**Well Name:** OCS-Y-2321 Burger J 001  
**Location:** Posey 6912  
**License Number:**  
**Spud Date:** 7/30/2015  
**Region:** Chukchi Sea, Alaska  
**Drilling Completed:** 9/21/2015  
**Surface Coordinates:**  
LAT: N 71° 10’ 24.029”  
LONG: W 163° 28’ 18.522”  
**Bottom Hole Coordinates:**  
LAT: N 71° 10’ 24.029”  
LONG: W 163° 28’ 18.522”  
**Ground Elevation (ft):** 0  
**K.B. Elevation (ft):** 76  
**Logged Interval (ft):** 222  
**To:** 6800  
**Total Depth (ft):** 6800  
**Formation:** Kuparuk C / Kuparuk A / Kuparuk D  
**Type of Drilling Fluid:** Surface: Sea Water; Intermediate and Main Objective: KlaShield WBM  

**OPERATOR**  
**Company:** Shell Gulf of Mexico, Inc  
**Address:** 200 North Dairy Ashford Rd  
Houston, TX 77079  

**GEOLOGIST**  
**Name:** J. McBeth, R. Massey  
**Company:** Waters Petroleum Advisors  
**Address:** 4824 Potter Crest Circle  
Anchorage, AK 99516  
**Office:** (907) 350-8289  

**Comments**  
**Exploration**  
**Rig:** Polar Pioneer  
**API #:** 55-352-00004-00  
**AFE #:** 30230984  

This log displays the LWD data in Recorded Mode
Casing/LOT

KB to Mudline: 222'

Mudline Cellar Floor: 255'

Water Depth: 146'

Surface:
8.5" Pilot hole to 1,512' MD
42" Pilot hole opener: 36" x 2" X65 set at 393' MD
22" 129.5 # X80, H90 casing @ 1475' MD / 1475' TVD; FIT to 210 psi w/ 10.0 ppg MW @ 1522' TVD=12.6 ppg EMW

Intermediate 1: 14" 114# L80 Vam Top KB casing @ 2,933' MD / 2,933' TVD; FIT to 451 psi w/ 14.0 ppg MW @ 2,973' TVD=14.0 ppg EMW

Intermediate 2: 9 5/8" 53.5# L80 Vam SLIJ-II casing @ 5,408' MD / 5,406' TVD; FIT to 907 psi w/ 12.07 ppg MW @ 5,408' TVD=15.28 ppg EMW

LWD

Pilot Hole (8.5" hole size):
BHA #1 Sensor Distances: DGR=6.67', PWD=9.49', PCDC=16.8', XBAT=32.85', ADR=59.89', ALD=79.17', CTN=92.13', MRIL=109.6'

Pilot Hole (26" hole size):
BHA #4 Sensor Distances: PCDC=123.78', PWD=133.7'

Intermediate 1 Hole (17-1/2" hole size):
BHA #5 Sensor distances: DIR=79.96', PWD=89.88'

Intermediate 2 Hole (12-1/4" hole size)
BHA #6 Sensor distances: GR=37.22', EWR=45.42', DIR=56.82', PWD=70.67', ALD=87.77', CTN=106.44', XBAT=130.62'

Main Objective (8.5" hole size):
BHA #7 Sensor Distances: DGR=38.4', PWD=41.27', DIR=48.8', XBAT=64.79', ADR=95.88', ALD=113.16', CTN=126.09', MRIL=143.06'

ROCK TYPES

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol
- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Tuff
- Siderite
- Cement

PROPRIETARY
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**Drill Data 1**

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<td>80</td>
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<thead>
<tr>
<th>Lithology</th>
<th>Resistivity</th>
<th>Porosity &amp; PE</th>
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<td>shallow</td>
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<td>N POR (%)</td>
<td>Gas (units)</td>
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<td>Medium 28&quot; (ohm)</td>
<td>DEN (gm/cc)</td>
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<td>Deep 34&quot; (ohmm)</td>
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<td>Extra Deep 40&quot; (ohmm)</td>
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**Geological Descriptions**

- **Burger J**
  - Spud: 30 July 2015 @ 1705 hrs
  - RKB: 76 ft

- **Water Depth**: 146 ft

8.5" Pilot Hole drilled from sea floor (222' MD/TVD) to 1,512' MD / 1,512' TVD / -1,436 TVDSS

36" Hole opener then drilled from sea floor (222' MD/TVD) to 384' MD/TVD / -308' TVDSS

Mud line cellar bit then drilled from sea floor to 257' MD/TVD / -181' TVDSS

42" Hole opener then drilled from 257' MD/TVD to 393' MD/TVD / -317' TVDSS

36" Casing/Conductor set at 375' MD / 375' TVD / -299' TVDSS
26" Hole opener then drilled from 375' MD/TVD to 1,512' MD / 1,512' TVD / -1,436 TVDSS

Drill out at 1830 hrs on Sept 4, 2015

22" Surface Casing set at 1,475' MD / 1,475' TVD / -1,399' TVDSS

1500'-1530' SL TST 70% lt-med gy wi com wh-lt gy tuf mtx, arg, sft, easily fri; CLYST 30% med gy, sft, fri

1560'-1590' CL YST 100% med gy, lmpy-mushy, sft, ireg cuttings habit, sm-slty