



Treatment Report

Customer: Occidental Petroleum Corp.		Job #: JOB00148356
Rep: David Cornett	Rig: Ikon 12	Job Date: Feb 11 @ 02:02
Supervisor: William (Wayne) Silvester	Well: Rainbow 9-01HZ	Time Requested:
Job Type: US Primary	UWI: Rainbow 9-01HZ	Time Arrived: Feb 11 @ 02:02
Casing-Surface	Surface: Rainbow 9-01HZ	Time Released: Feb 11 @ 08:02

1 Grade	L80	1 Size (mm, in)	9.625	1 Weight (kg/m, lb/ft)	36
BHCT (°C, °F)	88	BHST (°C, °F)	104	Funnel Vis (sec/L, sec/qt)	TBD
Mud Density (kg/m3, lb/gal)	TBD	Mud Type	WBM	Plug Size (mm, in)	9.625
Plug Type	Top PDC	TMD (m, ft)	1839.88	TVD (m, ft)	18425

Treatment Info:	Tonnes Used:	Tonnes Not Used:	0.00
Preflush:	5m3 Fresh Water & 10m3 MAG Mark & 10m3 Fresh Water	Slurry Temp:	71
Displace:	142m3 Fresh Water	Water Temp:	65
Slurry Returns:	23 Plug Bumped:	Bulk Temp:	65
	Yes	Pump Out Lines:	Yes
		Float Held:	Yes
		Circulation Time:	0.5
		Bulk Sample:	Yes
		Water Sample:	Yes
		Slurry Sample:	Yes

Time	Pressure MPa	Annular Pressure MPa	Volume Per Stage m3	Total Stage Volume m3	Rate m3/min	Treatment Detail
02:00	0.00	0.00	0	0.00	0	Arrive on Location - Spoke with Company representative about depths, volumes, water requirements. Water test completed: pH:7 Hardness: 50ppm Chlorides: 278 ppm Temp: 64f
04:10	0.00	0.00	0	0.00	0	Safety Meeting - Held JSA meeting with Magnum crew/ Rig crew. Spoke about stop work authority, muster points, and communication between both crews
04:13	100.00	0.00	5	0.00	3	Fill Lines - Dropped bottom plug Filled lines with 5bbls water for pressure test then 10 bbls of fresh water Then pump MAG Mark 10 bbls
04:23	2000.00	0.00	0	0.00	0	Start Pressure Test - Pressure test lines to 2000 psi
04:30	853.00	0.00	204.5	0.00	5.5	Pump Slurry - Pumped 910 sks @ 14.1 y= 1.31 w= 6.06 Sample weighed/ verified. Good returns
05:15	960.00	0.00	142	0.00	5.5	Displace - Displaced 120 BBLS Pumped 23 BBLs to Surface
05:15	0.00	0.00	0	0.00	0	Drop Plug - Drop plug
05:19	548.00	0.00	23	0.00	3	Decrease Rate - Decreased Rate to 3 BBLs per minute to Bump plug @ 120 BB

05:55	1350.00	0.00	3	0.00	0	Bump Plug - Bumped plug Final circulation psi: 950 bumped @ 1350 psi Float held 5 minute psi test
07:50	0.00	0.00	0	0.00	0	Wash Up Truck - Drained water out of plumbing
08:45	0.00	0.00	0	0.00	0	Leave Location - Left location