



NEXEN PETROLEUM USA
GOM Deepwater Exploration



KAKUNA Prospect -- Green Canyon 504

OPERATOR:	Nexen	PARTNER:	ENSCO 8502	DATE:	12/27/2011
WELL NAME:	GC 504 ST00 BP 01 OCS-G 22968	RIG:	ENSCO 8502	RF ELEV:	86'
SURFACE LOCATION:	X: 2,312,025 Y: 9,977,480	PBHL:	X: 2,308,788 Y: 9,976,344	WD:	3,637'
OBJECTIVE ZONE:	Base Tahiti Pay			PTD:	29,084' TVD

HOLE			CSG		PP	MW	FG	Big Bore II Subsea Wellhead		
MD	TVD	BML	TOP	FT	DO/TD	DO/TD	FRAC			
4,039'	4,039'	316'	3,712'	327'	8.6					36" Jetted to 318' BML 36" Ext Joint 2.0" wall, 726 lb/ft, X-65, HC100/MT Pin, 68 ft Joint 36" Xover 1.5" wall 552 lb/ft, X-56, HC100/MT Box X D90/MT Pin 36" Intermediate 1.5" wall 552 lb/ft, X-56, D60/MT (2 Joints) 36" Jetin 1.0" wall, 374 lb/ft, X-56, D60/MT Box X Inverted Bevel Shoe @ 4,039' TVD
(Actual Depths)										
Top Salt @ 4,979' TVD										
6,016'	6,015'	2,293'	3,709'	2,274'	8.6 / 9.0		Sea Water / 9.8			26" PDC CMT: 15.2 ppg Foamed Deep Set II Lead / 15.2 ppg Non-Foamed Deep Set II Tail TOC @ MudLine No Burst / Collapse Rupture Disks 22" X 1.25" Ext Joint, X-80, XLW 22" X 1.25" 1 Joint, X-80, XLW 22" X 1", 224 lb/ft, X-80, XLW (Burst 6364 - Collapse 3874) 87° F
(Actual Depths)										
Achieved 22" FIT to 14.8 ppg, equivalent to OBG Plus 1000 psi										
11,100'	11,099'	7,377'	3,791'	5,488'	9.0 / 10.5		11.5 / 12.0			18-1/8" PDC x 21" Reamer (Annular cement job squeezed from 6203' MD to 4010' MD) CMT: 16.4 ppg Premium H, TOC @ 6,779' MD (2,500' of fill) 18", 117 lb/ft, P110, Hyd511 (Burst 6684 - Collapse 2109) 109° F
(Actual Depths)										
Planned FIT = 15.2 ppg. Actual LOT achieved = 13.5										
Original 18" setting depth was planned for 11,000 ft TVD. 18" liner set earlier than planned, due to hang up of liner hanger 75ft below wellhead housing. Rathole length below revised 18" setting depth = 1,821 ft										
14,001'	14,000'	10,277'	7,956'	6,020'	10.5 / 12.1		12.0 / 13.0			16-1/2" PDC x 19-1/2" Reamer CMT: 16.4 ppg Premium H, TOC = 3000' fill for primary cement job on shoe. No Burst / Collapse Rupture Disks 16", 97 lb/ft, Q-125HC, Hydrill 511 (Burst 7860 - Collapse 2950) 122° F
(Actual Depths)										
Planned FIT = 15.2 ppg. Actual LOT achieved = 15.2										
Note: Notch in salt body at 14,000' TVD +/- 500'. 1800' separation at closest approach.										
Note: Rounded up pore pressure based on kick pressure, not predicted Pp curve. The salt was being drilled w/ 14.9 ppg SBM prior to kick. Kick = 15.5 ppg EMWt. Kick zone pressure equated to 97% of OBG. Above trend. Believed to be discrete zone. Note: Isolated zone in salt at 18820' - 18,825' TVD w/Pfrac = 16.2ppg EMWt, cemented. Note: A total of five remedial cement squeezes performed on 14" shoe/rat hole. Final successful squeeze left 37' of slurry above the shoe (Actual TOC at 18,814' MD)										
18,910'	18,909'	15,186'	3,709'	15,142'	12.1 / 15.5		13.0 / 15.6			14-1/2" PDC x 17-1/2" Reamer CMT: 16.4 ppg Premium H, Planned TOC @ 14,700' MD (4,151' of fill attempted on primary job) No Burst / Collapse Rupture Disks 14", 112.6 lb/ft, Q-125HC, VAMTOP (± 200 ft) (Burst 12450 - Collapse 8920) No Burst / Collapse Rupture Disks 14", 112.6 lb/ft, Q-125HC, Hyd 513 / 523 (Burst 12450 - Collapse 8920) 142° F
(Actual Depths)										
Planned FIT = 16.5 ppg. Actual LOT achieved = 16.2 ppg										
Note: Isolated weak zone in salt from 18906' - 18,917' TVD w/Pfrac = 16.2ppg EMWt										
Note: Premature release of liner hanger running tool resulted in liner hanger falling to bottom without engagement of liner hanger slips. Set liner top packer and conducted primary cement squeeze. A total of two remedial cement squeezes also performed on 11-3/4" shoe. Final successful squeeze left 689' of slurry above the shoe (Actual TOC at 21,211' MD).										
21,900'	21,899'	18,176'	18,517'	3,383'	15.5 / 14.1		15.6			12-1/4" PDC x 14-3/4" Reamer CMT: 16.4 ppg Premium H, Planned TOC @ 20,900' MD (1000' of fill attempted on primary squeeze) No Burst / Collapse Rupture Disks 11-3/4", 65 lb/ft, Q-125HC, Hyd523 (±712 ft) (Burst 9940 - Collapse 5740) 11-3/4", 65 lb/ft, Q-125HC, SLIJ II (±1587 ft) (Burst 9940 - Collapse 5740) 11-3/4", 65 lb/ft, Q-125HC, Hyd523 (Burst 9940 - Collapse 5740) 158° F
(Actual Depths)										
Planned FIT = 16.7 ppg. Actual FIT achieved = 16.7 ppg										
Base Salt @ 22,326' MD / 22,325' TVD (TBC by LWD logs) BOS FG: 15.9 ppg										
Note: Predicted pore pressure at BoS is 13.8 - 14.1 ppg EMWt. Higher mud weight to stabilize inclusions near Base of Salt.										
23,387'	23,384'	19,664'	18,017'	5,370'	14.1 / 14.5		15.2			10-5/8" PDC x 12-1/4" Reamer CMT: 16.4 ppg Premium H, Top squeeze top of liner down to 21,900' MD CMT: 16.4 ppg Premium H, TOC @ 22,837' MD (550' of fill above 9-7/8" shoe) No Burst / Collapse Rupture Disks 9-7/8", 62.8 lb/ft, Q-125HC, SLIJ II (Burst 13840 - Collapse 11640) 166° F
(Actual Depths)										
Planned LOT = 16.0 ppg										
M15 - 23,484' TVD										
M18 - 25,634' TVD										
M21 - 27,384' TVD										
27,543'	27,000'	23,820'	22,887'	4,656'	14.5 / 15.3		15.2 / 15.4			8-1/2" PDC x 9-7/8" Reamer CMT: 16.4 ppg Premium H, TOC @ 26,043' MD (1,500' of fill, to be adjusted for hydrocarbon zones) No Burst / Collapse Rupture Disks 7-5/8", 39 lb/ft, Q-125HC, SLIJ II (Burst 14340 - Collapse 12810) 7-5/8", 39 lb/ft, Q-125HC/P-110, Hyd 513/523 (±490 ft) (Burst 12620 - Collapse 11080) 201° F
(Actual Depths)										
Planned LOT = 16.8 ppg										
M22 - 28,284' TVD										
30,039'	29,084'	26,316'			15.3 / 15.6		15.4 / 15.7			6-1/2" PDC Well TD 220° F