Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1220114

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 33185
Name: Quail Oil & Gas, LC
Address 1: 525 INDUSTRIAL DR.
Address 2: PO BOX K
City: GARDEN CITY State: KS Zip: 67846 + 9643
Contact Person: Daron Patterson
Phone: (620) 271-0236
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Roger Martin
Purchaser:

Designate Type of Completion:

☑ New Well ☐ Re-Entry ☐ Workover

☐ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☑ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

06/14/2014	06/26/2014	06/26/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-025-21576-00-00
Spot Description:
NW SE NE NW Sec. 23 Twp. 32 S. R. 21 ☐ East ☑ West
795 Feet from ☑ North / ☐ South Line of Section
2200 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Clark
Lease Name: Leon Well #: 1-23
Field Name:
Producing Formation: N/A
Elevation: Ground: 2032 Kelly Bushing: 2044
Total Vertical Depth: 6650 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 641 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: 2100 ppm Fluid volume: 260 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Woolsey Operating
Lease Name: Clarke License #: 33168
Quarter SW Sec. 8 Twp. 32 S. R. 12 ☐ East ☑ West
County: Barber Permit #: D28492

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: 10/02/2014
☑ **Confidential Release Date:** 10/01/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 10/03/2014

[redacted] 1220114

Operator Name: Quail Oil & Gas, LC Lease Name: Leon Well #: 1-23

Sec. 23 Twp. 32 S. R. 21 ☐ East ☑ West County: Clark

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Sonic
Micro
Phased Induction

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Heebner	4288	-2244
Lansing	4505	-2461
Swope	4904	-2860
Pawnee	5103	-3059
Cherokee	5152	-3108
Viola Dolo	6396	-4352

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	12.250	8.625	23	641	65/35 poz	250	6%gel, 3%cc

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	-			
	-			

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

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

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

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

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

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

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

DISPOSITION OF GAS:
☐ 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)*
☐ Other *(Specify)* _____

PRODUCTION INTERVAL:
_____
_____

Form	ACO1 - Well Completion
Operator	Quail Oil & Gas, LC
Well Name	Leon 1-23
Doc ID	1220114

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	12.250	8.625	23	641	65/35 poz	250	6%gel, 3%cc

ALLIED
OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 6-14-14 District Med Lodge KS Ticket No. 62829
Company Quail Oil & Gas Rig Duke 6
Lease Loon Well No. 1-23
County Comanche State KS
Location Vic Protection KS Field

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☑ Intermediate ☐ Production ☐ Liner ☐

Size 8 5/8 Type ______ Weight 24 Collar ______

Casing Depths: Top ______ Bottom 641

Drill Pipe: Size ______ Weight ______ Collars ______
Open Hole: Size 12 1/4 T.D. 641 ft. P.B. to ______ ft.

CAPACITY FACTORS:

Casing:	Bbls/Lin. ft.	Lin. ft./Bbl.
Open Holes:	Bbls/Lin. ft.	Lin. ft./Bbl.
Drill Pipe:	Bbls/Lin. ft.	Lin. ft./Bbl.
Annulus:	Bbls/Lin. ft.	Lin. ft./Bbl.
	Bbls/Lin. ft.	Lin. ft./Bbl.

Perforations: From ______ ft. to ______ ft. Amt. ______

CEMENT DATA:
Spacer Type: ______
Amt. ______ Sks Yield ______ ft³/sk Density ______ PPG

LEAD: Pump Time ______ hrs. Type 65:35:6% Gel + 3% cc + 1/4 # Floseal
Excess ______
Amt. 250 Sks Yield 1.99 ft³/sk Density 12.5 PPG
TAIL: Pump Time ______ hrs. Type Class A + 3% cc
Excess ______
Amt. 100 Sks Yield 1.33 ft³/sk Density 14.8 PPG
WATER: Lead 10.9 gals/sk Tail 6.3 gals/sk Total ______ Bbls.

Pump Trucks Used 471/265
Bulk Equip. 421/290

Float Equip: Manufacturer ______
Shoe: Type ______ Depth ______
Float: Type ______ Depth ______
Centralizers: Quantity ______ Plugs Top ______ Btm. ______
Stage Collars ______
Special Equip. ______
Disp. Fluid Type ______ Amt. ______ Bbls. Weight ______ PPG
Mud Type ______ Weight ______ PPG

COMPANY REPRESENTATIVE Dacon
CEMENTER Jason Thiessel

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
						On loc. Spot in Rig up Safety meeting
600PM						Run Casing
						Circ Ball thru w/ rig
850 PM	1500		1/4 BBL		1/4	Press test
855 PM			88 1/2 BBL			Mix + Pump Ld cement Slurry
			24 BBL			Mix + Pump TL cement Slurry
						Release plug
930 PM	100				3 1/2	Start Displacement
	250		36 BBL		2 1/2	Slow to Bump
1000 PM	800		38 1/2 BBL		0	Bump Plug
						Release
						Float did hold
						cement did circulate

FINAL DISP. PRESS: 250 PSI BUMP PLUG TO 800 PSI BLEEDBACK 1/2 BBLS. THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS

ALLIED OIL & GAS SERVICES, LLC 062829

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Medicine Lodge KS

DATE 6-14-14	SEC. 23	TWP. 32	RANGE 21	CALLED OUT 230PM	ON LOCATION 530PM	JOB START 850PM	JOB FINISH 1000PM
LEASE Lean	WELL # 1-23		LOCATION Protection KS, 5west to Rd 30, 4 North, East into			COUNTY Comanche	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR Duke #6
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 641
CASING SIZE 8⅝ 24# DEPTH 641
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX 800 MINIMUM
MEAS. LINE SHOE JOINT 42
CEMENT LEFT IN CSG. 42
PERFS.
DISPLACEMENT 38½ BBLs Fresh H2O

OWNER Quail Oil + Gas

CEMENT

AMOUNT ORDERED 250 sx 65:35:6% Gel + 3% cc + ¼# Flocel, 100 sx Class A + 3% cc

EQUIPMENT

PUMP TRUCK # 471/265 CEMENTER Jason Thimesch
HELPER Robert Johnson
BULK TRUCK # 421/290 DRIVER Jamie Bowen
BULK TRUCK # DRIVER

REMARKS:

Did circ cement to Surface

CHARGE TO: Quail Oil + Gas
STREET
CITY STATE ZIP

COMMON	@		
POZMIX	@		
GEL	@		
CHLORIDE	@		
ASC	@		
	@		
	@		
	@		
	@		
	@		
	@		
	@		
	@		
HANDLING	@		
MILEAGE			
	TOTAL		

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			
EXTRA FOOTAGE	@		
MILEAGE	@		
MANIFOLD	@		
	@		
	@		
	TOTAL		

PLUG & FLOAT EQUIPMENT

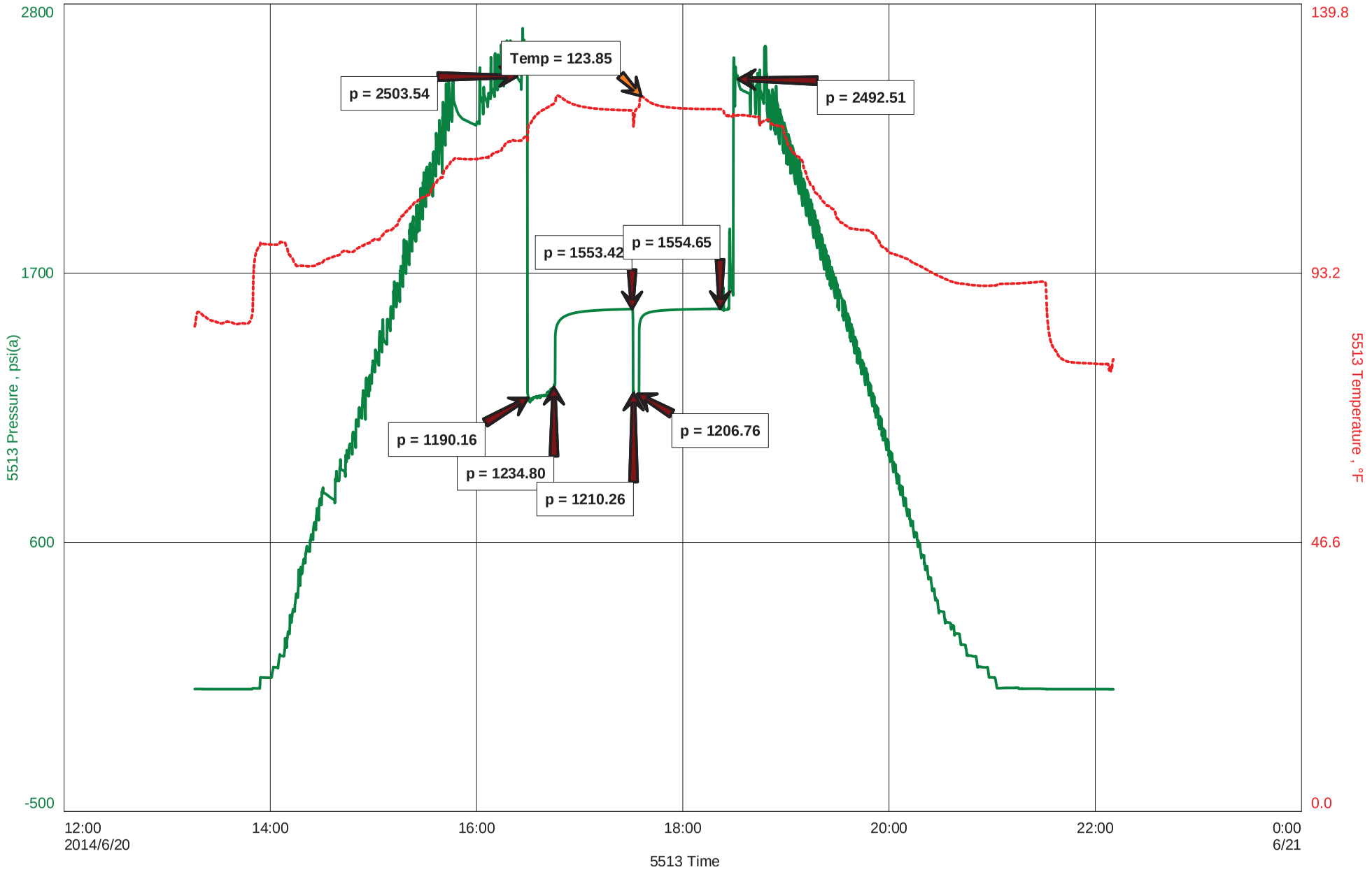
	@		
	@		
	@		
	@		
	@		

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or

Quail Oil and Gas LC
DST #1 Morrow Sand 5236-5260
Start Test Date: 2014/06/20
Final Test Date: 2014/06/20

#1-23 Leon
Formation: Morrow Sand
Pool: Wildcat
Job Number: K135

#1-23 Leon



DIAMOND TESTING
P. O. Box 157
HOISINGTON, KANSAS 67544
(316) 653-7550

GAS VOLUME REPORT

Company Quail Oil and Gas LC Lease & Well No. #1-23 Leon

Date 6-20-14 Sec. 23 Twp. 32S Rge. 21W Location County Clarke State KS

Drilling Contractor Duke #6 Formation Morrow Sand DST No. 1

Remarks: Gas to Surface in 1 Min., Shut in tool 5 min. into second flow, blowing oil vapor towards rig.

INITIAL FLOW

Time O'Clock	Orifice Size	Gauge	CF/D
10	.75 in.	125# in.	1,626
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	

FINAL FLOW IW

Time O'Clock	Orifice Size	Gauge	CF/D
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	

FINAL FLOW

JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Quail Oil and Gas LC		
Contact	Wray Valentine	Job Number	K135
Well Name	#1-23 Leon	Representative	Jason McLemore
Unique Well ID	DST #1 Morrow Sand 5236-5260	Well Operator	Quail Oil and Gas LC
Surface Location	23-32s-21w-Clarke	Prepared By	Jason McLemore
Field	Wildcat	Qualified By	Roger Martin
Well Type	Vertical	Test Unit	#7

Test Information

		Representative	Jason McLemore
Test Type	Drill Stem Test	Well Operator	Quail Oil and Gas LC
Formation	Morrow Sand	Report Date	2014/06/20
Well Fluid Type	01 Oil	Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

Start Test Date	2014/06/20	Start Test Time	13:16:00
Final Test Date	2014/06/20	Final Test Time	22:14:00

Test Results

RECOVERED:

60	Gassy Oil, 40% Gas, 60% Oil
635	VSOCMW, 1% Oil, 94% Water, 5% Mud
695	TOTAL FLUID

GRAVITY: 37

CHLORIDES: 95,000
PH: 7

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET

FILE: 123leondst1

TIME ON: 1:16 PM

TIME OFF: 10:14 PM

Company Quail Oil and Gas LC — Lease & Well No. #1-23 Leon

Contractor Duke #6 — Charge to Quail Oil and Gas LC

Elevation KB 2044 — Formation Morrrow Sand — Effective Pay ____ Ft. — Ticket No. K135

Date 6-20-14 — Sec. 23 — Twp. 32 S — Range 21 W — County Clarke — State KANSAS

Test Approved By Roger Martin — Diamond Representative Jason McLemore

Formation Test No. 1 — Interval Tested from 5236 ft. to 5260 ft. — Total Depth 5260 ft.

Packer Depth 5231 ft. — Size 6 3/4 in. — Packer depth ____ ft. — Size 6 3/4 in.

Packer Depth 5236 ft. — Size 6 3/4 in. — Packer depth ____ ft. — Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 5217 ft. — Recorder Number 5513 — Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 5218 ft. — Recorder Number 5588 — Cap. 6000 P.S.I.

Below Straddle Recorder Depth ____ ft. — Recorder Number ____ — Cap. ____ P.S.I.

Mud Type Chemical — Viscosity 63 — Drill Collar Length 260 ft. — I.D. 2 1/4 in.

Weight 9.1 — Water Loss 8.8 cc. — Weight Pipe Length 0 ft. — I.D. 2 7/8 in

Chlorides 2900 P.P.M. — Drill Pipe Length 4943 ft. — I.D. 3 1/2 in

Jars: Make STERLING — Serial Number Jars & Joint — Test Tool Length 33 ft. — Tool Size 3 1/2-IF in

Did Well Flow? No — Reversed Out NO — Anchor Length 24 ft. — Size 4 1/2-FH in

Main Hole Size 7 7/8 — Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. — Bottom Choke Size 5/8 in

Blow: 1st Open: Strong, BOB in 10 Seconds, Gas to Surface in 1 Min., Gaging Gas, No Blowback

2nd Open: BOB on Open, Shut in After 5 Min., Blowing out Oil Vapor Towards Rig.

Recovered 60 ft. of Gassy Oil, 40% Gas, 60% Oil

Recovered 635 ft. of VSOCMW, 1% Oil, 94% Water, 5% Mud

Recovered 695 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Recovered ____ ft. of CHLORIDES: 95,000

Recovered ____ ft. of PH: 7

Remarks: GRAVITY: 37

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 4:37 PM A.M. P.M. — Time Started Off Bottom 6:30 PM A.M. P.M. — Maximum Temperature 124

Initial Hydrostatic Pressure ..... (A) 2504 P.S.I.

Initial Flow Period ..... Minutes 15 (B) 1190 P.S.I. to (C) 1235 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 1553 P.S.I.

Final Flow Period ..... Minutes 5 (E) 1210 P.S.I. to (F) 1207 P.S.I.

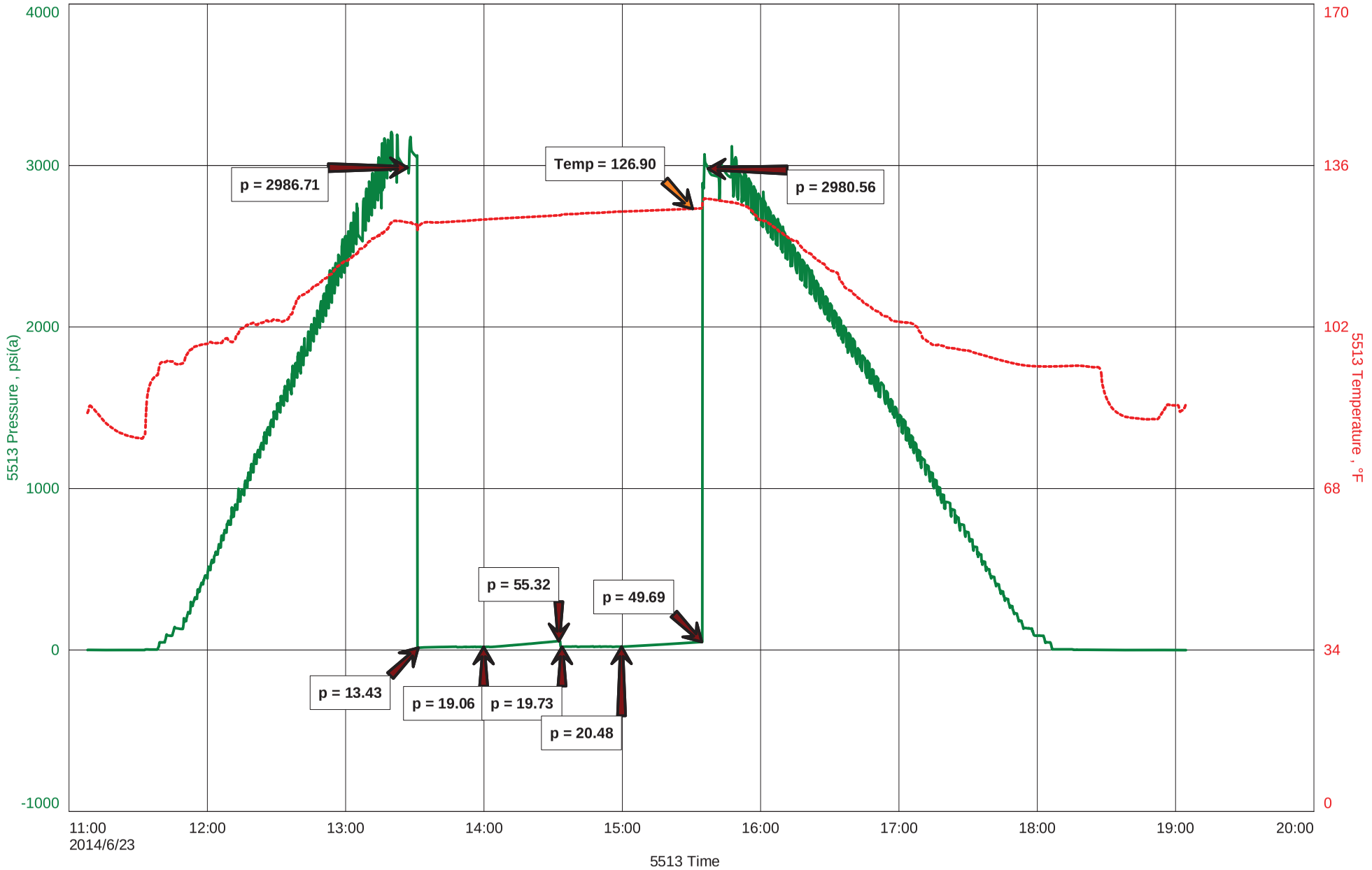
Final Closed In Period ..... Minutes 48 (G) 1555 P.S.I.

Final Hydrostatic Pressure ..... (H) 2493 P.S.I.

Quail Oil and Gas LC
DST #2 Viola 6364-6410
Start Test Date: 2014/06/23
Final Test Date: 2014/06/23

#1-23 Leon
Formation: Viola
Pool: Wildcat
Job Number: K136

#1-23 Leon



JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Quail Oil and Gas LC		
Contact	Wray Valentine	Job Number	K136
Well Name	#1-23 Leon	Representative	Jason McLemore
Unique Well ID	DST #2 Viola 6364-6410	Well Operator	Quail Oil and Gas LC
Surface Location	23-32s-21w-Clark	Prepared By	Jason McLemore
Field	Wildcat	Qualified By	Roger Martin
Well Type	Vertical	Test Unit	#7

Test Information

		Representative	Jason McLemore
Test Type	Drill Stem Test	Well Operator	Quail Oil and Gas LC
Formation	Viola	Report Date	2014/06/23
Well Fluid Type	01 Oil	Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

Start Test Date	2014/06/23	Start Test Time	11:08:00
Final Test Date	2014/06/23	Final Test Time	19:08:00

Test Results

RECOVERED:

5	Drilling Mud
5	TOTAL FLUID

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET

FILE: 123leondst2

TIME ON: 11:08 AM

TIME OFF: 7:08 PM

Company Quail Oil and Gas LC — Lease & Well No. #1-23 Leon

Contractor Duke #6 — Charge to Quail Oil and Gas LC

Elevation KB 2044 Formation Viola Effective Pay ____ Ft. Ticket No. K136

Date 6-23-14 Sec. 23 Twp. 32 S Range 21 W County Clarke State KANSAS

Test Approved By Roger Martin — Diamond Representative Jason McLemore

Formation Test No. 2 Interval Tested from 6364 ft. to 6410 ft. Total Depth 6410 ft.

Packer Depth 6359 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 6364 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 6345 ft. — Recorder Number 5513 Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 6346 ft. — Recorder Number 5588 Cap. 6000 P.S.I.

Below Straddle Recorder Depth ____ ft. — Recorder Number ____ Cap. ____ P.S.I.

Mud Type Chemical Viscosity 63 — Drill Collar Length 260 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 10.8 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 4200 P.P.M. — Drill Pipe Length 6071 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number Jars & Joint — Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? No Reversed Out NO — Anchor Length 46 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: Weak Surface Blow, Died in 16 Min.

2nd Open: Dead

Recovered 5 ft. of Drilling Mud

Recovered 5 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Remarks: ____

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 1:38 PM A.M. P.M. Time Started Off Bottom 3:38 PM A.M. P.M. Maximum Temperature 127

Initial Hydrostatic Pressure ..... (A) 2987 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 13 P.S.I. to (C) 19 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 55 P.S.I.

Final Flow Period ..... Minutes 30 (E) 20 P.S.I. to (F) 20 P.S.I.

Final Closed In Period ..... Minutes 30 (G) 50 P.S.I.

Final Hydrostatic Pressure ..... (H) 2981 P.S.I.

620-271-0236

ALLIED
OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

6-25-14 District ML. KS Ticket No. 632202
Company Quail O.L + Gas Rig Duke Lp
Lease Lean Well No. 1-23
County Clarke State KS
Location V.C Protection KS Field 25 32 21

CASING DATA: Conductor ☐ PTA ☑ Squeeze ☐ Misc ☐
Surface ☐ Intermediate ☐ Production ☐ Liner ☐
Size ____ Type ____ Weight ____ Collar ____

Casing Depths: Top ____ Bottom ____

Drill Pipe: Size 4 1/2 Weight ____ Collars ____
Open Hole: Size 7 7/8 T.D. ____ ft. P.B. to ____ ft.

CAPACITY FACTORS:
Casing: Bbls/Lin. ft. .0637 Lin. ft./Bbl. 15.70
Open Holes: Bbls/Lin. ft. .0602 Lin. ft./Bbl. 16.5793
Drill Pipe: Bbls/Lin. ft. .01422 Lin. ft./Bbl. 70.32
Annulus: Bbls/Lin. ft. .0406 Lin. ft./Bbl. 24.6974
Bbls/Lin. ft. .0440 Lin. ft./Bbl. ____
Perforations: From ____ ft. to ____ ft. Amt. ____

CEMENT DATA:
Spacer Type: ____
Amt. ____ Sks Yield ____ ft³/sk Density ____ PPG
LEAD: Pump Time ____ hrs. Type 60:40:4% Gel
Excess ____
Amt. ____ Sks Yield 1.4 ft³/sk Density 14.1 PPG
TAIL: Pump Time ____ hrs. Type ____
Excess ____
Amt. ____ Sks Yield ____ ft³/sk Density ____ PPG
WATER: Lead 6.7 gals/sk Tail ____ gals/sk Total ____ Bbls.
Pump Trucks Used 892/555
Bulk Equip. 364
Float Equip: Manufacturer ____
Shoe: Type ____ Depth ____
Float: Type ____ Depth ____
Centralizers: Quantity ____ Plugs Top ____ Btm. ____
Stage Collars ____
Special Equip. ____
Disp. Fluid Type Fresh/mud Amt. ____ Bbls. Weight ____ PPG
Mud Type Native Weight ____ PPG

COMPANY REPRESENTATIVE ____ CEMENTER Jake Head

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	ANNULUS	FLUID PUMPED DATA TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	REMARKS
11:00A						On Location Safety Meeting
						Rig up Safety Meeting
						laying down D/pipe
3:10P	1500					D Test
	100		8.5		3	Pump Spacer
	100		12.5		3	Mix + Pump Cmt
	100		3		3	Pump Spacer
3:30P	100		8 3/4		3	Pump Mud
4:00	100		8.5		3	Pump Spacer
	100		12.5		3	Mix + Pump Cmt
	100		3		3	Pump Spacer
4:15	100		3 1/4		3	Pump Mud
4:30	100		16		3	Flush Hole
	100		10		3	Mix + Pump Cmt
5:00	100		1 1/4		3	Displace
5:10	100		5		3	load Hole
5:20	100		8.5		3	Mix Cmt + till circ
5:30P	100		12.5		3	Plug Rat + Mouse
7:00 PM						

FINAL DISP. PRESS: ____ PSI BUMP PLUG TO ____ PSI BLEEDBACK ____ BBLS. THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS