



**BAROID DIVISION
N L INDUSTRIES, INC.**

ADT REPORT

DA

374099

Report No. 15

Time 0600

Date APRIL 2, 1974

OPERATOR HEMATITE PETROLEUM				WELL NAME & NO. AROO #1						
Depth 9,825'		Contractor GLOBAL MARINE		Parish-Offshore Area BASS BASIN		Field or Block No. AROO W/C				
Operation DRILLING		Rig No. CONCEPTION		Start Date MAR 9 74		State TASMANIA				
ADT Engineer CHARLES ASKEW PE		Sec. - Twp - Rnk -								
LOGGING DATA				Drill Rate 20.7 AVG		Fl. Hr. Mon. - P.				
Trip Chloride 4500 ppm		"d" Exponent 1.59-1.98		Background 5-10 UNITS						
Lag Down D. P. 813 Strokes		Shale Density 2.52 gm/cc		Connection NONE						
Lag Off Bottom 2,610 Strokes		Shale Factor 1-2 ml./gm		Trip 45 UNITS						
BIT DATA		Type	Size	Jets	Hours	Feet Drilled	Depth Out	Avg. Ft. Hr.	Condition T-B-G	
Bit No. 11		XDV	8 1/2"	2 1/2" x 1 1/2"	6.7	139	---	20.7	---	
Last Bit No. 10		XDV	12 1/4"	3-1 1/2"	8.2	116	9686'	13.2	2-2-I	
DRILLING DATA 2.78' 17.625" ID RISER				79.20' 6.5" OD BUMPER SUBS: 2.75" ID						
DRILL PIPE				DRILL COLLARS				Weight On Bit 40K lbs.		
Weight (lbs./ft.) 50.0 HW 19.5		Capacity 0.0087 bbl./ft.		Weight (lbs./ft.) 92		Capacity 0.0073 bbl./ft.		Rotary Speed 80 RPM.		
O. D. 5.0 HW 5.0 in.		Disp. 0.0156 bbl./ft.		O. D. 6.5 in.		Disp. 0.0337 bbl./ft.		Hook Load 220K lbs.		
I. D. 3.0 HW 3.0 in.		Length 8,909 ft.		I. D. 2.75 in.		Length 522.69 ft.		BHA-611.19		
PUMPS		Size	Bbls. Cycle	Cycles Min	Bbls. Min.	Gal./Min.	Pressure	Reduced Rate		
No. 1		6 3/4 x 16	0.203	62	12.58	529	2,500	psi @ cpm		
No. 2		6 3/4 x 16	0.203					psi @ cpm		
CASING		SURFACE	INTERMEDIATE	LINER	ANNULAR VOLUMES					
Size I.D. - O.D.		12.915" - 13.375"	8.691" - 9.625"		Between Drill Pipe & Casing - 0.0489 bbls./ft.					
Weight (lbs./ft.)		68.0	47.0		Between Drill Pipe & Open Hole - 0.0459 bbls./ft.					
Depth 2,979' KB		2,701'	9,635' KB - 9,357'		Between Drill Pipe & Liner - bbls./ft.					
Volume (bbls./ft.)		0.1497	0.0732		Between Drill Collars & Open Hole - 0.0292 bbls./ft.					
MUD DATA		Type: LIGNOSULFONATE				Flowline Temp. 140 °F		COST		
Time 0600		Vis. 44 SEC/90		Oil-Water-Solids 0-91.9		Daily 596.40		Total 22,189.55		
Weight - In/Out 9.819.8		PH 12.5		API Filtrate Cake 9.0 1 1/2"		1		Per bbl./day		
PV/YP 12.17		SAND TR. %		HT-HP Filtrate @ 250 °F 14.6		2.95		40.53		
Gels 0/10 Min. 018		1		Avg. Sp. Gr. Solids		4.500		1120 BBL AVG.		
E. C. D. 10.2				Chloride Ion. Conc.						
HYDRAULICS		ANNULAR VELOCITY: 17.625" ID RISER - 45 FT/MIN								
PRESSURE DROP		Jet Velocity 415 ft. sec		Est. Fracture Pressure @ Casing Seat						
Surface Equip. - 100 psi		Annular Velocity D.P. 2.56 D.C. 432		9435' - 7515 psi - +15.0 ppg.						
Drill String 720 psi		Hydraulic Horsepower -		Est. Formation Pore Pressure						
Bit Jets 1,484 psi		Surge Pressure @ Casing Seat @ 10 Sec Std		7825' - 4598 psi - 9.0 ppg.						
Annulus 196 psi		5614 psi - 11.2 ppg		Critical Velocity D.P. 190 D.C. 211						
RECOMMENDATIONS										
Mud weight 9.8-10.0 ppg.		Pipe Casing Speed 15 sec. min. std.		Rotary Speed --- RPM		W.O.B. --- lbs.				
ACTIVITY & REMARKS										
MARCH 26 - RAN ISF-SONIC, FDC-CNL, AND DIPMETER. MADE TRIP IN HOLE TO CONDITION MUD AND HOLE. TRIP GAS - 50 UNITS										
MARCH 27 - POH AND RAN VELOCITY SURVEY, MICRO-LATERAL LOG, AND TOOK SIDE WALL CORES - 2 GUNS. GIH TO CONDITION MUD AND HOLE.										
MARCH 28 - CONDITION MUD AND HOLE. TRIP GAS - 55 UNITS. POH AND RUN FIT'S FIT #1 - 9530' - SHUTIN PRESSURE - 4444 PSI - 8.96% GAL EQUIV. INITIAL HYDROSTATIC - 4917 PSI - 9.9% GAL EQUIV. FINAL HYDROSTATIC - 4886 PSI - 9.8% GAL EQUIV. FIT #2 - 9133' - SHUTIN PRESSURE - 3966 PSI - 8.35% GAL EQUIV. INITIAL HYDROSTATIC - 4720 PSI - 9.9% GAL EQUIV. FINAL HYDROSTATIC - 4702 PSI - 9.9% GAL EQUIV. GIH TO CONDITION MUD & HOLE - TRIP GAS - 60 UNITS.										
MARCH 29 - CIRCULATE AND CONDITION MUD AND HOLE. POH AND RUN 9 1/8" CASING.										
MARCH 30 - RUN AND CEMENT 9 1/8" CASING AT 9635' KB, TEST BOP'S - NEG. PULL FOR REPAIRS.										
MARCH 31 - REPAIR SHEAR RAMS. RUN STACK - HUNG UP ON W/B. PULL STACK & RETRIEVE W/B.										
APRIL 1 - RUN STACK & RISER, TEST C&K LINES AND CASING. PUN W/B, GIH & DRILL OUT CMT. TEST FORMATION TO 15.00 PPG EQUIV. - O.K. DRILLING AHEAD. MIDNIGHT DEPTH - 9713'										
APRIL 2 - DRILLING AHEAD WITH BIT #11.										