



RACEDANE PTY LTD
DRILLING FLUID CONSULTANTS

WELL : DUNBAR 1 DW1 LOCATION : PPL 1, VIC. DATE : 20th MAR., 01
 OPERATOR : ORIGIN ENERGY ENGINEER : E. TRETOWAN REPORT No. : 1-2
 REPORT FOR : B. Beetson / E. Trethowan RIG No. : OD&E # 30 TIME : 24.00
 OPERATION : Pick up 3-1/2" drill pipe and RIH DEPTH : _____

MUD DATA		
Time	KCl - DADA	
Time		24:00
Depth	m	
Density	PPG	8.5
Viscosity	sec/qt	60
PV	cp	
YP	lb/100ft ²	
Gels	lb/100ft ²	
API Filtrate	ccs	
Cake	32nd	
Sand	% Vol	
Solids	wt %	
Oil/Water	wt %	
nH	cc/in	0.5
Alk Filtrate	ppm	
Chloride	ppm	
Total Hard	ppm	
KCl	%	4.0
Rf / @ 0F		
Sulphite	mg/L	
Flowline Temp.	°C	
ALCEN		

BIT DATA		
Size	1	
Size	6.0	
Type	STR09D	
Jets	12,12,12	
Out (m)	IN	
Metres		
Hours		
Metres/Hr		
WOB k lbs		
RPM		
Dev		
T.R.C		

MATERIAL USAGE	
KCl	140
PAC R	10
PHPA Dry Powder	12
CAUSTIC POTASH	1

DAIY COST €	5217.76
CUMUL COST €	5217.76

PIUMP		
Time	1	2
Linear	5.5	
Stroke	8.0	
Bbls/Stk	0.0559	
Eff (%)	95	
SPM		
Bbls/Min		
Gal/Min		
Dracc (psi)		
SCR		

EQUIPMENT		
	Size	Hours
Shaker	3 x 110	
Shaker	3 x 110	
Desander		
Desilter	12 x 5"	

Rhle Made 24 Hrs	120
Bbls Made-Cumul.	480

SYSTEM VOLUMES									
ANNULUS					DRILL STRING				
Size	inch	7.0CSG	6.0OH	6.0OH	Size	inch	3.5 DP	3.5 HWDP	4.75 DC
Hole ID	inch	6.276	6.0	6.0	Pipe ID	inch	2.60	2.06	2.25
Pipe OD	inch	3.5	3.5	4.75	Capacity	bbl/m	0.0215	0.0136	0.0161
Ann. Vol	bbl/m	0.0865	0.0757	0.0428	Section Length	m			
Section Length	m				Section Volume	bbls			
Section Vol	bbls				Flow Type				
Ann. Vel.	m/min				Pressure Drop	psi			
Crit Vel	m/min				Theoretical Lag				ct/c
Flow Type					Carbide Lag				stks
Pressure Drop	psi				Est. Average I.D.				ins

Total Annular Volume		bbls	Total String Volume		bbls	Mud Volume in Hole		bbls
Surface Volume	480	bbls	Total Circulating Volume		bbls	Total Circulation Time		mins

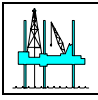
SYSTEM HYDRAULICS		
SYSTEM DEPRESSURE POINTS		
Surface	psi	
Drill String	psi	
Bit Jets	psi	
Annulus	psi	
Hydrostatic Head	psi	
Equiv. Circulating Dens.	SG	
Jet Velocity	m/sec	
Jet Impact Force	lbs	
Bit HHP		
System HHP		
% HHP at Bit		
HHP/sq. in		
F.I.T. at Casing Shoe	SG	

ACTIVITY

RHA - Bit Bit Sub 3.0 x 3.5" HWDP - 280 60M

19th MAR. : Drill rat hole and mouse hole with PAC - fresh water mud.
Nipple up to existing B Section

20th MAR. : Complete nipple up. Pressure test BOPs. M/u NB # 1 and RIH picking up 3.5" drill string
Mixed 480 bbl 4% KCl / PHPA mud



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WELL : DUNBAR 1 DW1 LOCATION : PPL 1, VIC. DATE : 21st MAR., 01
 OPERATOR : ORIGIN ENERGY ENGINEER : E. TRETOWAN REPORT No. : 3
 REPORT FOR : B. Beetson / E. Trethowan RIG No. : OD&E # 30 TIME : 24.00
 OPERATION : Time drill with down hole motor to initiate side track DEPTH : 1217 m

MUD DATA	
Time	24:00
Depth	m 1217
Density	PPG 8.6
Viscosity	sec/qt 50
PV	cp
YP	lb/100ft ²
Gels	lb/100ft ²
API Filtrate	ccs
Cake	32nd
Sand	% Vol
Solids	wt %
Oil/Motor	wt %
nH	cc/min 10
Alk Filtrate	ppm
Chloride	ppm
Total Hard	ppm
KCl	% 4
Rf / @ 0F	
Sulphite	mg/L
Flowline Temp.	°C
ALCEN	

BIT DATA	
Size	6.0
Type	STR09D
Jets	12,12,12
Out (m)	IN
Metres	2
Hours	1.5
Metres/Hr	1.3
WOB k lbs	1-3
RPM	DHM-105
Dev	
T.R.C	

MATERIAL USAGE	
KCl	25
PAC R	2
PHPA Dry Powder	4
CAUSTIC POTASH	
BARITE	10

DAIY COST €	1426.17
CUMUL COST €	6742.02

PIUMP	
Time	CD D7 R
Linear	5.5
Stroke	8.0
Bbls/Stk	0.0559
Eff (%)	95
SPM	90
Bbls/Min	5.03
Gal/Min	211
Dracc (psi)	1100
SCR	

EQUIPMENT		
	Size	Hours
Shaker	2 x 110	4
Shaker	3 x 110	4
Desander		
Desilter	12 x 5"	

Rhic Made 24 Hrs	120
Bbls Made-Cumul.	600

SYSTEM VOLUMES									
ANNULUS					DRILL STRING				
Size	inch	7.0CSG	6.0OH	6.0OH	Size	inch	3.5 DP	3.5 HWDP	4.75 DC
Hole ID	inch	6.276	6.0	6.0	Pipe ID	inch	2.60	2.06	2.25
Pipe OD	inch	3.5	3.5	4.75	Capacity	bbl/m	0.0215	0.0136	0.0161
Ann. Vol	bbl/m	0.0865	0.0757	0.0428	Section Length	m	867.5	324	25.5
Section Length	m	1209		8	Section Volume	bbls	18.6	4.4	0.4
Section Vol	bbls	104.6		0.3	Flow Type				
Ann. Vel.	m/min	58		116	Pressure Drop	psi			
Crit Vel	m/min				Theoretical Lan		1272		etc
Flow Type					Carbide Lag				stks
Pressure Drop	psi				Est. Average I.D.				ins

Total Annular Volume	105	bbls	Total String Volume	22	bbls	Mud Volume in Hole	122	bbls
Surface Volume	470	bbls	Total Circulating Volume	598	bbls	Total Circulation Time	119	mins

SYSTEM HYDRAULICS	
SYSTEM DEPRESSURE POINTS	
Surface	psi
Drill String	psi
Bit Jets	psi
Annulus	psi
Hydrostatic Head	psi
Equiv. Circulating Dens.	SG
Jet Velocity	m/sec
Jet Impact Force	lbs
Bit HHP	
System HHP	
% HHP at Bit	
HHP/sq. in	
F.I.T. at Casing Shoe	SG

ACTIVITY
BHA - Bit Motor Float Sub Stab Sub Hang Off Collar IHRHO MMDC - 25.46m, 27 x 3.5" HWDP, Jars, 8 x 3.5" HWDP - 333.96M
21 st MAR : Cont. RIH, picking up drill string. Tag cement at 1173 m.
Drill cement, using water, to 1215 m. Circulate and displace hole to KCl - PHPA mud. Slug pipe and POH. Pick up directional BHA. RIH. Circ.
Rig up and run motor orientation with gyro. Time drill to 1217 m.
Mix 120 bbl premix to rebuild pit volume after displacing hole.
Slight pH increase from drilling off cement
Note - 7" shoe depth at 1209.23 m



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WELL : DUNBAR 1 DW1 LOCATION : PPL 1, VIC. DATE : 22nd MAR., 01
 OPERATOR : ORIGIN ENERGY ENGINEER : E. TRETOWAN REPORT No. : 4
 REPORT FOR : B. Beetson / E. Trethowan RIG No. : OD&E # 30 TIME : 24.00
 OPERATION : Drilling at 1395 m in rotary – inclination 28.8 deg TVD 1386 m DEPTH : 1395 m

MUD DATA		
Time	KCl - DADA	
Time	10:30	24:00
Depth	m	1270 1395
Density	PPG	8.6 8.7+
Viscosity	sec/qt	45 48
PV	cp	13 15
YP	lb/100ft ²	14 20
Gels	lb/100ft ²	2 / 3 2/4
API Filtrate	ccs	NC 8.0
Cake	32nd	- 1
Sand	% Vol	Tr Tr
Solids	wt %	1.5
Oil/Water	wt %	1 / 0.5
nH	cp	0.5
API Filtrate	ccs	0.2 / 0.4 0.2 / 0.4
Chloride	ppm	20000 20000
Total Hard	ppm	120 110
KCl	%	4.6 4.1
Rf / @ 0F		
Sulphite	mg/L	
Flowline Temp.	°C	
ALCEN		100K 100K

BIT DATA		
Size	1	
Size	6.0	
Type	STR09D	
Jets	12,12,12	
Out (m)	IN	
Metres	180	
Hours	22	
Metres/Hr	8.2	
WOB k lbs	15	
RPM	60+M-123	
Dev	28.8	
T.R.C	D.P.C	

MATERIAL USAGE	
KCl	
PAC R	5
PHPA Dry Powder	
CAUSTIC POTASH	
BARITE	
MI GEL	15

DAIY COST €	1077.05
CUMUL COST €	7766.88

PIUMP		
Time	END 07.8	
Linear	5.5	
Stroke	8.0	
Bbls/Stk	0.0559	
Eff (%)	95	
SPM	105	
Bbls/Min	5.86	
Gal/Min	246	
Dracc (psi)	2000	
SCR		

EQUIPMENT		
	Size	Hours
Shaker	2 x 110	21
Shaker	3 x 110	24
Desander		
Desilter	12 x 5"	

Rhe Made 24 Hrs	25
Bbls Made-Cumul.	625

SYSTEM VOLUMES									
ANNULUS					DRILL STRING				
Size	inch	7.0CSG	6.0OH	6.0OH	Size	inch	3.5 DP	3.5 HWDP	4.75 DC
Hole ID	inch	6.276	6.0	6.0	Pipe ID	inch	2.60	2.06	2.25
Pipe OD	inch	3.5	3.5	4.75	Capacity	bbl/m	0.0215	0.0136	0.0161
Ann. Vol	bbl/m	0.0865	0.0757	0.0428	Section Length	m	1045.5	324	25.5
Section Length	m	1209	160.5	25.5	Section Volume	bbls	22.5	4.4	0.4
Section Vol	bbls	104.6	12.1	1.1	Flow Type				
Ann. Vel.	m/min	68	77	137	Pressure Drop	psi			
Crit Vel	m/min				Theoretical Len		2111		etc
Flow Type					Carbide Lag				stks
Pressure Drop	psi	109	19	12	Est. Average I.D.				ins

Total Annular Volume	119	bbls	Total String Volume	27	bbls	Mud Volume in Hole	145	bbls
Surface Volume	400	bbls	Total Circulating Volume	545	bbls	Total Circulation Time	119	mins

SYSTEM HYDRAULICS		
SYSTEM DEPRESSURE POINTS		
Surface	psi	
Drill String	psi	
Bit Jets	psi	444
Annulus	psi	140
Hydrostatic Head	psi	2082
Equiv. Circulating Dens.	SG	9.3
Jet Velocity	m/sec	73
Jet Impact Force	lbs	265
Bit HHP		64
System HHP		287
% HHP at Bit		22.2
HHP/sq. in		2.25
F.I.T. at Casing Shoe	PPG	10.0

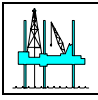
ACTIVITY

RHA - Bit Motor Float Sub Stab Sub Hang Off Collar UPHO MMDC - 25.46m, 27 x 3.5" HWDP, Jars, 8 x 3.5" HWDP - 333.96M

22nd MAR : Cont. time drilling to establish kick off. Slide and rotary drill to build inclination and correct azimuth. Drill to 1395 m.

Add premix for volume. Filtrate test had high spurt loss due to lack of solids to build filter cake. Add 1.5 ppb prehydrated gel and 0.5 ppb PAC - reduced filtrate to 8 ccs.

Mud density constant at 8.7 - 8.8 ppg. Plan to add barite to raise density to 9.1 ppg prior to top Waarre sand.



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WELL : DUNBAR 1 DW1 LOCATION : PPL 1, VIC. DATE : 23rd MAR., 01
 OPERATOR : ORIGIN ENERGY ENGINEER : E. TRETOWAN REPORT No. : 5
 REPORT FOR : B. Beetson / E. Trethowan RIG No. : OD&E # 30 TIME : 24.00
 OPERATION : Wiper trip at 1636 m -TD. Final inclination 29.5 deg TVD 1597 m(approx.) DEPTH : 1636 m

MUD DATA		
Time	KCI - DADA	
Time	06:00	23:00
Depth	m	1457 1636
Density	PPG	9.1 9.1
Viscosity	sec/qt	48 47
PV	cp	18 17
YP	lb/100ft ²	23 22
Gels	lb/100ft ²	3 / 4 2/4
API Filtrate	ccs	7.3 6.5
Cake	32nd	1 1
Sand	% Vol	Tr Tr
Solids	wt %	2.5
Oil/Water	wt %	1 / 0.5
nH	cp	0.5 0.5
Alk Filtrate	meq/l	0.1 / 0.2 0.2 / 0.1
Chloride	meq/l	10500 10000
Total Hard	meq/l	110 120
KCl	%	4.0 4.0
Rf / @ °F		
Sulphite	mg/L	
Flowline Temp.	°C	
ALCEN		100K 100K

BIT DATA		
Size	1	
Size	6.0	
Type	STR09D	
Jets	12,12,12	
Out (m)	IN	
Metres	421	
Hours	45	
Metres/Hr	9.35	
WOB k lbs	15	
RPM	60+M-123	
Dev	28.8	
T.R.C	IN	

MATERIAL USAGE	
KCI	25
PAC R	1
PHPA Dry Powder	3
CAUSTIC POTASH	1
BARITE	175
ALDECIDE G	1

DAIY COST	€	2600.12
CUMUL COST	€	10276.00

PIUMP		
Time	1	2
Inch	5.5	
Stroke	8.0	
Bbls/Stk	0.0559	
Eff (%)	95	
SPM	105	
Bbls/Min	5.86	
Gal/Min	246	
Dracc (psi)	2150	
SCR		

EQUIPMENT		
	Size	Hours
Shaker	2 x 110	24
Shaker	3 x 110	24
Desander		
Desilter	12 x 5"	

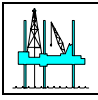
Rhle Made-24 Hrs	60
Bbls Made-Cumul.	685

SYSTEM VOLUMES									
ANNULUS					DRILL STRING				
Size	inch	7.0CSG	6.0OH	6.0OH	Size	inch	3.5 DP	3.5 HWDP	4.75 DC
Hole ID	inch	6.276	6.0	6.0	Pipe ID	inch	2.60	2.06	2.25
Pipe OD	inch	3.5	3.5	4.75	Capacity	bbl/m	0.0215	0.0136	0.0161
Ann. Vol	bbl/m	0.0865	0.0757	0.0428	Section Length	m	1286.5	324	25.5
Section Length	m	1209	401.5	25.5	Section Volume	bbls	27.6	4.4	0.4
Section Vol	bbls	104.6	30.4	1.1	Flow Type				
Ann. Vel.	m/min	68	77	137	Pressure Drop	psi			
Crit Vel	m/min				Theoretical Lag		2424		etc
Flow Type					Carbide Lag				stks
Pressure Drop	psi	109	19	12	Est. Average I.D.				ins

Total Annular Volume	124	bbls	Total String Volume	27	bbls	Mud Volume in Hole	169	bbls
Surface Volume	380	bbls	Total Circulating Volume	548	bbls	Total Circulation Time	93	mins

SYSTEM HYDRAULICS		
SYSTEM DEPRESSURE POINTS		
Surface	psi	
Drill String	psi	
Bit Jets	psi	462
Annulus	psi	183
Hydrostatic Head	psi	2479 (1597m TVD)
Equiv. Circulating Dens.	SG	9.7
Jet Velocity	m/sec	73
Jet Impact Force	lbs	265
Bit HHP		66
System HHP		309
% HHP at Bit		21.5
HHP/sq. in		2.35
F.I.T. at Casing Shoe	PPG	10.0

ACTIVITY
RHA - Bit Motor Float Sub Stab Sub Hang Off Collar UPHO MMDG - 25.46m, 27 x 3.5" HWDP, Jars, 8 x 3.5" HWDP - 333.96M
23rd MAR : Cont. drilling directionally. Mud density remained at 8.7+ ppg to 1440 m. Added Barite to raise density to 9.1 ppg prior to top Waarre C sand. Flow check through target sands - no flow. Maintained volume with premix. Added biocide to control bacteria. Drilled to 1636 m - TD at 23:00 hrs. Circulate clean. Wiper trip to shoe.
Note - Barite addition - 17 ppb



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DRILLING FLUID CONSULTANTS

WELL : DUNBAR 1 DW1 LOCATION : PPL 1, VIC. DATE : 24th MAR., 01
 OPERATOR : ORIGIN ENERGY ENGINEER : E. TRETOWAN REPORT No. : 6
 REPORT FOR : B. Beetson / E. Trethowan RIG No. : OD&E # 30 TIME : 24.00
 OPERATION : POH – lay out drill string DEPTH : 1636 m

MUD DATA	
Time	23:00
Depth	m 1636
Density	PPG 9.1
Viscosity	sec/qt 47
PV	cp 17
YP	lb/100ft ² 22
Gels	lb/100ft ² 2/4
API Filtrate	ccs 6.5
Cake	32nd 1
Sand	% Vol Tr
Solids	wt % 2.5
Oil/Water	wt % 1 / 0.5
nH	cp 0.5
Alk Filtrate	meq/l 0.2 / 0.1
Chloride	meq/l 10000
Total Hard	meq/l 120
KCl	% 4.0
Rf / @ 0F	
Sulphite	mg/L
Flowline Temp.	°C
ALCEN	100%

BIT DATA		
Size	1 6.0	1DD 6.0
Type	STR09D	STR09D
Jets	12,12,12	OPEN
Out (m)	1636	
Metres	421	
Hours	45	
Metres/Hr	9.35	
WOB k lbs	15	
RPM	60+M-123	
Dev	29.5	
T.R.C	2.F.1	

MATERIAL USAGE	
KCl	
PAC R	1
PHPA Dry Powder	
CAUSTIC POTASH	
BARITE	40
ALDECIDE G	
MI GEL	5

DAIY COST €	567.67
CUMUL COST €	10028.67

PIUMP		
Time	1 07:00	2 07:00
Linear	5.5	
Stroke	8.0	
Bbls/Stk	0.0559	
Eff (%)	95	
SPM	105	
Bbls/Min	5.86	
Gal/Min	246	
Dracc (psi)	1100	
SCR		

EQUIPMENT		
	Size	Hours
Shaker	2 x 110	24
Shaker	3 x 110	24
Desander		
Desilter	12 x 5"	

Rhic Made-24 Hrs	-
Bbls Made-Cumul.	685

SYSTEM VOLUMES									
ANNULUS					DRILL STRING				
Size	inch	7.0CSG	6.0OH	6.0OH	Size	inch	3.5 DP	3.5 HWDP	4.75 DC
Hole ID	inch	6.276	6.0	6.0	Pipe ID	inch	2.60	2.06	2.25
Pipe OD	inch	3.5	3.5	4.75	Capacity	bbl/m	0.0215	0.0136	0.0161
Ann. Vol	bbl/m	0.0865	0.0757	0.0428	Section Length	m	1311	325	-
Section Length	m	1209	426	-	Section Volume	bbls	28.2	4.4	-
Section Vol	bbls	104.6	32.2	-	Flow Type				
Ann. Vel.	m/min	68	77		Pressure Drop	psi			
Crit Vel	m/min				Theoretical Lan		2451		etc
Flow Type					Carbide Lag				stks
Pressure Drop	psi	109	19	12	Est. Average I.D.				ins

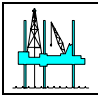
Total Annular Volume	127	bbls	Total String Volume	22	bbls	Mud Volume in Hole	170	bbls
Surface Volume	350	bbls	Total Circulating Volume	520	bbls	Total Circulation Time	89	mins

SYSTEM HYDRAULICS		
SYSTEM DEPRESSURE POINTS		
Surface	psi	
Drill String	psi	
Bit Jets	psi	
Annulus	psi	183
Hydrostatic Head	psi	2479 (1597m TVD)
Equiv. Circulating Dens.	SG	9.7
Jet Velocity	m/sec	
Jet Impact Force	lbs	
Bit HHP		
System HHP		
% HHP at Bit		
HHP/sq. in		
F.I.T. at Casing Shoe	PPG	10.0

ACTIVITY

RHA - Bit Bit Sub 27 x 2.5" HWDP - 2 x 2.5" HWDP - 224 00M

24th MAR : Slug pipe wiper trip to shoe - work through tight hole. Run in and circulate clean. Slug pipe. POH. Hole good. Rig up and run wireline logs. Loggers TD - 1334 m. Hole caliper near gauge throughout. RIH with RR Bit. Wash to bottom. Circulate clean. Pump slug. POH. Lay down drill string.



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DRILLING FLUID CONSULTANTS

WELL : DUNBAR 1 DW1 LOCATION : PPL 1, VIC. DATE : 25th MAR., 01
 OPERATOR : ORIGIN ENERGY ENGINEER : E. TRETOWAN REPORT No. : 7
 REPORT FOR : B. Beetson / E. Trethowan RIG No. : OD&E # 30 TIME : 24.00
 OPERATION : Tubing cemented. Prepare to rig release. DEPTH : 1636 m

MUD DATA		
Time	KCl - DADA	
Time	17:00	
Depth	m	1636
Density	PPG	9.1
Viscosity	sec/qt	
PV	cp	
YP	lb/100ft ²	
Gels	lb/100ft ²	
API Filtrate	ccs	
Cake	32nd	
Sand	% Vol	
Solids	wt %	
Oil/Water	wt %	
nH	ctn	10
Alk Filtrate	ppm	
Chloride	ppm	10000
Total Hard	ppm	
KCl	%	4.0
Rf / @ 0F		
Sulphite	mg/L	
Flowline Temp.	°C	
ALCEN		100K

BIT DATA		
Size	1 DP	
Size	6.0	
Type	STR09D	
Jets	OPEN	
Out (m)		
Metres		
Hours		
Metres/Hr		
WOB k lbs		
RPM		
Dev		
T.R.C		

MATERIAL USAGE	
KCl	25
PAC R	
PHPA Dry Powder	
CAUSTIC POTASH	1
BARITE	
ALDECIDE G	
MI GEL	
SAPP	6

DAIY COST	€	725.72
CUMUL COST	€	11672.00

PIUMP		
Time	1	2
Time	6:00	
Stroke	80	
Bbls/Stk	0.0559	
Eff (%)	95	
SPM		
Bbls/Min		
Gal/Min		
Dracc (psi)		
SCR		

EQUIPMENT		
	Size	Hours
Shaker	3 x 110	
Shaker	3 x 110	
Desander		
Desilter	12 x 5"	

Rhle Made 24 Hrs	
Bbls Made-Cumul.	685

SYSTEM VOLUMES									
ANNULUS					DRILL STRING				
Size	inch	7.0CSG	6.0OH	6.0OH	Size	inch	3.5 DP	3.5 HWDP	4.75 DC
Hole ID	inch	6.276	6.0	6.0	Pipe ID	inch	2.60	2.06	2.25
Pipe OD	inch	3.5	3.5	4.75	Capacity	bbl/m	0.0215	0.0136	0.0161
Ann. Vol	bbl/m	0.0865	0.0757	0.0428	Section Length	m			
Section Length	m				Section Volume	bbls			
Section Vol	bbls				Flow Type				
Ann. Vel.	m/min				Pressure Drop	psi			
Crit Vel	m/min				Theoretical Lag				ct/c
Flow Type					Carbide Lag				stks
Pressure Drop	psi				Est. Average I.D.				ins

Total Annular Volume	127	bbls	Total String Volume	22	bbls	Mud Volume in Hole	170	bbls
Surface Volume	350	bbls	Total Circulating Volume	520	bbls	Total Circulation Time		mins

SYSTEM HYDRAULICS		
SYSTEM DEPRESSURE DROPS		
Surface	psi	
Drill String	psi	
Bit Jets	psi	
Annulus	psi	
Hydrostatic Head	psi	2479 (1597m TVD)
Equiv. Circulating Dens.	SG	
Jet Velocity	m/sec	
Jet Impact Force	lbs	
Bit HHP		
System HHP		
% HHP at Bit		
HHP/sq. in		
F.I.T. at Casing Shoe	PPG	10.0

ACTIVITY
RHA :
25th MAR : Cont. lay out drill string. Rig up and run 2-7/8" tubing. Circ. tubing, add Caustic to last circulated mud to raise pH to 10. Mix and pump 25 bbl of 6 kg/bbl SAPP weighteed to 9.1 ppg with KCl. Cement tubing with Class G cement. Displace with water.