

Well Name: OCS-Y-2321 BURGER J #001
Location: Posey 6912
Operator: Shell Gulf of Mexico Inc.
Report Prepared By: Jessica Moen
Report Delivered To: Shell Gulf of Mexico Inc.

Depth (MD) 6450 to 6600 ft
(TVD) 6446 to 6595 ft
Formation: Top Kuparuk D
Date: 9/21/2015

Zone Production Analysis (From Steam-Still PPM Ratios)

The production of this zone is deemed to be Gas/NPH. At approximately 6450 feet, there is a gas / NPH contact (and a NA / NA contact at approximately NA feet) for a total of 150 feet of Gas/NPH show (and NA feet of NA show).

1

Depth 6495 ft Gas Units 36 Mud Chlorides (1000's) = 145000

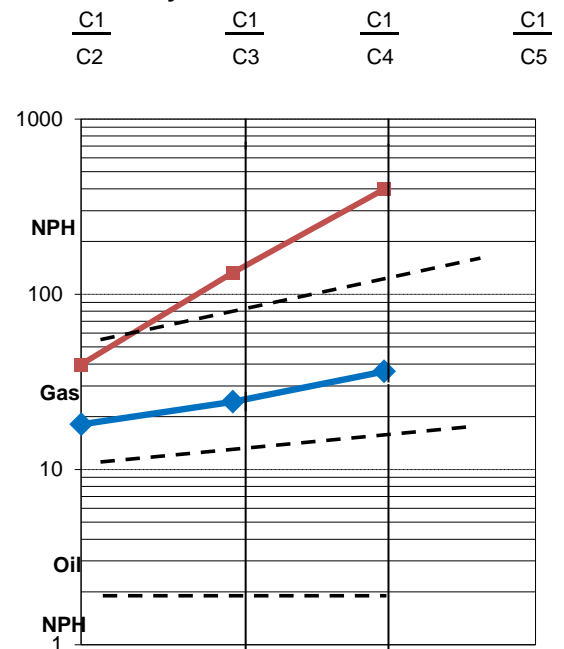
| | Flowline ppm | Background ppm | Show ppm |
|----|--------------|----------------|----------|
| C1 | 2310 | 680 | 1630 |
| C2 | 119 | 29 | 90 |
| C3 | 84 | 17 | 67 |
| C4 | 45 | 0 | 45 |
| C5 | 0 | 0 | 0 |

Hydrocarbon Ratios

| | | |
|-------|---|---------|
| C1/C2 | = | 18 |
| C1/C3 | = | 24 |
| C1/C4 | = | 36 |
| C1/C5 | = | #DIV/0! |

Production Analysis Gas Oil Water Non-Producing Hydrocarbons

Hydrocarbon Ratios



2

Depth 6580 ft Gas Units 19 Mud Chlorides (1000's) = 145000

| | Flowline ppm | Background ppm | Show ppm |
|----|--------------|----------------|----------|
| C1 | 1194 | 797 | 397 |
| C2 | 57 | 47 | 10 |
| C3 | 40 | 37 | 3 |
| C4 | 17 | 16 | 1 |
| C5 | 0 | 0 | 0 |

Hydrocarbon Ratios

| | | |
|-------|---|---------|
| C1/C2 | = | 40 |
| C1/C3 | = | 132 |
| C1/C4 | = | 397 |
| C1/C5 | = | #DIV/0! |

Production Analysis Gas Oil Water Non-Producing Hydrocarbons

Formation Data

At Max Gas, the visual sample percentages were: 40 % SST, 40 % CLYST, 20 % SLTST, _____ % _____.

The reservoir rock was a lt gry to med gry, transi-colored sandstone. The grain size was v fine to fine and the grain shape was sb angular to round. Approximate visual porosity was N/A % and the visual permeability was N/A. Grain sorting was poor and the rock cement was uncons. The porosity type was N/A and the secondary components in the rock fragments were: claystone and siltstone. The rock hardness was firm and the sample contamination was N/A.

Liquid Hydrocarbon Data

The liquid hydrocarbon was first detected at N/A feet and continued through N/A feet. The liquid phase of the mud was N/A. The liquid hydrocarbon occurred in the form of N/A and was present in the N/A. When the N/A were studied in the UV box, the liquid hydrocarbon covered N/A % of the surface of the sample. The oil was N/A in color, exhibited a N/A fluorescence and had an approximate API gravity of N/A; odor was NA and staining was present. The cuttings exhibited a N/A cut that was N/A in color with a N/A fluorescence.

Logger's Opinion of the Show Interval

Gas climbed to a peak of 36 units at 6495' MD over 11 units of background gas at 6448' MD. Samples changed to partially sandstone with a dull yellow fluorescence, a slow dull yellow crush cut fluorescence, and a dull yellow residual fluorescence. The lack of heavier hydrocarbons with fluorescence indicates a non-productive hydrocarbon or heavy hydrocarbon with no associated gas is present.