Well Name: KGS Patterson # 5-25
Well Id: Sec 25 T22S R38W, Kearny County, Kansas
License Number: 15-093-21979-00
Spud Date: March 07, 2020
Surface Coordinates: 100' FSL & 860' FEL / SE SW SE SE

Drilling Completed:

Bottom Hole
Coordinates:
Ground Elevation (ft): 3317'
Logged Interval (ft): 3600'
Formation: Morrow, Viola, Arbuckle, Granite Wash
Type of Drilling Fluid: Natural Chemical

K.B. Elevation (ft): 3329'
To: Total Depth (ft):

Printed by WellSight LogViewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR
Company: BEREXCO LLC
Address: 2020 N. BRAMBLEWOOD
WICHITA, KANSAS 67206
CO. ENG: Mr. Dana Wreath

GEOLOGIST
Name: Edwin H. Grieves/Tim Hedrick
Company: GRIEVES AND CO.
Address: PO Box 3125
Edmond, Oklahoma, 74083-3125
Cell: 405-826-9027/Cell:580-754-0062

CORE #1
Contractor: DEVILBLISS CORING
Core #: 1
Formation: CHEROKEE
Core Interval: From: 4616 Cut: 60'
To: 4676 Recovered: 60'
Bit type: SHORT C240 /SERIAL H463 IN AT 4615'
Size: 7 7/8'
Coring Time: 14:47
CORING SECTION 2

CORE #2  4676' TO 4736' - CUT 60', RECOVERED 60' CORE/ BIT 7 7/8'' BIT, SHORT C240/SER.# H463-(CORE TIME 13 HR 40 MIN.)

CORE #3 4736' TO 4796' - CUT 60' -RECOVERED 60'/ BIT 7 7/8'', SHORT CZ308, SER# F265 - (CORE TIME 6HRS 40 MIN.)

CORE #4 4880' TO 4997' CUT 17' - RECOVERED 17'/ BIT- 7 7/8'' SHORT CZ 410, SER.#H422 IN @ 4880

CORE #5 4897 TO 4957' CUT 60' RECOVERED / BIT- 7 7/8'' SHORT CZ 410, SER.#H422 IN @ 4897', OUT @ 4957'

CORE #6 5380' TO 5440', CUT 60', RECOVERED 60'/BIT- 7 7/8'' SHORT CZ 410, SER.#H422 IN @ 5380', OUT @ 5440'

CORE #7 5640 TO 5670' CUT 30', CORE JAMMED, RECOVERED 28.5' CORE, BIT-7 7/8 SHORT 22410, SER.QO46 IN @ 5640'

CORE #8 5670-5719' CUT 49' CORE, JAMMED, RECOVERED 49'/BIT 7 7/8'' SHORT 22410 SER. QO46 IN AT 5640' OUT @ 5719'

CORE #9 5780-5811' CUT 31' CORE, RECOVERED 27' CORE,BIT 7 7/8'' SHORT 22410 SER. QO46 IN AT 5780, OUT AT 5811,

CORING SECTION 3

CORE#10 -5811'-5826, CUT 15' RECOVERED 15'/ CORE,BIT 7 7/8'' SHORT 22410 SER. QO46 IN AT 5811, OUT 5826'

5850' CORE ATTEMPT, LOST CIRC AND WOB DROPPED TO ZERO UPON ATTEMPT TO CORE/RECOVERED 6'' OF CORE. DOLO& CHERT,MOVE CORE 11 TO NEXT CORE POINT

CORE #11- 5959' TO 6019' CUT 60' CORE, RECOVERED 60' CORE / BIT #1 SHORT CZ410 SER. H463/RI IN AT 5959'

CORE #12- 6019' TO 6042' CUT 23' CORE RECOVERED 23' CORE / BIT #1 SHORT CZ410 SER. H463/RI IN AT 6019'

CORE #13- 6042' TO 6102', CUT 60' RECOVERED 60'/ BIT #1 SHORT CZ410 SER. H463/RI IN AT 6042'

CORE #14 -6102' TO 6162', CUT 60' CORE RECOVER 60'/ BIT #1 SHORT CZ410 SER. H463/RI IN AT 6102'

CORE #15- 6162' TO 6222' CUT 60'/ RECOVERED 60'/ BIT #1 SHORT CZ410 SER. H463/RI IN AT 6162'

CORE #16- 6222' TO 6273' CUT 51'/ RECOVERED 51'/ BIT #2 SHORT CZ410 SER. H222/RI IN AT 6222'

CORE #17 -6278' TO 6300' / CUT 22' RECOVERED 20.5' / BIT #3 SMITH 7 7/8'' D42CR SER. 504452 IN @ 6278' OUT @ 6300'

LOST CIRCULATION RECORD

1ST RECORD OF LOST CIRC @ 5826' - LOST 1200' WITH 12#

LOST CIRC OF 80 BBLS ON ATTEMPT TO CORE AT 5850' ALSO SEEPING WITH 20# HULLS/ ABANDON CORE 11

FOUGHT LOST CIRCULATION UNTIL WE BUILT TO 30# HULLS THEN THE HOLE HELD WITH NO LOSSES FROM 5850 TO 5959'(CORE #12 POINT)

WE HAVE LOST ONLY TRACES OF MUD SINCE REGAINING CIRC PRIOR TO CORE #11 AS OF 4/09/2020
DRILL STEM TEST REPORT

25 22a 26er Kearney, Ne
2020 N Bramblewood
Weber, Ne 67228
Patterson KCI #6-26
Job Ticket: 06101
ATTN: Ed Griesel
Test Start: 2020.03.30 @ 19:22:00

GENERAL INFORMATION:
Formation: Loner Mesaverde Res.
Deviated: No Whipsstock ft (KB)
Time Test Opened: 20:59:16
Time Test Ended: 01:26:45
Interval: 5378.00 ft (KB) To 5438.00 ft (KB) (TVD)
Total Depth: 5438.00 ft (KB) (TVD)
Hole Diameter: 7.69 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Repet)
Tester: Bradley Waiiter
Unit No: 78

Reference Elevations:
KB: 3329.00 ft (KB)
CF: 3317.00 ft (CF)
KB to GRNCF: 12.00 ft

Serial #: 8522
Inside Press @ Run Depth: 50.10 psig @ 6380.00 ft (KB)
Start Date: 2020.03.30
End Date: 2020.03.31
Start Time: 19:22:05
End Time: 01:35:45

TEST COMMENT:
15. F & 1/4" blow.
30 ft & No return.
19. FF: 1/2" blow.
30. FF No return.

Capacity: 3000.00 psig

PRESSURE SUMMARY

<table>
<thead>
<tr>
<th>Time (Min.)</th>
<th>Pressure (psig)</th>
<th>Temp (deg F)</th>
<th>Annotation</th>
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Recovery

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<th>Volume (cu ft)</th>
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Gas Rates

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<th>Gross.gcft</th>
<th>Pressure (psig)</th>
<th>Gas Rate (Mscf)</th>
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*Note from multiple tests
DRILL STEM TEST REPORT

Baranco, LLC
25 22s SSW Kearney, KS
2020 N BrandlADOW
Wichita, KS 67208
Patterson KGS #6-25
Job Ticket: 66102
ATTN: Ed Greaves
Test Start: 2020.04.02 @ 08:50:00

GENERAL INFORMATION:
Formation: Viola
Deviated: No
Whipstock: R (KB)
Time Tool Opened: 13:30:30
Time Tool Closed: 18:22:15

Interval: 6640.80 ft (KB) To 5719.00 ft (KB) (TVD)
Total Depth: 5719.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches
Hole Condition: Good
KB to GRCF: 12.00 R

Serial #: 8622
Inside Press.: 164.26 psig @ 8841.00 R (KB)
Outside Press.: 164.26 psig @ 8841.00 R (KB)
Start Date: 2020.04.02
Start Time: 06:55:00
End Date: 2020.04.02
End Time: 18:20:15

TEST COMMENT:
16- F: 10 1/2" blow.
30- B: No return.
10- FF: 8 1/2" blow.
30- FS: No return.

PRESSURE SUMMARY

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<th>Temp (deg F)</th>
<th>Annotation</th>
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Recovery

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<th>Volume (gal)</th>
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Gas Rates

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<th>Pressure (psig)</th>
<th>Gas Rate (Mcf/hr)</th>
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*Recovery from multiple tests

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Curve Track 1

Lithology

Geological Descriptions

BEREDCO RIG ONE

START SAMPLES AT 3600'

3600-3653' (FAST DRILLING) LS - INTERBEDDED - HVY TRS WHT TO CRM - CHLKY, GRYISH IP, SUB SUcro TO SUB CHLKY DLT LT YEL FLUOR, NO CUT, ABDT PR TO FR MICRO PP POR

3600-3653' (SLOW DRILLING) LS - LT GY TO GY TAN, SUB CHLKY TO SUB SUcro & PCKSTN, DLT LT YEL FLUOR IP, NO VIS POR

3653-3655' SH- V/DK GRY TO BLK CARB

3655'-3720' INTERBEDDED LS SIMILAR RO 3600-3653' W/ SLI TRS CHERT WHTISH GRY TO Opaque

JETS 3/15
IN AT 2025
RX23
JZ
7 7/8"
BIT 4
LCM 1
VIS 55
WT 8.5
PP 700
RPM 80
WOB 32
3650

MD

ROP (min/ft)
Gamma (API)

TG, C1-C5

C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)

3600-3653' (FAST DRILLING) LS - INTERBEDDED - HVY TRS WHT TO CRM - CHLKY, GRYISH IP, SUB SUcro TO SUB CHLKY DLT LT YEL FLUOR, NO CUT, ABDT PR TO FR MICRO PP POR

3600-3653' (SLOW DRILLING) LS - LT GY TO GY TAN, SUB CHLKY TO SUB SUcro & PCKSTN, DLT LT YEL FLUOR IP, NO VIS POR

3653-3655' SH- V/DK GRY TO BLK CARB

3655'-3720' INTERBEDDED LS SIMILAR RO 3600-3653' W/ SLI TRS CHERT WHTISH GRY TO Opaque

JETS 3/15
IN AT 2025
RX23
JZ
7 7/8"
BIT 4
LCM 1
VIS 55
WT 8.5
PP 700
RPM 80
WOB 32
3650

MD

ROP (min/ft)
Gamma (API)
PAWNEE 4428'-1099'

4428'-4427' SH- V/ DK GRY TO BLK CARB
4428'-4440' SH- MED TO V/ DK GRY SLI TO V/ CAL TO LS LT GRY TO TN CRYPTO-XLN PKSTN TRS OOLITIC, TRS DLL YEL FLUOR, NO CUT, NO VIS POR
4440-4451' LS- ABDT WHT TO CRM CHLK W/ LT GRY OOLITES IP, ABDT TAN OOLITES, SUB SUCRO TO SUB CHLK MTRX, DLL LT YEL FLUOR, NO CUT, HYV TRS PR FG TO EXCEL MICRO PP POR
4457-4475' LS-LT GRY SLI TO FRLY SHLY CRYPTO-XLN PKSTN, TR PHNTM OOLITES, DLL LT YEL FLUOR, NO CUT NO VIS POR
4475-4477 SH- V/DK GRY TO BLK CARB
4477-4485' LS- SIMILAR TO 4457-4475, W/ TRS GRY CHERT
4585-4590 SH- V/DK GRY TO BLK CARB

CHEROKEE 4485'-1156'

4490-4525 LS-LT TO MED GRY SLI TO EXTRMY SHLY GRDING TO CALC SHALES LT TO MED GRY, SUB SUCRO TO PKSTN, NO FLUOR TO TR DLL YEL FLUOR IP, NO CUT NO VIS SHOW
4525-4526' SH- V/DK GRY TO BLK CARB
4526'-4571' LS- TN GRY IP, CRYPTO-XLN TRS SUB LITHO, PKSTN, ABDT TO V/ SHLY IP, INTERBEDDED SHALES & LIMES, NO CUT, NO VIS POR
4571-4578' SH- MED TO DK GRY TO BLK CARB

4578-4615' LS- TN GRYISH TAN, CRYPTO-V/V/FN-XLN TRS CHLK WHT, SUB SUCRO PKSTN, V/ SHLY IPS, DLL YEL FLUOR IP, NO CUT, NO VIS POR

CFS/ SHORT TRIP/ CTCH/ TRIP OUT TO PICK UP CORE BARREL

START CORE #1 @ 4:30 AM 3/22/20, PLEASE NOTE SCALE CHANGE @ 4616' DRILL TIME 0-50 MINUTES

NOTE: NO SAMPLES IN TRAP BOX

4616-4676' INTERBEDDED LS & SHALES 1. (FASTER DRILLING) LS- GRYISH TAN, CRYPTO-XLN V/V/FN-XLN PKSTN SUB LITHO, DLL YEL FLUOR, NO CUT, NO VIS POR

WOB 12
RPM 55
PP 900
WT 9.2
VIS 55
LCM 3

WHT, SUB SUCRO PCKSTN, V/SHLY IPS, DLL YEL FLUOR, NO CUT, NO VIS POR

4676-4734' (SLOW DRILLING) SH- MED TO V/ DK GRY, SLI TO V/SHLY, CRYPTO-XLN PKSTN SUB, ABND SH PARTINGS, NO FLUOR, NO CUT, NO VIS POR

4699-4701-SH- MED TO DK GRY TO BLK CARB

14-17 U. SH GAS

12 U. TOTAL

C1

13 U. BG

C2

21 U. SH GAS

19 U. TOTAL

CN

16 U. TOTAL

15 U. BG

15 U. TOTAL

11 U. BG

15 U. BG

11-12 U. BG

13 U. BG

14 U. BG

13 U. BG

18 U. TOTAL

17 U. TOTAL

16 U. TOTAL

14 U. TOTAL

14 U. TOTAL

16 U. TOTAL

15 U. TOTAL
N.D.T (BLEW NAIL)

WOB 32
RPM 75
PP 800

WT 9.2
VSL 60
LCM 3

4786-4796 SH-MED TO DK GRY, RSS SPLINTERY
COMPLETE CORE #3 AT 9:55 AM 3/24/20 @ 4796'

4786-4806' SH-MED TO GRY-SFT MUSHY WHEN WET TO DK GRY SPLINTERY

4806'-4818' LS-TN TO LT GRY-CRYPTO-VF/FN-XLN, PCKSTN, OOLITIC IP (TN GRY) TR FOSS, DLL YEL FLUOR IP, NO CUT NO VIS POR

4818-4835' SH-LT TO MED GRY, EARTHY TXTT, SLI TO V/ CALC W/ INTERBED LS IP

4836'-4880' LS-TRS WHT TO CRM CHLK & CRM TN, SUB SUCRO S-CHLKY PCKSTN, ABDT SLI TO V/PHTNM OOLITIC TO OOLITIC, W/ INTERBEDS LT TO MED GRY SH, DLL YEL FLUOR, NO CUT, NO VIS POR

STARTED CORE #4 AT 4880' AT 10:57 AM 3/25/2020

4880-4891' LS-LT LT GRY TR FOSS RE-XLN, CRYPTO-XLN DLL YEL FLUOR, NO CUT, NO VIS POR

4881-4882' SH-MED TO DK GY CALC

4884'-4954' LS-LT GRY TAN, CRYPTO-XLN PHNTM OOLITIC IP, DLL YEL FLUOR NO CUT, NO VIS POR

BARREL JAMMED CORE #4 AT 4:55 PM 3/25/2020

STARTED CORE #5 AT 4:55 AM 3/26/2020

4907-4910' LS-LT GRY TR GRYISH TN, CRYPTO-XLN V/OOLITIC MTRX, SUB SUCRO IP, DLL YEL FLUOR, NO CUT, TRS V/PR MICRO PP POR

4910.5-4927' LS-LT GRY TR GRYISH GREEN SFT

4910.5-4937' LS-LT GRY TR GRYISH HTN, CRYPTO-XLN V/OOLITIC MTRX, SUB SUCRO IP, DLL YEL FLUOR, NO CUT, TRS V/PR MICRO PP POR

4937-4954' LS-TN GRYISH SH PARTINGS, DLL YEL FLUOR, ABT PR, TRS GD TO EXCEL MICRO PP & SOME INTEROOLITIC POR, NO CUT, NO VIS SHOW SCATT SH PARTINGS

4954-4987'S-LT GRY-SUB SUCRO PCKSTN, PHNTM OOLITES, HVY TRS CARB & MED GRY SH PARTINGS, NO CUT, NO VIS POR

CORE #5 COMPLETE 9:09 AM 3/26/2020

4987-5007' LS-WHT TO CRM CHLK, SUB SUCRO PCKSTN, PHNTM OOLITIC TO OOLITIC IP DLL YEL FLUOR, NO CUT, NO VIS POR, TRS CRM LT GRY OPAQUE CHERT

4798-5007' LS-WHT TO CRM CHLK & LT TN, SUB SUCRO TO SUCRO V/TO EXTREMELY OOLITIC (MED TO LRG COLITES) YEL TO GLDN YEL FLUOR, NO CUT, HVY TRS FR MICRO PP POR W/ TO LGDN PTNTM CHERT
START 15

WOB 12
RPM 50
PP 1100

WOB 11
RPM 50
PP 1100

START 16

WOB 24
RPM 48
PP 1300

WOB 24

6102-6138' 2. DOLO GRY-CRYPTO-V/V-FN-XLN PKSTN DELL YEL FLUOR, NO CUT, NO VIS POR

6138-6143' DOLO LT GRY SCATT TN LT BRN, CRYPTO-XLN SUB SUCRO DELL YEL FLUOR, NO CUT, SCATTTRS PR MICRO PP POR IP, V/QUEST PERM

6143-6162' DOLO-LT GRY CRYPTO TO V/V-FN-XLN PKSTN, DELL YEL FLUOR, NO CUT, NO VIS POR

END CORE #14 @ 6162' @ 12:02 PM 4/11/2020

START CORE #15 @ 6162' @ 11:22 PM 4/11/2020

6162 - 6183.5' DOLO-LT GRY TN IP CRYPTO TO V/V-FN-XLN SUB SUCRO PKSTN, ABDT LT GRY SH LAMINATIONS THRU, DELL YEL FLUOR, NO CUT, NO VIS POR

6183.5-6213.5' DOLO-LT GRY TN IP CRYPTO-XLN PKSTN SUB SUCRO, ABDT GRY SH LAM, SCATT TR GLAUC, DELL YEL FLUOR, SCATT TR SM VUG, PP MICRO PP, INTER-XLN POR, QUEST PERM

6183.5 - 6213.5' 2. DOLO TO DOLO QUTZ SND- WHT TN GREEN IP V/FN FN GRN, S-ANG S-RND TO RND GRNS, PR SRT, FRIABLE IP, GLAUC LAM, DELL YEL FLUOR, NO VIS POR

6213.5 - 6222' DOLO-LT GRY TN, V/V-FN TO MED TR COARSE V/SUCRO W/TRS TO V/ABDT QUTZ GRNS FN TO MED TO COARSE, S-ANG S-RND TO RND, DELL LT YEL FLUOR, NO CUT, ABDT PR FR TO EXCEL SM VUG, PP MICRO PP & INTER-XLN POR

END CORE #15 @ 6222' @ 8:27 AM 4/12/2020

START CORE #16 @ 6222' @ 9:00 PM 4/12/2020

6222-6227' DOLO LT GRY TN, V/V-FN TO MED TR COARSE V/SUCRO W/TRS TO V/ABDT QUTZ GRNS FN TO MED TO COARSE, S-ANG S-RND TO RND, DELL LT YEL FLUOR, NO CUT, ABDT PR FR TO EXCEL SM VUG, PP MICRO PP & INTER-XLN POR

6227-6252' DOLO-LT GRY-TN IP CRYPTO-XLN PKSTN SUB SUCRO, V/DLL YEL FLUOR, NO CUT, TR SM VUG POR TO TR PR PP TO MICRO PP POR

6252-6267.5' DOLO- LT GRY- W/ WHT XLS FN TO COARSE Up To 1 1/2", SUCRO, V/DLL YEL FLUOR NO CUT NO VIS POR SU SILTY & OR SHLY, HVY TRS TO ABDT DISS PYR

6267.5-6282' SH-MED GRY GREENISH, EXTREMELY SILTY SL DOLO & OR GYP, ANHY & OR GYP-WHT TO GY- FN TO COARSE XLS

END CORE #16 @ 6273' @ 4:45 AM 4/13/2020

ATTOMPT CORE 17 @ 6273 AND DRILLED 3" IN 72 MIN. RECOV. 3" CORE TO 6273.1' (CORE PIECES FROM THIS ATTEMPT AND IN THE PICS WILL BE BOXED WITH THE NEXT CORE AT THE TOP OF CORE)

6273.5-6278' GRANITE- ORANGE GRY FLDSPR W/TRS QURTZ, TR BIOTTITE FLUOR, NO CUT, NO VIS POR (DRILL CUTTINGS)

END CORE #17 @ 6300' @ 3:57 AM 4/16/2020

6278-6300' GRANITE-FELDSPAR ORANGE W/TRACES BLACK MINERALS