

## DAILY GEOLOGICAL REPORT

Date:	26 November 2002	Rig:	SEDCO 500
Report Number:	5	Bit Diameter:	8.50 in
Report Period:	00:00 - 24:00 Hours	Last Casing:	13-3/8" @ 1350.0 ft MDRT
Spud Date:	21-Nov-2002 08:00 Hours	FIT:	13.50 ppg EMW @ 1350.0 ft MDRT
Days From Spud:	5.7	Mud Weight:	10.00 ppg
Depth @ 2400 Hrs:	4010.0 ft MDRT	ECD:	10.65 ppg
	3937.3 ft TVDRT	Mud Type:	Paradril (SOBM)
	3872.3 ft TVDAHD	Mud Chlorides:	
Lag Depth:	4010.0 ft MDRT	Est. Pore Pressure:	8.50 ppg
Last Depth:	3546.0 ft MDRT	DXC:	Normal
Progress:	464.0 ft	Last Survey:	3919.76 ft MDRT
Water Depth:	295.0 ft	Deviation:	Inc. 3.94°
RT:	65.0 ft		Az. 248.75°

## OPERATIONS SUMMARY

**24 HOUR SUMMARY:** Drilled 8.5" hole from 3546ft to 4010ft. Circulated bottoms up, and evaluated shows. Decision made to cut 180ft core as programmed. Pulled out of hole and made up 8.5" coring assembly. Commenced running into hole to cut core # 1.

**NEXT 24 HOURS:** Continue running into hole. Cut 180ft core as per programme. Pull out of hole and recover core. If sufficient is core recovered an 8.5" drilling assembly will be picked with a steerable mud motor.

**CURRENT OPERATION @ 06:00 HRS (27-Nov-2002):** Continue coring in 8.5" at 4120ft MDRT.

## GEOLOGICAL SUMMARY

### LITHOLOGY

INTERVAL:	3540 to 3710 ft MDRT (-3419.9 to -3582.3 ft TVDAHD)
ROP (Range):	7 to 168 ft/h
Av. ROP:	49 ft/h
<p>Massive CLAYSTONE with minor interbedded SILTSTONE</p> <p>CLAYSTONE: (90 - 95%) medium to dark olive grey, medium to dark greyish brown, blocky to sub-platy, occasionally sub-fissile and elongate, soft to firm, dominantly firm, occasionally hard, trace of dolomite.</p> <p>SILTSTONE: (5 - 10%) medium to dark brown, medium olive grey, soft to firm, blocky, 10-15% very fine quartz sand, grades in part to Sandy Siltstone,</p>	

INTERVAL:	3710 to 3750 ft MDRT (-3582.3 to -3620.7 ft TVDAHD)
ROP (Range):	15 to 90 ft/h
Av. ROP:	37 ft/h
<p>CLAYSTONE with minor interbedded SILTSTONE</p> <p>CLAYSTONE: (95%) light to medium olive grey, medium to dark greyish brown, firm to moderately hard, dominantly firm, blocky to sub-platy, occasionally sub-fissile, 10-15% quartz silt, commonly grades to Silty Claystone, trace dolomite.</p> <p>SILTSTONE: (5%) as above</p>	

INTERVAL:	3750 to 3900 ft MDRT (-3620.7 to -3765.7 ft TVDAHD)
ROP (Range):	7 to 235 ft/h
Av. ROP:	85 ft/h
<p>Sequence of interbedded SANDSTONE (Silty), SILTSTONE (Sandy) and CLAYSTONE with minor thin DOLOMITE stringers</p> <p>SILTY SANDSTONE: (5 - 30%) quartzose, pale brown to pale yellowish brown, clear to translucent quartz grains, soft to friable, silt size to very fine grained, moderately sorted, angular to sub-angular, 10-15% argillaceous and silty matrix, trace carbonaceous flecks, poor visible porosity. No shows.</p> <p>CLAYSTONE: (20 - 70%) light to medium olive grey, medium to dark greyish brown, firm to moderately hard, dominantly firm, blocky to sub-platy, occasionally sub-fissile, trace dolomite.</p> <p>SANDY SILTSTONE: (20 - 50%) medium to dark brownish grey, light to medium olive grey, soft to firm, blocky, 20-25% very fine quartz sand, grades in part to Silty Sandstone Siltstone, trace carbonaceous specks.</p> <p>DOLOMITE: (1 - 5%) light to medium brown to pale yellowish brown, firm to moderately hard, very fine to micro-crystalline, nil visible porosity.</p>	

INTERVAL:	3900 to 3992 ft MDRT (-3765.7 to -3854.9 ft TVDAHD)
ROP (Range):	16 to 173 ft/h
Av. ROP:	75 ft/h
<p>Massive CLAYSTONE sequence with minor interbedded SILTSTONE and thin DOLOMITE stringers.</p> <p>CLAYSTONE: (70 - 75%) medium to dark olive grey, medium to dark greyish brown, firm to moderately hard, dominantly firm, blocky to sub-fissile, 10-15% quartz silt, trace dolomite, trace carbonaceous specks.</p> <p>SILTSTONE: (20 - 30%) as above, common to abundant very fine quartz sand, grades to Silty Sandstone.</p> <p>DOLOMITE: (0 - 5%) light to medium brown to pale yellowish brown, firm to moderately hard, very fine to micro-crystalline, nil visible porosity.</p>	

INTERVAL:	3992 to 4010 ft MDRT (-3854.9 to -3872.3 ft TVDAHD)
ROP (Range):	18 to 58 ft/h
Av. ROP:	36 ft/h
<p>Massive SANDSTONE</p> <p>SANDSTONE: (100%) pale yellowish brown, white, light grey, clear to translucent quartz grains, soft to friable, silty to dominantly very fine grained quartz, poor to moderately sorted, angular to sub-rounded, 10-20% white kaolinitic matrix, grades to Sandy Siltstone in part, trace carbonaceous specks, trace dark lithics, poor to locally fair inter-granular porosity. No direct fluorescence, very faint pale yellowish white residual ring fluorescence. (OBM residue?).</p>	

**HYDROCARBON FLUORESCENCE**

No Shows

**GAS SUMMARY**

<b>Background Gas</b>							
INTERVAL (ft MDRT)	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
3540 - 3710	4	800	200	0	0	0	0
3710 - 3750	5	1313	40	0	0	0	0
3750 - 3900	5	1313	40	0	0	0	0
3900 - 3992	5	1313	40	0	0	0	0
3992 - 4010	5	1317	40	0	0	0	0

<b>Gas Peak</b>							
INTERVAL (ft MDRT)	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
3606 - 3606	12	1588	52	12	0	0	0
4001 - 4001	107	17030	500	92	23	0	0

**SAMPLE QUALITY**

Sampling at 30 ft intervals. Sample quality is good. Collecting spot samples at all gas peaks.

**MUDLOGGING EQUIPMENT / PERSONNEL**

All equipment functioning normally. GFF Chromatograph and FID Chromatograph both functioning normally.

**MWD**

No MWD/GR run.

Formation Name	Prognosed Depths			Actual Depths			Diff. TVT (ft)	Picks Based On
	MD (ft)	TVDRT (ft)	TVDAHD (ft)	MD (ft)	TVDRT (ft)	TVDAHD (ft)		
Wonocolo Formation	365.0	365.0	(300.0)	367.0	367.0	(302.0)	2.0 L	Tagged seabed
Tuban Formation	1645.0	1645.0	(1580.0)	1600.0	1599.9	(1534.9)	45.1 H	Logs
Kujung I Formation	1890.0	1890.0	(1825.0)	1865.0	1864.9	(1799.9)	25.1 H	Logs
Ngrayong Formation	3875.0	3875.0	(3810.0)	3703.0	3640.5	(3575.5)	234.5 H	Logs
Ngimbang Formation	4125.0	4125.0	(4060.0)	3986.0	3914.1	(3849.1)	210.9 H	Logs
Lidah Formation	4171.0	4171.0	(4106.0)	4035.0	3961.6	(3896.6)	209.4 H	Logs
Kujung II Formation	4174.0	4172.0	(4107.0)	4174.0	4096.3	(4031.3)	75.7 H	Logs
Kujung III Formation	5165.0	5165.0	(5100.0)	5232.0	5122.7	(5057.7)	42.3 H	Logs
Top 40/50 Carbonate	4990.0	4990.0	(4925.0)	5972.0	5829.7	(5764.7)	839.7 L	Logs

**SURVEY DATA**

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	V.Sec (ft)	Dogleg (°/100ft)	E/W (ft)	N/S (ft)
3559.2	18.27	230.20	3503.1	3438.1	-498.12	3.21	-281.67	-412.18
3653.6	16.82	217.39	3593.2	3528.2	-526.26	4.36	-301.34	-432.51
3750.5	15.75	205.38	3686.2	3621.2	-553.12	3.64	-315.50	-455.54
3844.7	14.61	194.20	3777.1	3712.1	-576.44	3.33	-323.89	-478.61
3942.0	14.10	192.81	3871.3	3806.3	-598.36	0.63	-329.53	-502.06
4040.2	14.09	195.87	3966.7	3901.7	-620.24	0.76	-335.45	-525.24

**REMARKS**

If a second core is required there are sufficient inner barrels and consumables for another 180ft core.

Expect that the Upper Trabus 1B sand was intersected at approximately 4054ft. The Sandstone was described as light grey to greyish white, clear to translucent quartz grains, very fine to fine grained quartz, occasionally medium grained, poor to moderately sorted, sub-angular to sub-rounded, 10-20% white kaolinitic matrix, poor visible porosity, poor to fair inferred porosity. No direct fluorescence, milky yellowish white residual ring fluorescence. (OBM residue?).

A maximum Gas peak of 164 units was recorded at 4084ft with a breakdown of C1 24681 ppm; C2 735ppm; C3 139ppm; iC4 28ppm; nC4 13ppm. (96/3/0.8/0.2)

**WELLSITE GEOLOGISTS**

Bowo Pangarso / Yohei Ishioroshi