

Proposed RPD Well Schematic "Sturgis North" Prospect **CONFIDENTIAL**

Last Update: Gagneaux 5/29/2008

Well: OCS-G-23018 #1, Atwater Valley 138 Loc D Rig: 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= 786,393 Y= 10,097,821 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: Straight Hole : 1000' radius @ TD' of 31,150' RKB 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' Top of 16" HGR @ 3,586'	(37' BML)	3,880'	3,880' TVD	36" Jetted to 318' BML (120' x 2", 50' 1.5" X 1", 160' x 1")			
MWD/LWD w/ TD	(318' BML)	4,310'	4,310' TVD	30" x 32" Hole TD = 4,350' 28" 218.27 ppf 0.75" X-52 RL-4SL (3,545' - 4310') Foam Cement @ mud-line	Sea Water		
18" SA @ 5,557' (2,005' BML)	(788' BML)	6,287'	6,287' TVD	Burst Disk @ 4,431' (3500 psi) in 1" w 26" Hole TD = 6,230' 23" 448 ppf 2" X-80 (3537' - 3590') 22" 328 ppf 1.5" X-80 x H-90D (3590' - 3630') 22" 224 ppf 1" X-80 S-90/MT (3630' - 4434') 22" 170 ppf 0.75" X-60 S-60/MT (4434' - 6287')	11.5 - 14.9 ppg DKD Pad Mud 15.5 ppg		Straight Hole
TOS @ 6,844' RKB (3,292' BML)	(2,735' BML)	7,782'	7,782' TVD	18-1/8" x 21" Hole TD = 7,900' Foam Cement @ mud-line	SBM 11.3 PPG		Straight Hole
Top of 13 5/8" Liner @ 15,226'	(4,230' BML)	15,466'	15,466' TVD	18" 117 ppf, P110, Hyd 511 (5,557'-6,300') 17 7/8" 93.5 ppf, P110HC, Hyd 521 (6,300'-7,782') TOC @ 6,087'	14.5 ppg FIT		
			16-1/2" x 19" Hole TD = 15,600' TOC @ 12,466'	SBM 11.6 - 13.6 PPG			Straight Hole
			16.04" 109.6 ppf, HPQ-125 SLSF (3,586'-7,094') 16" 97 ppf, HPQ-125 SLSF (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)	Top of 11 7/8" Liner @ 20,436'	20,892'	20,892' TVD	19" Hole to 15,500' 14-1/2" x 16-1/2" Hole TD = 20,910'	SBM 13.5 - 16.0 ppg		Straight Hole
			16.5" Hole to 20,772'	13 5/8" 88.2 ppf, Q-125, SLSF (20,006'-15,226') 14" 112 ppf, Q-125, SLSF (20,666'-20,006') 13 5/8" 88.2 ppf, Q-125, SLSF (20,892'-20,666')	16.3 ppg FIT		
	9 3/8" TOL @ +/-21,950' Expandable TOL @ +/-22,050'		14.5" Hole to 20,910'. TOC @ 20,910'	SBM			
			Window Milled 22,171'-22,190' Whipstock @ 22,201' EZSV @ 22,224'	12 1/4" x 13 1/2" Hole TD = 22,974' 11 7/8" 71.8 ppf Q-125 HYD 513 (20,436' - 22,841') Abandonment Plug 100 bbls (561 ft³) 17.0 ppg Class H Cement 22,230' - 23,450'	15.8 - 16.0 ppg 16.5 ppg LOT		Straight Hole
BYPASS: Build to 7", Hold, Drop to Vertical by 23,170' MD / 23,166' TVD 11 7/8 x 9 5/8" SET 36 ppf EX-80 (22,050' - 24,674') 24,674' MD /24,670' TVD	(19,289 BML)	22,841'	22,841' TVD	10 5/8" x 12 1/4" Hole 8.921" Unexpanded ID 22,234'-24,699' 10.576" OD / 9.875" ID Post expanded 24,699'-24,853' 11 7/8 x 9 5/8" SET 36 ppf EX-80 (22,234' - 24,853')	SBM 15.9 - 16.1 ppg		Original Hole Straight
		27,000' TVD	27,000' TVD	9 3/4" x 11 3/8" Hole 9 3/8" 39 ppf HCQ-125 SLF (22,250 - 27,000')	SBM 16.1 - 16.3 ppg		Straight Hole
		31,150' TVD (TD of Open Hole)	31,150' TVD	8 1/2" Open Hole	SBM 16.3 - 16.5 ppg		Straight Hole