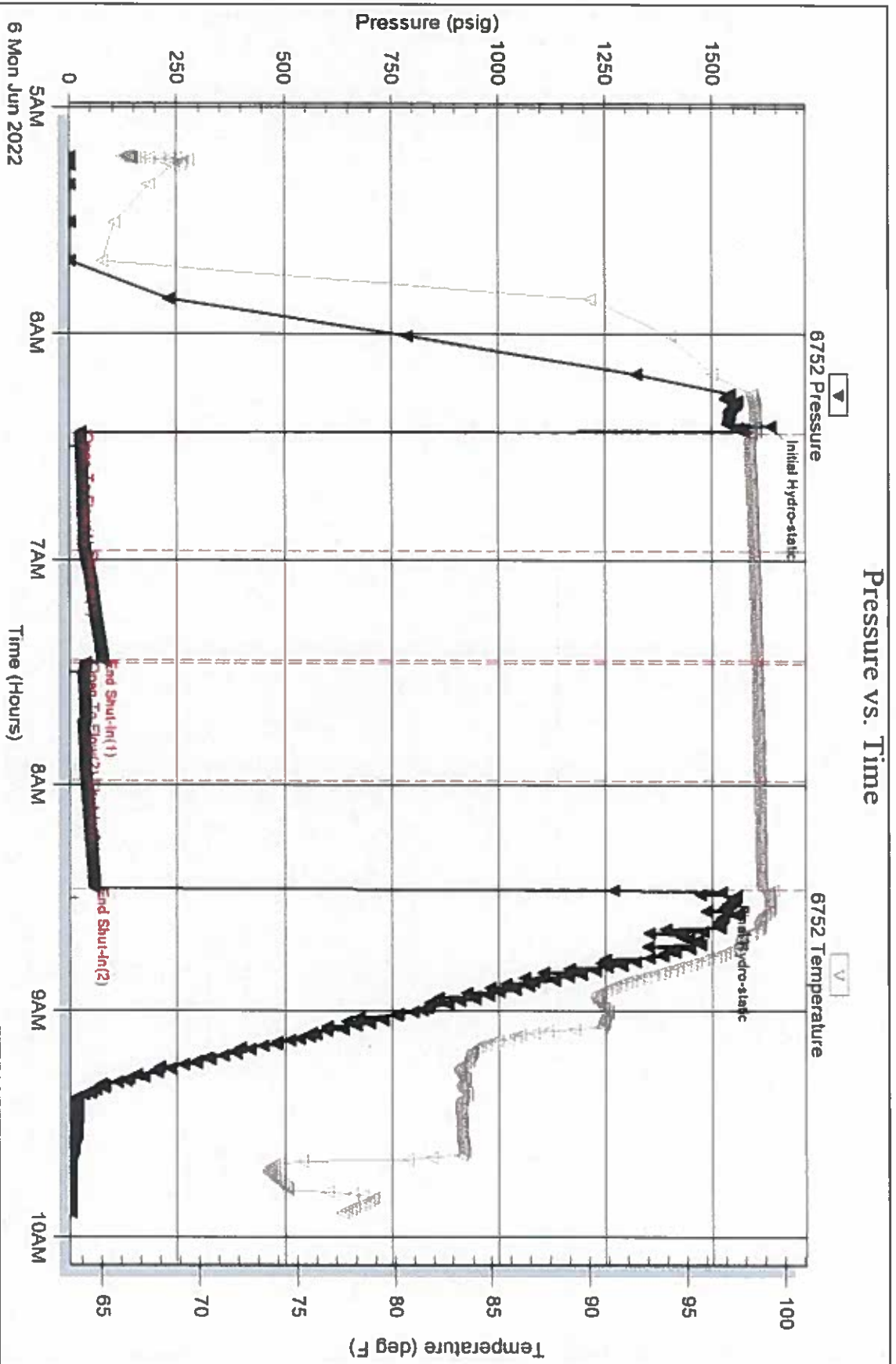
Inside

Russel Oil Inc

Muss-Dez Unit 1-33

DST Test Number: 2

Pressure vs. Time

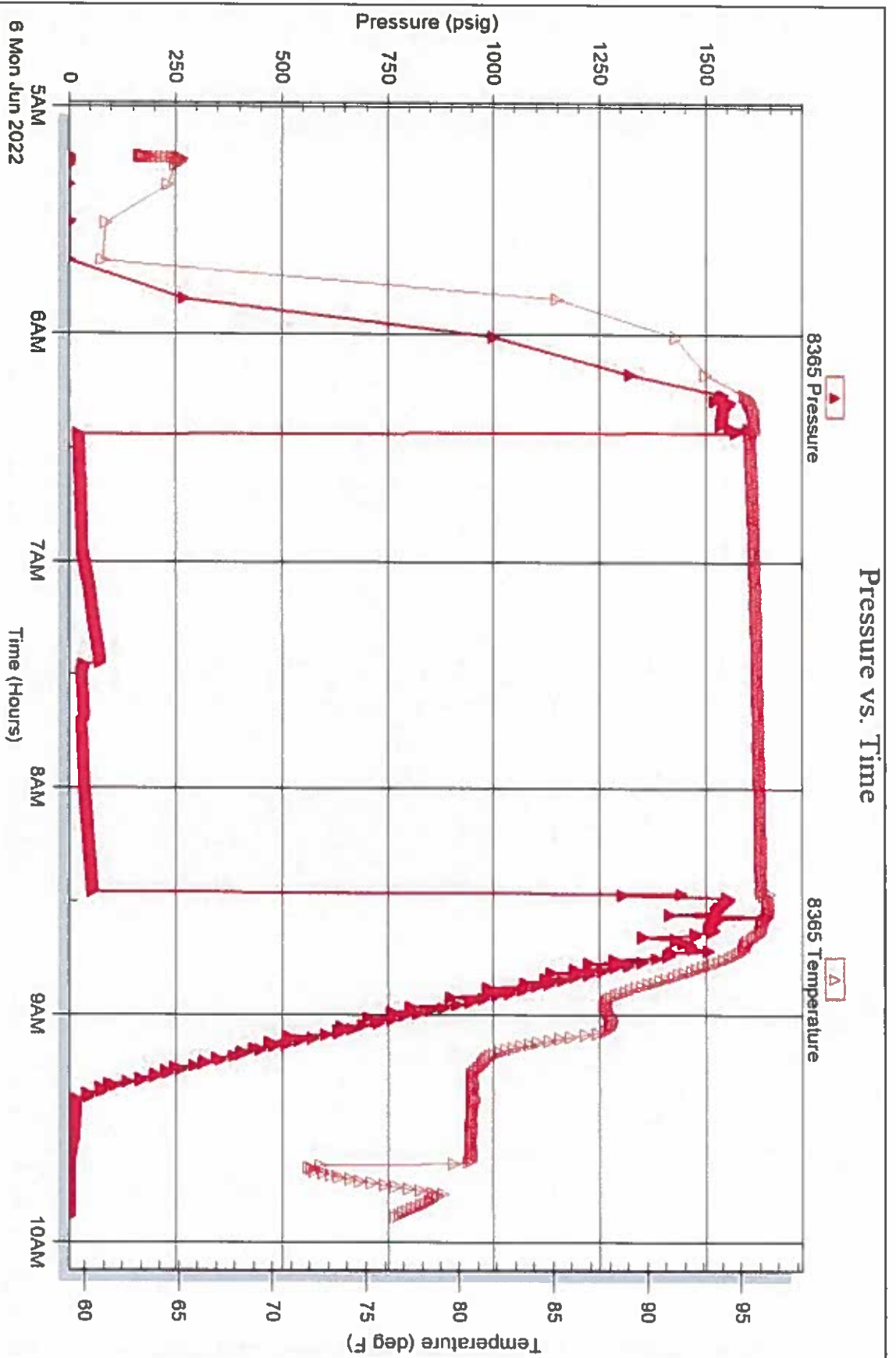


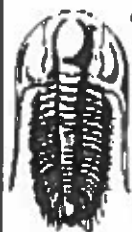
Serial #: 8365

Outside Russel Oil Inc

Nuss-Deitz Unit 1-33

DST Test Number: 2





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Russell Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

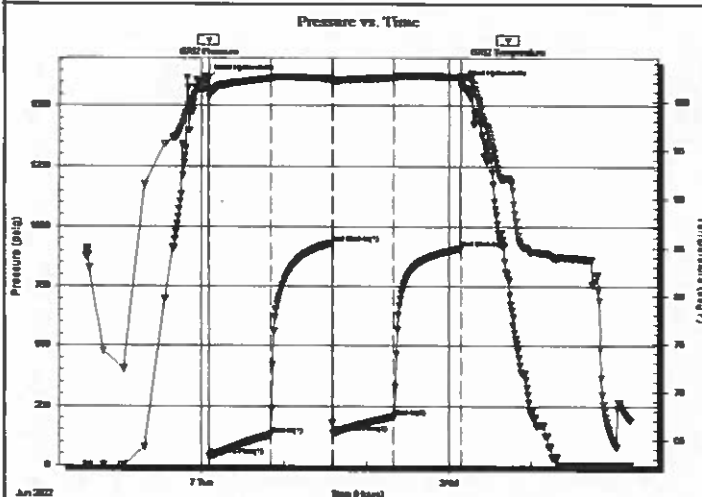
33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65444 DST#: 3
Test Start: 2022.06.06 @ 22:36:00

GENERAL INFORMATION:

Formation: LKC "I- J"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:05:17
Time Test Ended: 05:12:02
Interval: 3271.00 ft (KB) To 3310.00 ft (KB) (TVD)
Total Depth: 3310.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Leal Cason
Unit No: 72
Reference Elevations: 1905.00 ft (KB)
1897.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6752 Inside
Press@RunDepth: 205.20 psig @ 3277.00 ft (KB)
Start Date: 2022.06.06 End Date: 2022.06.07
Start Time: 22:36:01 End Time: 05:12:02
Capacity: psig
Last Calib.: 2022.06.07
Time On Btm: 2022.06.07 @ 00:04:47
Time Off Btm: 2022.06.07 @ 03:09:32

TEST COMMENT: IF: Strong Blow, BOB in 12 minutes, Built to 28.64 inches
ISL: No Blow
FF: Fair Blow, BOB in 20 minutes, Built to 22.17 inches
FSI:



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1615.77	101.41	Initial Hydro-static
1	37.74	100.47	Open To Flow (1)
46	128.12	102.44	Shut-In(1)
91	931.81	102.40	End Shut-In(1)
91	135.05	102.19	Open To Flow (2)
136	205.20	102.51	Shut-In(2)
184	909.78	102.63	End Shut-In(2)
185	1593.43	102.69	Final Hydro-static

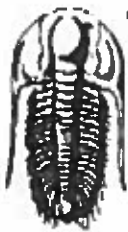
Recovery

Length (ft)	Description	Volume (bbl)
248.00	MCW 10%M 90%W	3.48
124.00	MCW 30%M 70%W	1.74
6.00	SOMCW 5%O 40%M 55%W	0.08

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russell Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65444 DST#: 3
Test Start: 2022.06.06 @ 22:36:00

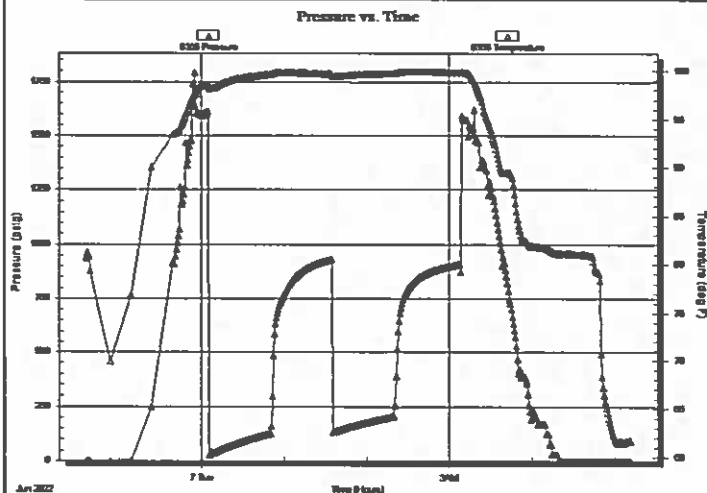
GENERAL INFORMATION:

Formation: LKC "I- J"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:05:17
Time Test Ended: 05:12:02
Test Type: Conventional Bottom Hole (Reset)
Tester: Leal Cason
Unit No: 72
Interval: 3271.00 ft (KB) To 3310.00 ft (KB) (TVD)
Reference Elevations: 1905.00 ft (KB)
Total Depth: 3310.00 ft (KB) (TVD)
1897.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good
KB to GR/CF: 8.00 ft

Serial #: 8365 Outside
Press@RunDepth: psig @ 3277.00 ft (KB)
Capacity: psig
Start Date: 2022.06.06 End Date: 2022.06.07 Last Calib.: 2022.06.07
Start Time: 22:36:01 End Time: 05:12:02 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Strong Blow, BOB in 12 minutes, Built to 28.64 inches
IS: No Blow
FF: Fair Blow, BOB in 20 minutes, Built to 22.17 inches
FS:

PRESSURE SUMMARY



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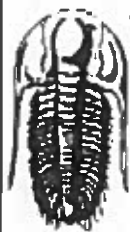
Recovery

Length (ft)	Description	Volume (bbl)
248.00	MCW 10%M 90%W	3.48
124.00	MCW 30%M 70%W	1.74
6.00	SOMCW 5%O 40%M 55%W	0.08

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65444 DST#: 3
Test Start: 2022.06.06 @ 22:36:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 43.00 sec/qt
Water Loss: 6.00 in³
Resistivity: ohm.m
Salinity: 5000.00 ppm
Filter Cake: 0.02 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: 66000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
248.00	MCW 10%M 90%W	3.479
124.00	MCW 30%M 70%W	1.739
6.00	SOMCW 5%O 40%M 55%W	0.084

Total Length: 378.00 ft Total Volume: 5.302 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW was .13 @ 64 degrees

Serial # 6752

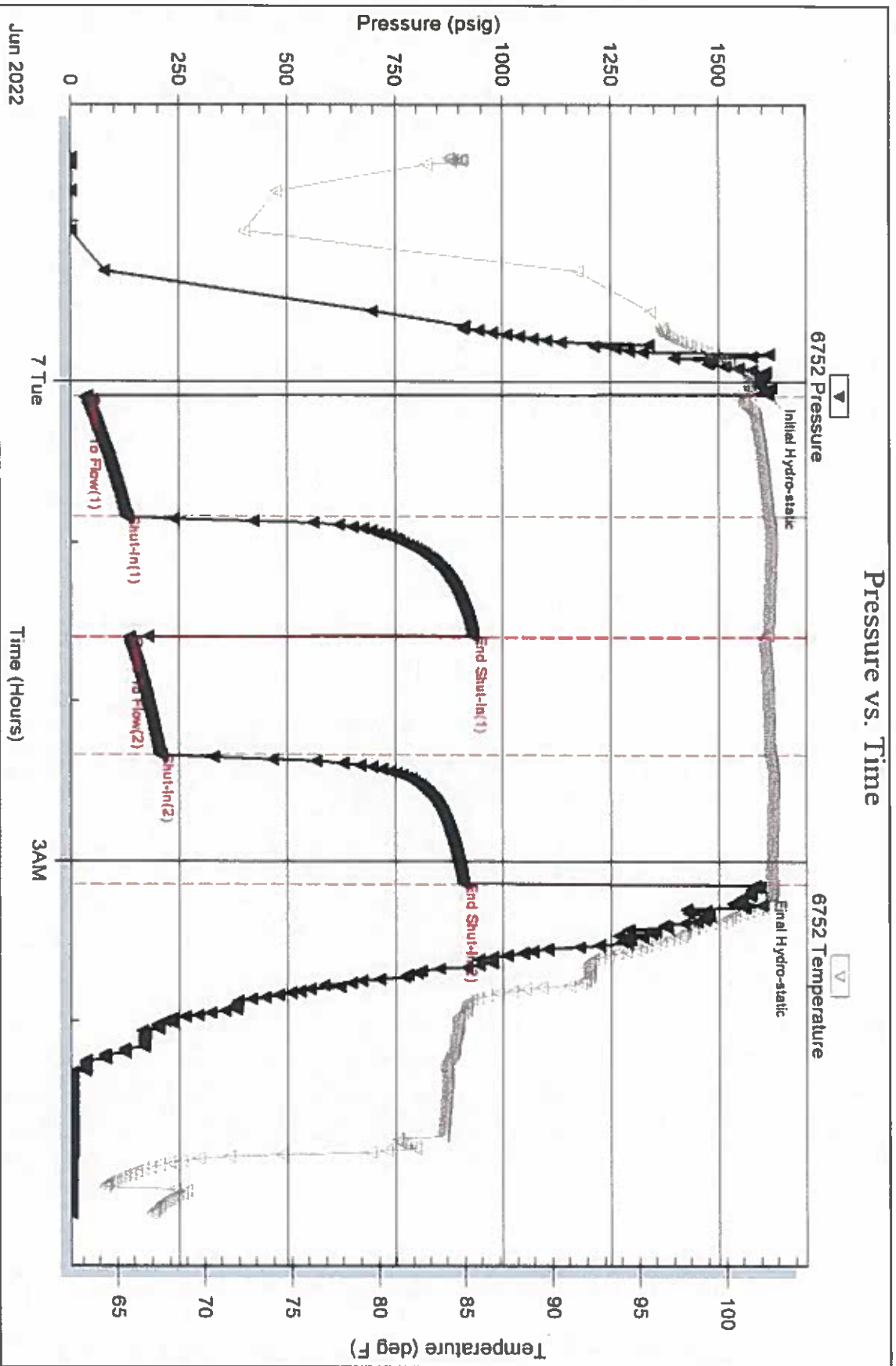
Inside

Russell Oil Inc

Nuss-Deitz Unit 1-33

DST Test Number: 3

Pressure vs. Time

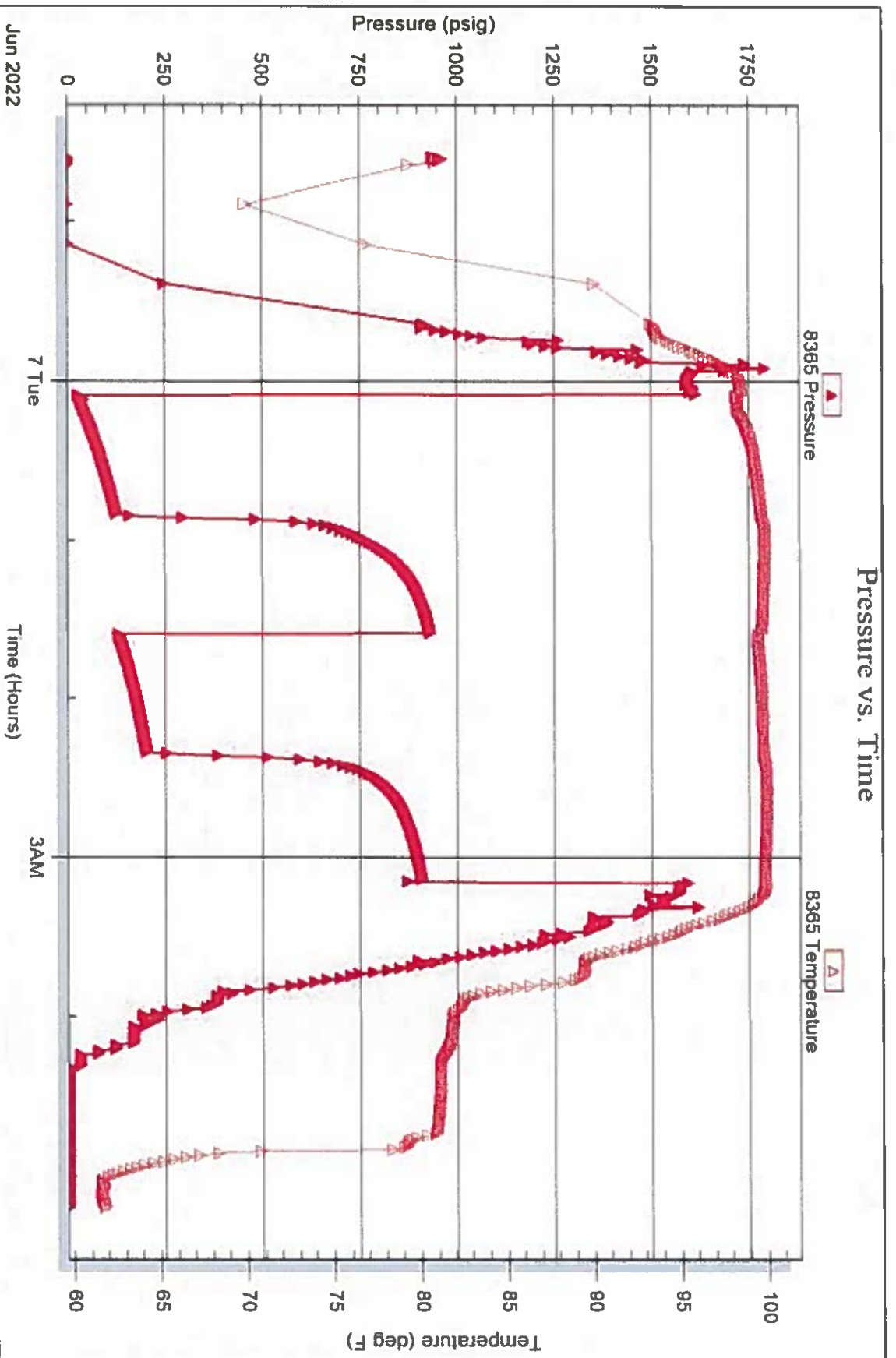


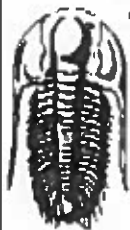
Serial #: 8365

Outside Russel Oil Inc

Muss-Dietz Unit 1-33

DST Test Number: 3





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russell Oil Inc
PO Box 8050
Edmond, OK 73083

ATTN: Kitt Noah

33-15S-14W Russel

Nuss-Dietz Unit 1-33

Job Ticket: 65445 DST#: 4

Test Start: 2022.06.07 @ 18:09:00

GENERAL INFORMATION:

Formation: Arbuckle

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:50:32

Time Test Ended: 22:39:17

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 72

Interval: 3335.00 ft (KB) To 3376.00 ft (KB) (TVD)

Total Depth: 3376.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1905.00 ft (KB)

1897.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6752 Inside

Press@RunDepth: 27.05 psig @ 3341.00 ft (KB)

Start Date: 2022.06.07 End Date: 2022.06.07

Start Time: 18:09:01 End Time: 22:39:17

Capacity: psig

Last Calib.: 2022.06.07

Time On Btm: 2022.06.07 @ 19:50:02

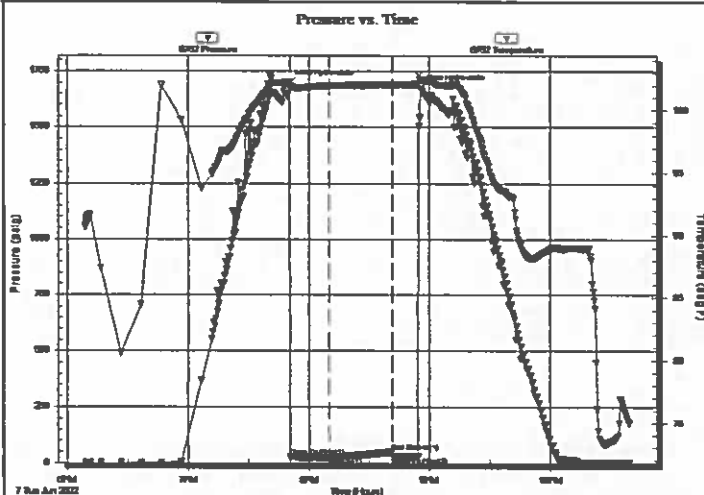
Time Off Btm: 2022.06.07 @ 20:55:32

TEST COMMENT: IF: Weak Surface Blow, Dead @ 4 minutes

IS: No Blow

FF: No Blow, Pulled Test

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1696.08	102.27	Initial Hydro-static
1	28.22	101.73	Open To Flow (1)
20	27.05	102.00	Shut-In(1)
52	49.63	102.09	End Shut-In(1)
52	27.81	102.09	Open To Flow (2)
66	1671.14	102.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud	0.01

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Test Start: 2022.06.07 @ 18:09:00

KB to GR/CF: 8.00 ft

Time Off Btmc:

FF: No Blow, Pulled Test



Recovery

Gas Rates

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65445 DST#: 4
Test Start: 2022.06.07 @ 18:09:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 53.00 sec/qt
Water Loss: 6.00 in³
Resistivity: ohm.m
Salinity: 5200.00 ppm
Filter Cake: 0.02 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig
Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud	0.014

Total Length: 1.00 ft Total Volume: 0.014 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6752

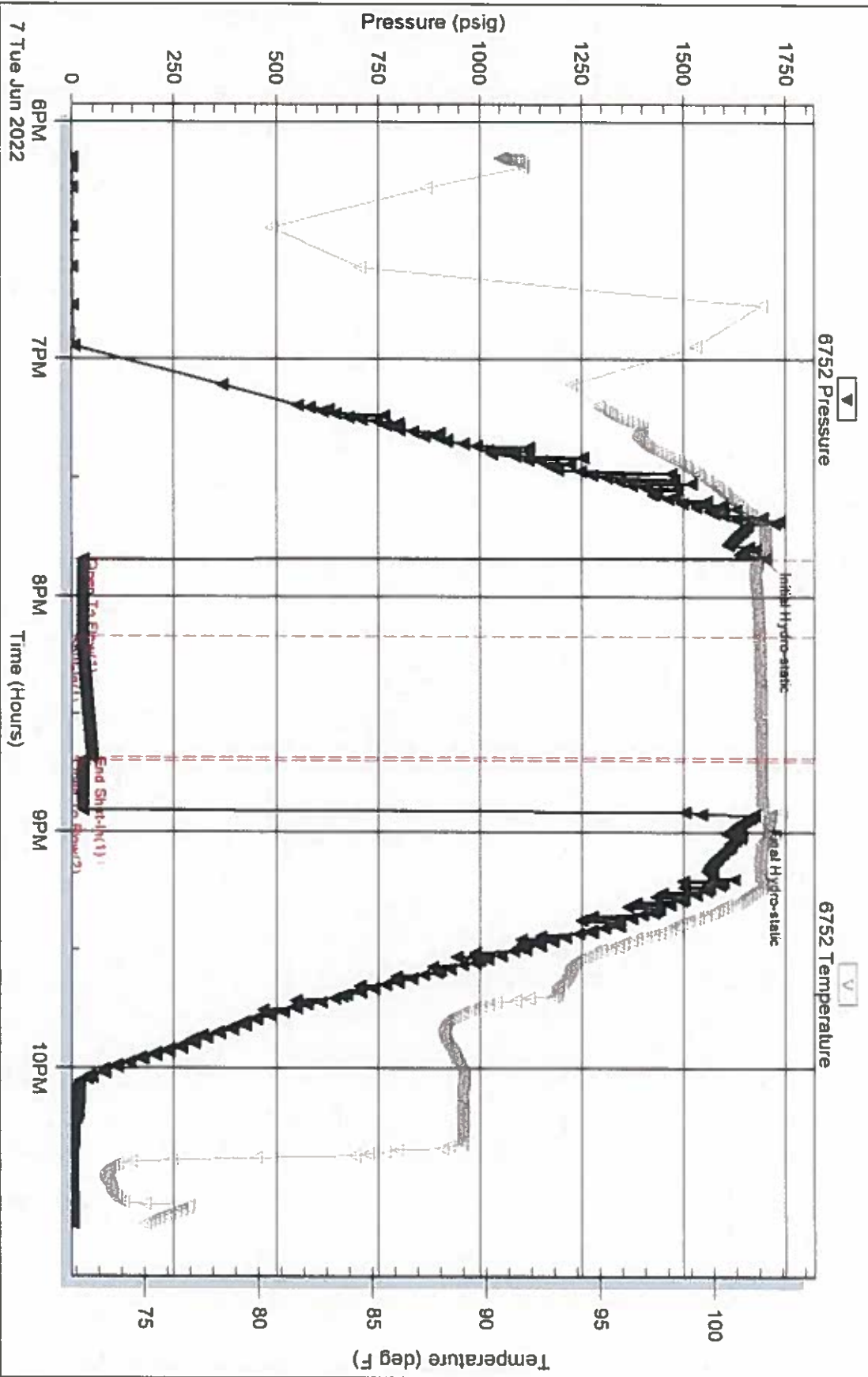
Inside

Russell Oil Inc

Nuss-Deitz Unit 1-33

DST Test Number 4

Pressure vs. Time

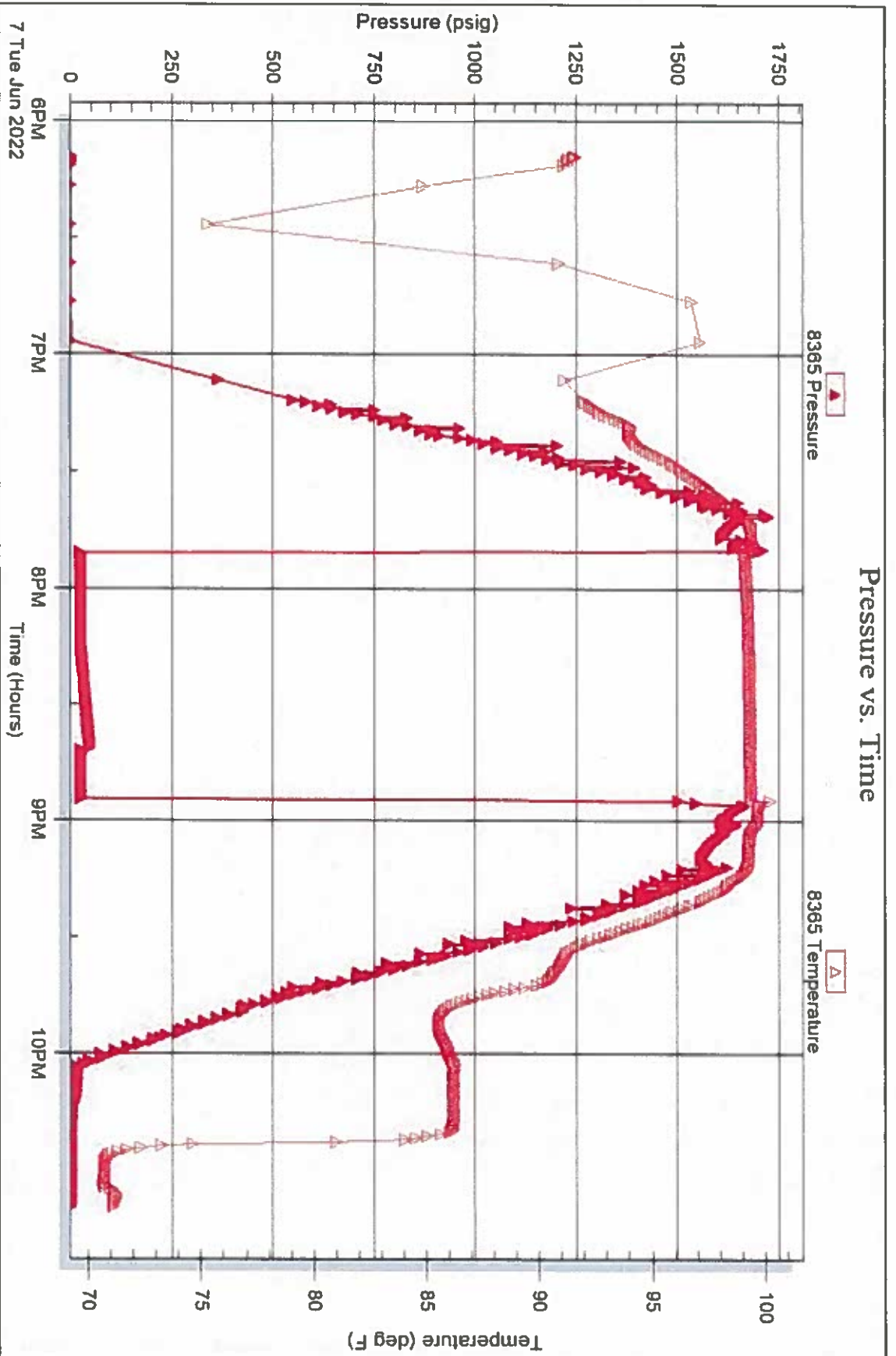


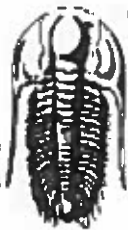
Serial #: 8365

Outside Russell Oil Inc

Nuss-Deitz Unit 1-33

DST Test Number: 4





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russell Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kitt Noah

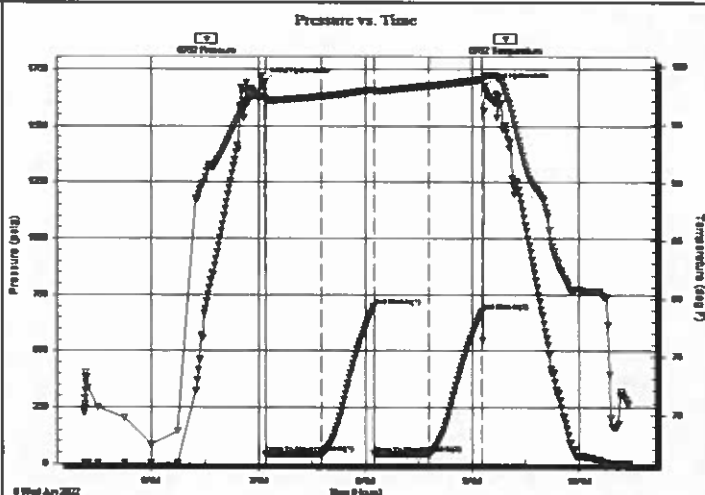
33-15S-14W Russel
Nuss-Dietz Unit 1-33
Job Ticket: 65446 DST#: 5
Test Start: 2022.06.08 @ 05:22:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 07:03:47
Time Test Ended: 10:28:02
Test Type: **Conventional Bottom Hole (Reset)**
Tester: **Leal Cason**
Unit No: **72**
Interval: **33365.0 ft (KB) To 3388.00 ft (KB) (TVD)**
Reference Elevations: **1905.00 ft (KB)**
Total Depth: **3388.00 ft (KB) (TVD)**
1897.00 ft (CF)
Hole Diameter: **7.88 inches** Hole Condition: **Good**
KB to GR/CF: **8.00 ft**

Serial #: **6752** Inside
Press@RunDepth: **44.82 psig @ 3380.00 ft (KB)**
Start Date: **2022.06.08** End Date: **2022.06.08**
Start Time: **05:22:01** End Time: **10:28:02**
Capacity: psig
Last Calib.: **2022.06.08**
Time On Btm: **2022.06.08 @ 07:03:32**
Time Off Btm: **2022.06.08 @ 09:07:02**

TEST COMMENT: IF: Weak Blow, Built to .68 inch, Died Off to .47 inch
IS: No Blow
FF: Weak Surface Blow, Dead @ 11 minutes
FS: No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1693.41	97.30	Initial Hydro-static
1	41.01	97.13	Open To Flow (1)
32	44.58	97.39	Shut-In(1)
62	696.27	97.92	End Shut-In(1)
62	43.03	97.86	Open To Flow (2)
93	44.82	98.29	Shut-In(2)
123	677.09	98.86	End Shut-In(2)
124	1673.57	99.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.14

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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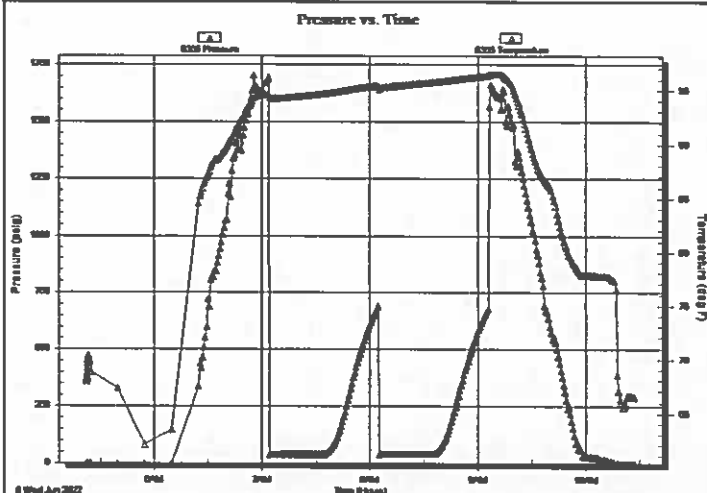
Russell Oil Inc
PO Box 8050
Edmond, OK 73083
ATTN: Kit Noah

33-15S-14W Russel
Nuss-Dietz Unit 1-33
 Job Ticket: 65446 **DST#: 5**
 Test Start: 2022.06.08 @ 05:22:00

Formation:	Arbuckle		Test Type:	Conventional Bottom Hole (Reset)
Deviated:	No	Whipstock:		
		ft (KB)		
Time Tool Opened:	07:03:47		Tester:	Leal Cason
Time Test Ended:	10:28:02		Unit No:	72
Interval:	33365.0 ft (KB) To	3388.00 ft (KB) (TVD)	Reference Elevations:	1905.00 ft (KB)
Total Depth:	3388.00 ft (KB) (TVD)			1897.00 ft (CF)
Hole Diameter:	7.88 inches	Hole Condition:	Good	KB to GR/CF:
				8.00 ft

Serial #: 8365	Outside				
Press@RunDepth:	psig	@	3380.00 ft (KB)	Capacity:	psig
Start Date:	2022.06.08	End Date:	2022.06.08	Last Calib.:	2022.06.08
Start Time:	05:22:01	End Time:	10:28:02	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF: Weak Blow, Built to .68 inch, Died Off to .47 inch
IS: No Blow
FF: Weak Surface Blow, Dead @ 11 minutes
FS: No Blow



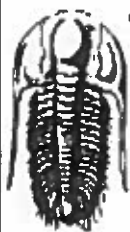
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Length (ft)	Description	Volume (bbl)
10.00	Mud	0.14

- * Recovery from multiple tests

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc

33-15S-14W Russel

PO Box 8050
Edmond, OK 73083

Nuss-Dietz Unit 1-33

Job Ticket: 65446

DST#: 5

ATTN: Kilt Noah

Test Start: 2022.06.08 @ 05:22:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 6.00 in³

Resistivity: ohm.m

Salinity: 5200.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud	0.140

Total Length: 10.00 ft

Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6752

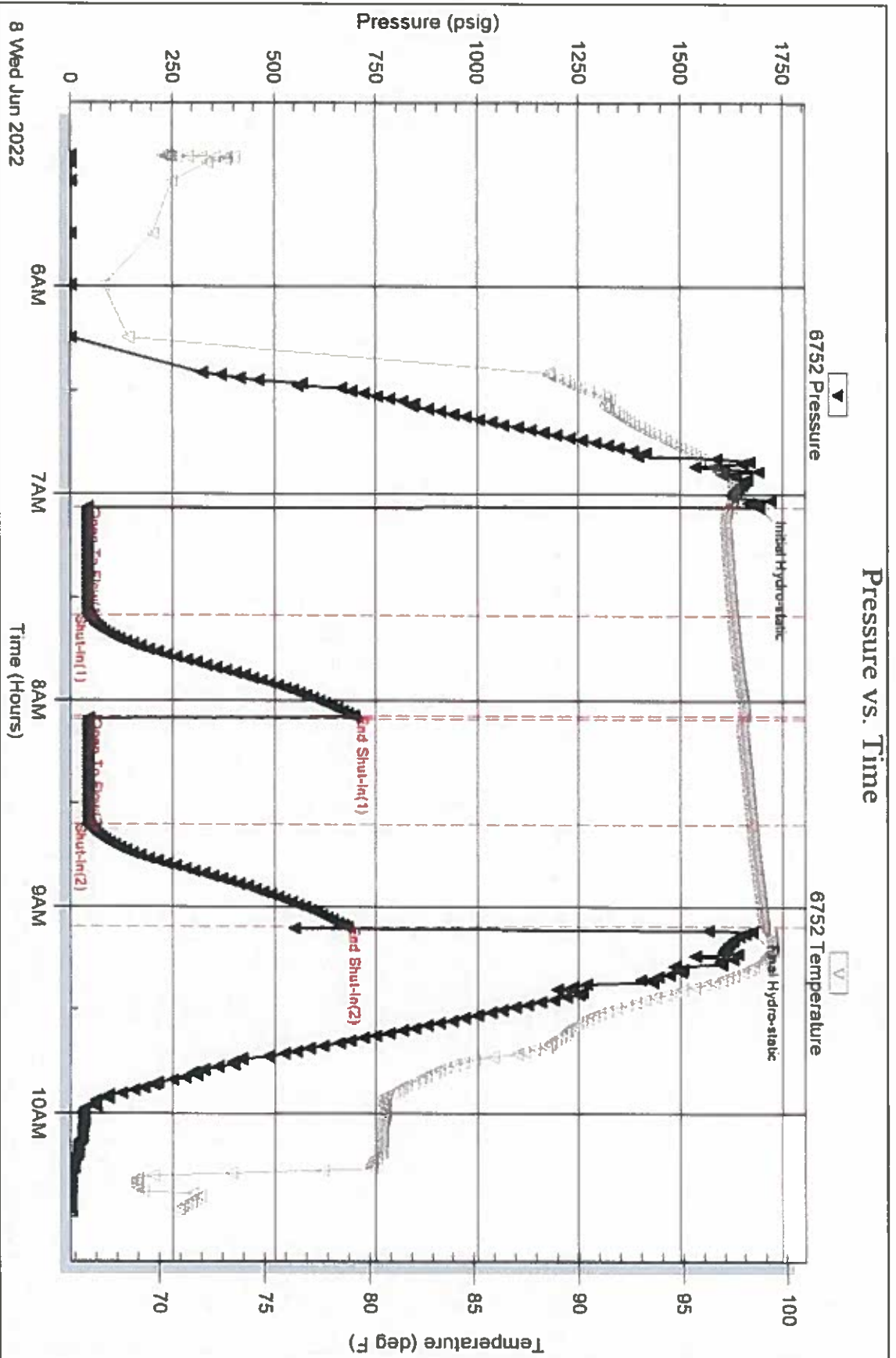
Inside

Russell Oil Inc

Nuss-Deitz Unit 1-33

DST Test Number: 5

Pressure vs. Time



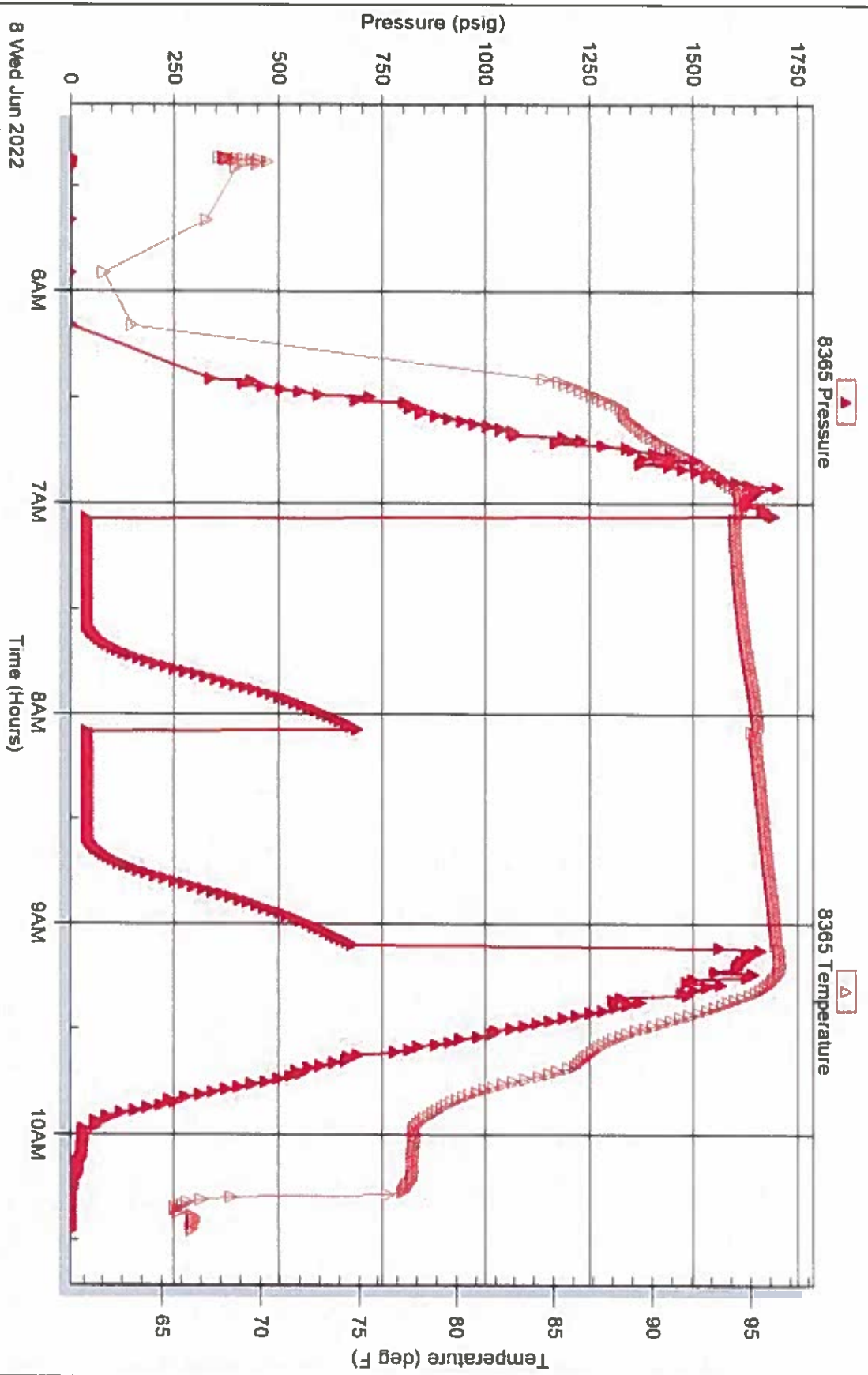
Serial #: 8365

Outside Russel Oil Inc

Nuss-Deitz Unit 1-33

DST Test Number 5

Pressure vs. Time



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. 2487

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6/2/22	33	15	14	Russell	Ks		8:00am

Location Russell sta Michael's Rd 1 1/2 W Sinto

Lease Nuss-Dierz Unit Well No. 1-33 Owner

Contractor Southwind Drilling Rpt To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job Surface

Hole Size 12 1/4 T.D. 906 Charge To Russell O.I.

Csg. 8 5/8 Depth 903-56 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. 30' Shoe Joint 30' Cement Amount Ordered 350 20 3/8 cc 2% gel

Meas Line Displace 55.5

EQUIPMENT

Pumptrk 16	No.	Cementer	Common 280
		Helper	Poz. Mix 70
Bulktrk 13	No.	Driver	Gel. 7
		Driver	Calcium 12
Bulktrk 14	No.	Driver	
		Driver	

JOB SERVICES & REMARKS

Remarks:	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
Ran 8 5/8 casing and est Circulation	Handling 379
	Mileage

FLOAT EQUIPMENT

Cemented with 350 sks	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
Cement Did Circulate	Float Shoe
	Latch Down
	1- Rubber Plug
	Pumptrk Charge Long Surface
	Mileage 15

X Signature Todd Braun

Thanks

Tax
Discount
Total Charge

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071

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

No. 2839

Cell 785-324-1041

Date 6-9-22	Sec. 33	Twp. 15	Range 14	County Russell	State KS	On Location	Finish 5:30 AM
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Nuss-Dietz unit Location 281 + M.chealis Rd. 1/2 W, 3/4 Int

Lease	Well No. 1-33	Owner
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Contractor Southwin #1	To Quality Oilwell Cementing, Inc.
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Type Job Plug	You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
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Hole Size 17 7/8"	T.D. 3460'	Charge To Russell oil
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Csg.	Depth	Street
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Tbg. Size 4 1/2" D.P.	Depth 3355'	City	State
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Tool	Depth	The above was done to satisfaction and supervision of owner agent or contractor.
------	-------	--

Cement Left in Csg.	Shoe Joint	Cement Amount Ordered 240 sx 60/110 4 1/2 Gel
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Meas Line	Displace 1120/mud	1/4 # Flo - seal
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EQUIPMENT

Pumptrk 18	No.	Cement Helper David	Common
Bulktrk 15	No.	Driver T. G.	Poz. Mix
Bulktrk 10	No.	Driver Rick	Gel.
			Calcium

JOB SERVICES & REMARKS

Remarks: 50 sx @ 3355'	Hulls
Rat Hole 50.5x @ 950'	Salt
Mouse Hole 100 sx @ 460'	Flowseal
Centralizers 10 sx @ 40' w/ plug	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar 30 sx Rathole	CFL-117 or CD110 CAF 38

Cement did Circulate	Sand
	Handling
	Mileage

FLOAT EQUIPMENT

Guide Shoe 1-Dry hole plug
Centralizer
Baskets
AFU Inserts
Float Shoe
Latch Down

Pumptrk Charge
Mileage

Signature	Tax
	Discount
	Total Charge

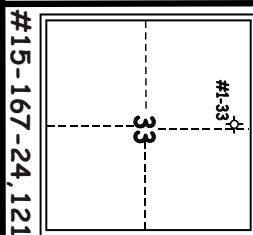
KITT NOAH

PETROLEUM GEOLOGIST

Kansas License #229



ELEVATION: KB: **1905**
GL: **1895**
MEASURED FROM: KB



GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

OPERATOR: **Russell Oil, Inc.**

LEASE: **Nuss-Dietz Unit** WELL NO: **#1-33**

LOCATION: **388'FN & 2644'FE**

SEC: **33** TWP: **15S** RNG: **14W**

COUNTY: **Russell** STATE: **Kansas**

CASING RECORD:

SURFACE: **8 5/8" set at 903' w/350 sx.**

PRODUCTION: **None**

DV TOOL: _____

FORMATION

TOP DATUM

Anhydrite 905 (+1000)

B/Anhydrite 936 (+969)

Topeka 2824 (-919)

Heebner 3056 (-1151)

Toronto 3072 (-1167)

Lansing 3119 (-1214)

B/KC 3346 (-1441)

Arbuckle 3376 (-1471)

RTD 3460 (-1555)

LTD 3462 (-1557)

CONTRACTOR: **Southwind Drilling Rig #1**

COMM: **6-1-2022** COMPL: **6-9-2022**

RTD: **3460** LTD: **3462**

SAMPLES SAVED FROM: **2700 to TD**

DRILLING TIME SAVED FROM: **2700 to TD**

SAMPLES EXAMINED FROM: **2700 to TD**

GEOLOGICAL SUPERVISION FROM: **2700 to TD**

MUD UP: **2621** MUD TYPE: **chemical**

Mudco - Gary Schmidberger

DRILL STEM TESTS TAKEN: **5**

Trilobite - Leal Cason

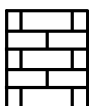
SURVEYS: **ELI Wireline**

Compensated Density Neutron

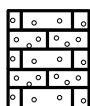
Dual Induction

Microlog

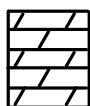
LEGEND



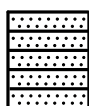
Limestone



Ool Lime



Dolomite



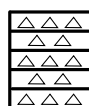
Sandstone



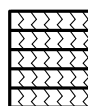
Shale



Carb Shale



Chert



Anhydrite

DEPTH

DRILLING TIME IN MINUTES PER FOOT

Rate of penetration increases



5"

10"

15"

20"

SAMPLE DESCRIPTIONS

REMARKS

Anhydrite

EL 905 (+1000)

B/Anhydrite

EL 936 (+969)

		SAMPLE DESCRIPTIONS				REMARKS
		Anhydrite				EL 905 (+1000)
		B/Anhydrite				EL 936 (+969)
950						
2700		Sh, gry & green				
		LS, crm fn xln fossil pr intpart poro mstly dense NSNO				
		Sh, gry, green, maroon				
		Sh, AA				
		Sh, lt gry, dk gry				
		Sh, dk gry & green				
		Howard				EL 2752 (-847)
		LS, crm-gry fn xln sli fossil pr visible poro NSNO				
		Sh, gry & green				
		LS, crm-tan fn xln sli fossil; pr visible poro; dense; blocky NSNO				
		Sh, gry & maroon				
		LS, crm-tan fn xln v fossil pr-fr interpart poro NSNO				
2800		Sh, dk gry & green				
		Sh, gry, green, maroon				

2800

Sh, dk gry & green

Sh, gry, green, maroon

conn

Sh, dk gry & green

TopekaLS, crm-tan fn xln fossil & ool;
pr-fr interpart poro; NSNO

Sh, gry & green

Sh, dk gry, green, maroon

conn

LS, crm-tan xln sli oolitic pr
pr interpart poro; barren NSNO

LS, AA

LS, crm-tan fn xln v. dense pr
visible poro NSNO;

conn

LS, crm-gry fn xln sli fossil pr
visible poro; NSNOLS; crm; fn xln; v. fossil & ool;
pr-sc fr interpart poro; barren
NSNO; abund dk gry & tan chert

LS, crm-gry AA

2900

Sh, blk carbonaceous

conn

LS, crm fn xln fossil pr-fr
interpart poro; 2-3 pieces lt
brwn spty stn; flaky oil on brk;
no show of free oil; no odorLS, crm fn xln v. fossil; pr
interpart poro NSNO

Sh, lt. gry & green

LS, crm fn xln sli fossil pr
interpart poro mstly dense
NSNO

conn

Sh, dk gry & green

LS, crm-tan fn xln sli fossil pr
interpart poro; NSNOLS, crm fn xln sli fossil pr
interpart poro NSNO

conn

Sh, blk carbonaceous

LS, crm-tan fn xln fossil pr -fr
interpart poro NSNOLS, crm fn xln sli fossil pr visible
poro NSNO sc tan chert

Sh, dk gry & green

LS, crm fn xln fossil pr-fr
interpart poro barren NSNO
abund tan chert

3000

conn

LS, crm fn xln fossil pr visible
poro; blocky NSNO

EL 2824 (-919)

3000

LS,crm fn xln fossil pr-fr
interpart poro barren NSNO
abun tan chert

LS,crm fn xln fossil pr visible
poro; blocky NSNO

LS,crm fn xln fossil & ool; pr
interpart poro; subchalky; 1-2
pieces lt-med brwn spty stn;
SSFO; no odor

LS,crm AA; abund pieces wht
chalk

LS,crm fn xln fossil; chalky; pr
interpart poro; 1 pc poss edge
stn NSNO sc pieces tan chert

LS,AA

Heebner

Sh, blk carbonaceous

Sh, gry, green, maroon

Toronto

LS,crm fn xln sli fossil rare iso
pinpoint poro; overall pr interpart
poro; dense; blocky; 1-2 pieces
med brwn spty edge stn; SSFO;
no odor

Sh, gry, green & maroon

Sh, abund dk gry & maroon

Sh, lt gry & green

Lansing

LS,crm-wht fn xln v. fossil;
pr-fr fossilcast poro; barren
NSFO; no odor

LS,AA

Sh, gry & green

LS,crm fn xln y. ool; pelletoid
pr-fr interpart poro; few pieces
lt brwn subsat stn; S-FSFO --
active gas bubbles; sli-fr odor

Sh, gry & green

LS,crm fn xln ool; dolomitic;
subooliclastic; pr-fr interpart
poro; 2-3 pieces lt. brwn spty
stn; S-FSFO -- gas on brk;
sli-fr odor

LS,crm-tan fn xln sli fossil pr
interpart poro; dense NSNO

Sh, blk carbonaceous

LS,crm-tan fn xln fossil & ool;
pr interpart poro; 1-2 pieces lt
brwn spty stn; VSSFO -- flaky
oil on brk; sli odor

LS,crm fn xln fossil; pr interpart
poro; fr pinpoint poro; iso vld; fr
amt med brwn subsat-sat stn;
F-GSFO w/abund gas bubbles on
brk in 40" circ sample; gd odor;
LS,crm-tan fn xln fossil sli ool

EL 3056 (-1151)

EL 3072 (-1167)

EL 3119 (-1214)

DST #1: (3125-3165)
1st Op: Weak Bldg 7½";
Tool Slid 15'
No Blowback
2nd Op: No Blow
No Blowback

Rec:
66' Mud

IFP: 41-55#/30"
ISIP: 374#/30"
FFP: 55-56#/30"
FSIP: 473#/60"

Pipe Strap at 3165'
.78 Long to Board

DST #2: (3177-3217)
1st Op: Weak Bldg 1.79"
No Blowback
2nd Op: Weak Bldg .85"
No Blowback

Rec:
30' VSOSM
(1%O, 99%M)

IFP: 25-25#/30"
ISIP: 76#/30"

3100

3200

3200

"E"

Sh, blk carbonaceous

"F"

LS crm-tan fn xln fossil & ool;
pr interpart poro: 1-2 pieces lt
brwn sply stn; VSSFO -- flaky
oil on brk; sli odor

LS crm fn xln fossil; pr interpart
poro: fr pinpoint poro; iso vug; fr
amt med brwn subsat-sat stn;
F-GSFO w/abun gas bubbles on
brk in 40" circ sample; gd odor;

LS crm-tan fn xln fossil sli ool
overall pr interpart poro; mstly
dense; NSNO; sc pieces sharp
tan chert

"G"

Sh, gry & green

LS crm-wht fn xln v. oolitic;
sm pr oolitic; barren; abun
wht chalk; few pieces wht chert;
40" circ sample few pieces finely
ool poro; barren

LS crm fn xln sli fossil pr
visible poro NSNO sc pieces
mushy wht chalk

LS crm fn xln sli fossil pr
visible poro NSNO abun pieces
dk gry chert

Muncie Crk

LS,AA

"H"

Sh, blk carbonaceous

LS crm-tan fn xln fossil & ool
pr-fr pinpoint poro; iso vugular
poro; few pieces med-dk brwn
sat stn; SSFO; sli odor; sli yellow
flur; abun blue-gray chert

"I"

Sh, gry, green, maroon

LS crm fn xln fossil; v. ool; iso
vugular poro; pr-fr interpart &
pinpoint poro; gd amt golden brwn
mstly sat stn; S-FSFO -- gas on
brk; fr odor; yellow flur

"J"

Sh, gry, green, maroon

LS crm fn xln v. ool; dolomitic
fr-gd oolitic poro; gd amt lt.
brwn subsat-sat stn--show
becomes sply in 40" circ sample;
SSFO on brk; fr-gd gassy odor;
yellow flur

3300

LS crm-tan fn xln sli oolitic;
pr interpart poro; v. dense
NSNO

Sh, blk carbonaceous & dk gry

"K"

LS crm fn xln v. ool; pr visible
poro; rare oolitic poro; NS
barren

"L"

B/KC

LS crm-tan fn xln pr interpart
poro; blocky; 1-2 pieces sply stn;
VSSFO; v. sli odor

Sh, dk gry, kelly green, maroon;
2-3 pieces tite dolo; few pieces
chert; samples washing red

Sh, gry, green, red; 2-3 pieces
subsat stn dolo; pink and red
cherts; samples washing red

Arbuckle

Sh, AA; 3 pieces sat dolo; SSFO;
sli-fr odor

Circ 3376: Dolo, crm pr xln flood of dolo in
40" circ sample; 1-2 pieces saturated stain;
appears tite overall. Will DST here to test
productive datums of surrounding wells

Circ 3382: Dolo, crm fn-med xln sucrosic; sev
pieces lt golden brwn sat stn; SSFO; fr odor;
bright yellow flur

Circ 3388: Dolo, crm fn-med xln sucrosic; v.
friable; sm rhombic; fr amt lt brwn sat stn;
S-FSFO; pr has FO on brk; fr odor in stop
sample; 20" sample; Dolo AA; appears
more tite; VSSFO; fr odor; yellow flur

Dolo, crm fn-med xln iso vugular poro; pr-fr
poro; gd amt subsat-sat stn; SSFO; fr odor

1st Op: Weak Bldg 1.79"
No Blowback
2nd Op: Weak Bldg .85"
No Blowback

Rec:
30' VSOSM
(1%O, 99%M)

IFP: 25-25#/30"
ISIP: 76#/30"
FFP: 36-38#/30"
FSIP: 58#/30"

EL 3256 (-1351)

DST #3: (3271-3310)
1st Op: BOB 12"
No Blowback
2nd Op: BOB 20"
No Blowback

Rec:
6' SOMCW
(5%O, 55%W, 40%M)
124' MCW
(70%W, 30%M)
248' MCW
(90%W, 10%M)
378' Total Fluid

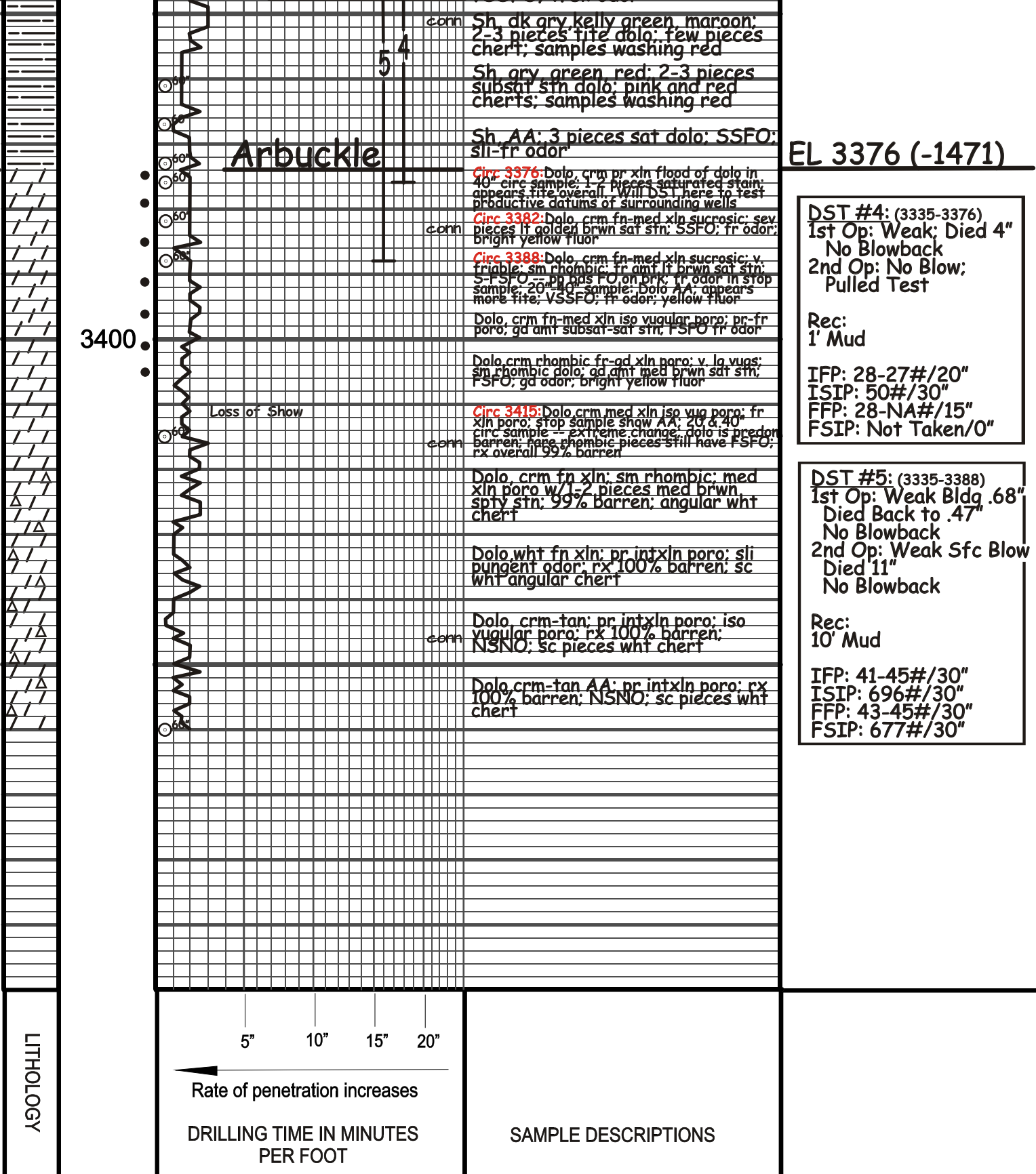
IFP: 38-128#/45"
ISIP: 932#/45"
FFP: 135-205#/45"
FSIP: 909#/45"
Chlor: 66,000 ppm

EL 3346 (-1441)

EL 3376 (-1471)

DST #4: (3335-3376)
1st Op: Weak; Died 4"
No Blowback
2nd Op: No Blow;
Pulled Test

Rec:



OPERATOR: Russell Oil, Inc.
 LEASE: Nuss-Dietz Unit WELL NO: #1-33
 API: 15-167-24,121 FIELD: Wildcat

ELEVATION: KB 1905
 LOCATION: 388'FN & 2644'FE
 SEC: 33 TWP: 15S RNG: 14W
 COUNTY: Russell STATE: Kansas