

Proposed Well Schematic "Sturgis North BP #2"

Last Update: Beiriger 08/24/2008

CONFIDENTIAL

Well: OCS-G-23018 #1 BP01, Atwater Valley 138 Loc D Rlg: Ensco 7500
Mudline Location: X= 786,393 Y= 10,097,821 (NAD 27 BLM 16) WBS No. "UWXEX-E7008-DRL".
Lat N 27° 48' 04.709" Long W 89° 38' 31.433" API Well Number: 60818406800
BHL Location: X= 786,494 Y= 10,097,810 Z = 31,150' TVD Latitude/Longitude.: Lat N27 48 04.709 Long W89 38 31.433 (same as surface)
OBJECTIVES: 18.0 Miocene @ 28,749' TVD KB to MSL (ft): 72'
DIRECTIONAL: Water Depth (ft): 3480'
KB to ML (ft): 3552'

EVAL PROG	GEOLOGIC MARKERS OBJECTIVES	MD	HOLE SIZE	CASING & CEMENT	MUD MW	LOT OBG/FG	DIRECTIONAL PROGRAM
10,000 psi 16" SA @ 3,589'	(37' BML)	3,880'	36" Jetted to 318' BML (120" x 2", 50' 1.5" X 1", 160' x 1")				
Top of 16" HGR @ 3,586'		3,880'	30" x 32" Hole TD = 4,350'		Sea Water		
MWD/LWD v/ TD		(318' BML)	28" 218.27 ppf 0.75" X-52 RL-4SL (3,545' - 4310')				
		4,310'	Burst Disk @ 4,431' (3500 psi) in 1"	Foam Cement @ mud-line	11.5 - 14.9 ppg DKD		
		(788' BML)	26" Hole TD = 6,230'	23" 448 ppf 2" X-80 (3537' - 3590')	Pad Mud 15.5 ppg		Straight Hole
18" SA @ 5,567' (2,005' BML)		6,287'	Collapse Disk @ 5,90'	22" 328 ppf 1.5" X-80 x H-90D (3590' - 3630')	12.0 ppg LOT		
		(2,735' BML)		22" 224 ppf 1" X-80 S-90/MT (3630' - 4434')			
				22" 170 ppf 0.75" X-60 S-60/MT (4434' - 6287')			
TOS @ 6,844' RKB (3,292' BML)		7,782'	18-1/8" x 21" Hole TD = 7,900'	Foam Cement @ mud-line	SBM		Straight Hole
		(4,230' BML)		18" 117 ppf, P110, Hyd 511 (5,557' - 6,300')	11.3 PPG		
				17 7/8" 93.5 ppf, P110HC, Hyd 521 (6,300' - 7,782')	14.5 ppg FIT		
				TOC @ 6,087'			
Top of 13 5/8" Liner @ 15,226'		15,466'	16-1/2" x 19" Hole TD = 15,600'		SBM		Straight Hole
		(11,914' BML)		TOC @ 12,890' (SLB Bond log 24-May-08)	11.6 - 13.6 PPG		
				16.04" 109.6 ppf, HPQ-125 SL SF (3,586' - 7,094')			
				16" 97 ppf, HPQ-126 SL SF (7,094' - 9,144')			
				16" 97 ppf, HCQ-125 Hydril 523 (9,144' - 15,466')	16.3 ppg FIT		
BOS @ 20,404' (16,852' BML)		20,892'	19" Hole to 15,500'				
Top of 11 7/8" Liner @ 20,436'		(17,310' BML)	14-1/2" x 16-1/2" Hole TD = 20,910'		SBM		Straight Hole
				13 5/8" 88.2 ppf, Q-125, SL SF (20,006' - 15,226')	13.5 - 16.0 PPG		
				14" 112 ppf, Q-125, SL SF (20,666' - 20,006')			
				13 5/8" 88.2 ppf, Q-125, SL SF (20,892' - 20,666')	16.3 ppg FIT		
Top of 9 3/8" liner @ 21,675'		22,025'	16.5" Hole to 20,772'				
		(18,473' BML)		TOC @ 20,920' (QSLT # 24-May-08)			
			12 1/4" x 13 1/2" Hole TD = 22,025'		SBM		Straight Hole
			11-7/8" Casing Window TOW= 22,003'; BOW= 22,025'		15.8 PPG		
				11 7/8" 71.8 ppf Q-125 HYD 513 (20,436' - 22,025')	16.18 ppg LOT		
24,676'/24,670' TVD		24,480'	10-5/8" Hole to 24,676'		SBM		Directional Hole
(21,119' BML)		24,776'			15.8 ppg		
		24,580'	9-3/8" 39 ppf HCQ-125 SLF (21,675' - 24,676')		16.67 ppg LOT		
TOS @ 25,215' RKB (21,663' BML)			8 1/2 x 9 7/8" Hole to 29,500'		SBM		Straight Hole
					16.0 - 16.2 ppg		
		29,500'/29,495' TVD					