



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Greystone, Inc

12-13s-19w Ellis KS

PO Box 505
Hays KS 67601

ZZ Farms #1

Job Ticket: 54026

DST#: 2

ATTN: Randy Killian

Test Start: 2014.04.12 @ 11:03:00

GENERAL INFORMATION:

Formation: **LKC "H-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:35:45

Time Test Ended: 16:03:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 73

Interval: **3576.00 ft (KB) To 3655.00 ft (KB) (TVD)**

Total Depth: 3655.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2134.00 ft (KB)

2129.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8648

Inside

Press@RunDepth: 54.05 psig @ 3642.00 ft (KB)

Start Date: 2014.04.12

End Date:

2014.04.12

Start Time: 11:03:05

End Time:

16:03:29

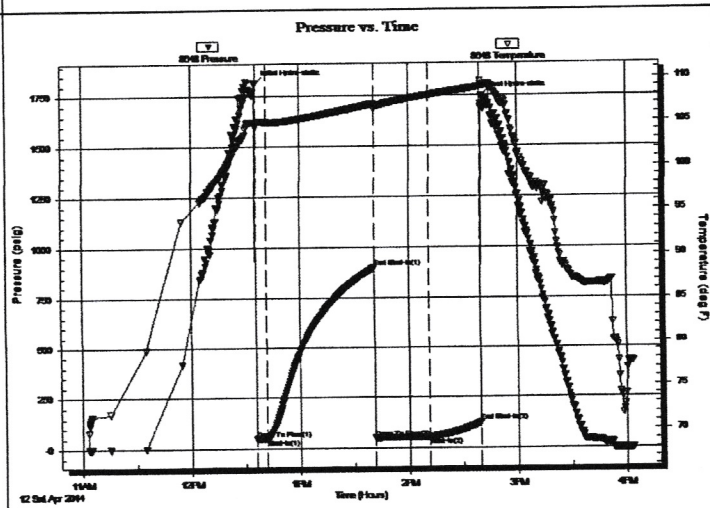
Capacity: 8000.00 psig

Last Calib.: 2014.04.12

Time On Btm: 2014.04.12 @ 12:35:30

Time Off Btm: 2014.04.12 @ 14:40:30

TEST COMMENT: 05 - IF- 1/2" blow
60 - IS- No return
30 - FF- No blow
30 - FS- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1815.37	104.83	Initial Hydro-static
1	49.91	104.36	Open To Flow (1)
7	50.76	104.91	Shut-In(1)
66	898.60	106.93	End Shut-In(1)
66	50.55	106.43	Open To Flow (2)
96	54.05	107.94	Shut-In(2)
124	127.26	108.88	End Shut-In(2)
125	1746.92	109.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud - Oil spots, 100%M	0.14

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Greystone, Inc
 PO Box 505
 Hays KS 67601
 ATTN: Randy Killian

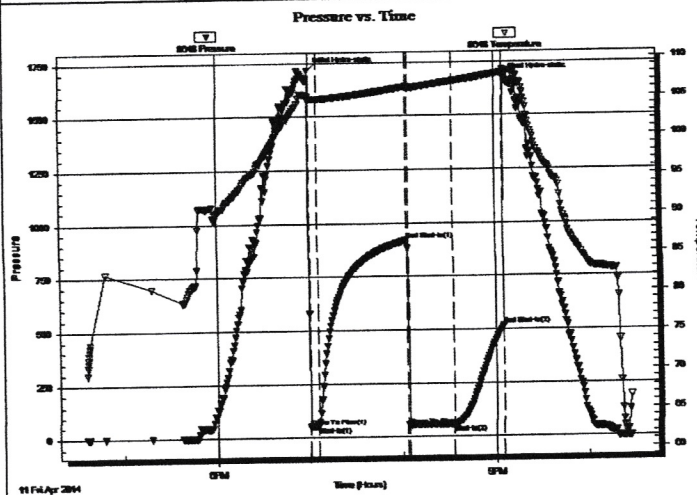
12-13s-19w Ellis KS
ZZ Farms #1
 Job Ticket: 56100 **DST#: 1**
 Test Start: 2014.04.11 @ 16:36:00

GENERAL INFORMATION:

Formation: **LKC "C-E"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 19:00:15 Tester: Cody Bloedorn
 Time Test Ended: 22:27:30 Unit No: 73
 Interval: **3453.00 ft (KB) To 3536.00 ft (KB) (TVD)**
 Total Depth: 3536.00 ft (KB) (TVD) Reference Elevations: 2134.00 ft (KB)
 Hole Diameter: 7.88 inches Hole Condition: Fair 2129.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8648 **Inside**
 Press@RunDepth: 54.58 psig @ 3523.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.11 End Date: 2014.04.11 Last Calib.: 2014.04.11
 Start Time: 16:36:05 End Time: 22:27:29 Time On Btm: 2014.04.11 @ 18:59:45
 Time Off Btm: 2014.04.11 @ 21:05:45

TEST COMMENT: 05 - IF- 1/4" blow
 60 - IS- No return
 30 - FF- No blow
 30 - FS- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1715.85	105.01	Initial Hydro-static
1	50.25	104.50	Open To Flow (1)
6	51.55	104.67	Shut-In(1)
64	917.88	106.22	End Shut-In(1)
65	52.29	105.88	Open To Flow (2)
93	54.58	106.91	Shut-In(2)
126	518.57	107.95	End Shut-In(2)
126	1677.13	108.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud, 100%M	0.21

Gas Rates

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

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 015

Phone 785-483-2025
Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-8-14	12	13	19	ELS	KS		12:30 AM
Location <i>Hays N Federal Rd 3 W Sinto</i>							

Lease	Well No.	Owner	
<i>22 Farms</i>	<i>1</i>	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Contractor		Charge To	
<i>Royal #1</i>		<i>Grey Stone Inc</i>	
Type Job	T.D.	Street	
<i>Surface</i>	<i>222</i>	<i>P.O. Box 506</i>	
Hole Size	Depth	City	
<i>12 1/4</i>	<i>221</i>	<i>Hays</i>	
Csg.	Depth	State	
<i>8 5/8</i>		<i>Ks 67601-0506</i>	
Tbg. Size	Depth	The above was done to satisfaction and supervision of owner agent or contractor.	
		Cement Amount Ordered <i>150 cm 3/4 2/ GEL</i>	
Cement Left in Csg.	Shoe Joint		
<i>15'</i>			
Meas Line	Displace		
	<i>13 BL</i>		

EQUIPMENT

Common *150*
Poz. Mix
Gel. *3*
Calcium *5*

Pumptrk	No.	Cementer	
<i>18</i>		<i>Craig</i>	
		Helper	
		<i>Andy</i>	
Bulktrk	No.	Driver	
		<i>Ryan</i>	
Bulktrk	No.	Driver	
<i>14</i>		<i>Ryan</i>	

JOB SERVICES & REMARKS

Remarks:
Rat Hole
Mouse Hole
Centralizers
Baskets
D/V or Port Collar
*8 5/8 on bottom. EST Circulation.
Mix 150 cm 3/4 Displace.*

Hulls
Salt
Flowseal
Kol-Seal
Mud CLR 48
CFL-117 or CD110 CAF 38
Sand
Handling *158*
Mileage

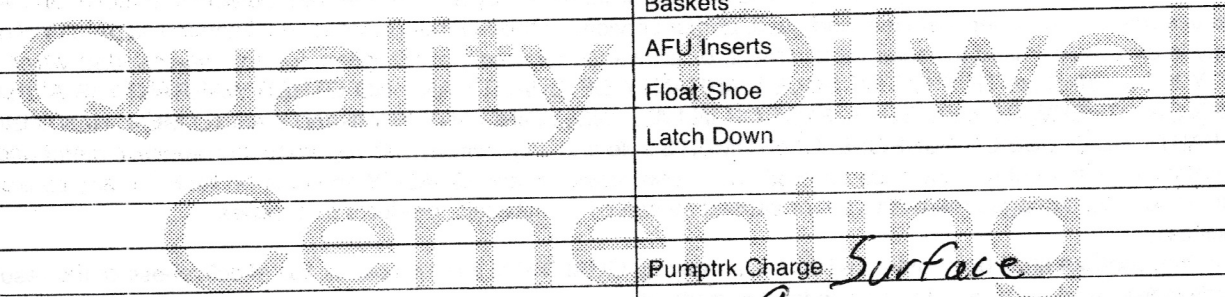
FLOAT EQUIPMENT

Guide Shoe
Centralizer *8 5/8 Swage*
Baskets
AFU Inserts
Float Shoe
Latch Down

Pumptrk Charge *Surface*
Mileage *9*

Tax
Discount
Total Charge

X Signature *Douglas Buey*



QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 203

Phone 785-483-2025
Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-13-14	12	13	19	Ellis	KS		4:30 PM

Location *Hays, N to feedlot Rd, 3w, S2*

Lease <i>22 Farms</i>	Well No. <i>1</i>	Owner To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor <i>Royal #1</i>		Charge To <i>Greystone Inc.</i>
Type Job <i>Plug</i>		
Hole Size	T.D.	
Csg.	Depth	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.	Shoe Joint	Cement Amount Ordered <i>270 sx 60/40, 4% gel, 1/4" # Flow</i>

EQUIPMENT

Pumptrk <i>17</i>	No.	Cementer Helper <i>Nick</i>	Common <i>162</i>
Bulktrk <i>9</i>	No.	Driver Driver <i>Ryan</i>	Poz. Mix <i>108</i>
Bulktrk <i>P4</i>	No.	Driver Driver <i>Travis</i>	Gel. <i>10</i>
			Calcium

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal <i>674</i>
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
<i>50sx at 3790</i>	Sand
<i>25sx at 1490</i>	Handling <i>280</i>
<i>100sx at 730</i>	Mileage
<i>40sx at 270</i>	FLOAT EQUIPMENT
<i>10sx at 40 with plug</i>	Guide Shoe
<i>30sx Rat</i>	Centralizer
<i>15sx Mouse</i>	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	<i>1 wood plug</i>
	Pumptrk Charge <i>plug</i>
	Mileage <i>9</i>

X Signature *Doug Buey*

Tax	
Discount	
Total Charge	