

Geological Report

Longhorn Crude, LLC.
Querbach #1-3
1380' FSL & 1730' FWL
Sec. 3 T23s R22w
Hodgeman County, Kansas



Longhorn Crude, LLC.

General Data

Well Data: Longhorn Crude, LLC.
Querbach #1-3
1380' FSL & 1730' FWL
Sec. 3 T23s R22w
Hodgeman County, Kansas
API # 15-083-21892-0000

Drilling Contractor: Pickrell Drilling Co. Rig #1

Geologist: Jason T Alm

Spud Date: June 21, 2013

Completion Date: June 29, 2013

Elevation: 2176' Ground Level
2186' Kelly Bushing

Directions: Hanston KS, South 4mi. to L Rd. West 1/2 mi.
North into location.

Casing: 1326' 8 5/8" surface casing
4413' 5 1/2" production casing

Samples: 10' wet and dry, 4050' to RTD

Drilling Time: 3650' to RTD

Electric Logs: None

Drillstem Tests: None

Problems: The top joint of surface pipe parted.

Remarks: Due to surface pipe issues we were not able to run
any drill stem tests or electric logs.

Formation Tops

Formation	Longhorn Crude, LLC.
Anhydrite	Querbach #1-3
Base	Sec. 3 T23s R22w
Heebner	1380' FSL & 1730' FWL
Lansing	1297', +889
BKc	1334', +852
Pawnee	3737', -1551
Fort Scott	3803', -1617
Cherokee	4170', -1984
Mississippian	4242', -2056
RTD	4329', -2143
	4353', -2167
	4406', -2220
	4414', -2228

Sample Zone Descriptions

Altamont

(4196', -2010): Not Tested

Ls – Fine to sub-crystalline with poor scattered vuggy porosity, light to fair spotted oil stain in porosity, no show of free oil, no odor, fair spotted yellow fluorescents.

Fort Scott

(4329', -2143): Not Tested

Ls – Fine crystalline with poor to fair inter-crystalline and slight vuggy porosity, no show of free oil, very light odor, dull yellow fluorescents

Miss Osage

(4406', -2220): Not Tested

Δ – Triptolic in part, weathered with scattered good vuggy porosity, light spotted oil stain in porosity, light odor, dull scattered fluorescents.

Structural Comparison

Formation	Longhorn Crude, LLC.	Palomino Petroleum	Beardmore Oil, Inc.
Anhydrite	Querbach #1-3	Querbach #1	Baldrey #2
Base	Sec. 3 T23s R22w	Sec. 3 T23s R22w	Sec. 3 T23s R22w
Heebner	1380' FSL & 1730' FWL	1320' FSL & 2310' FWL	NE SW
Lansing	1297', +889	1295', +889	1290', +892
BKc	1334', +852	1332', +852	1330', +852
Pawnee	3737', -1551	3731', -1548	(-3)
Fort Scott	3803', -1617	3795', -1611	(-6)
Cherokee	4170', -1984	4178', -1984	NA
Mississippian	4242', -2056	4242', -2058	NA
	4329', -2143	4324', -2140	(+2)
	4353', -2167	4348', -2164	(-3)
	4406', -2220	4402', -2218	(-3)
			(-2)
			NA
			(+1)
			(+1)
			(+1)

Summary

The location for the Querbach #1-3 well was found via 3-D seismic survey. The new well ran structurally as expected via the survey. No drill stem tests or electric logs were run due to surface pipe issues. After all gathered data had been examined the decision was made to run 5 ½ inch production casing to further evaluate the Querbach #1-3 well.

Recommended Perforations

Primary	Mississippian Osage	(4406' – 4410')	Not Tested
Secondary	Altamont	(4196' – 4204')	Not Tested
Before Abandonment	Fort Scott	(4345' – 4351')	Not Tested

Respectfully Submitted,

Jason T Alm
Hard Rock Consulting, Inc.