ORIGIN ENERGY RESOURCES LTD.

BIT RECORD

Well : **Dunbar 1 DW 1** Basin / Area : **OTWAY BASIN** Permit : **PPL1** Field : **Re entry**

Location : Latitude : **38° 32' 53.79" S** G.L. **77.20** metres Spud Date: **19-Mar-01**

Longitude : **142° 54' 23.11" N** Well Site Supervisor: **Barry Beetson** K.B. **81.40** metres T.D. Date: **23-Mar-01**

Contractor : **OD&E** Rig #: **30** Proposed TD: **1622** metres Rig Released Date: **26-Mar-01**

PUMPS

No.	Type	Stroke (in)	Liner (in)	Output (gps)
1	GD PZ-8 Triplex	8.00	5.50	2.34
2	GD PZ-8 Triplex	8.00	5.50	2.34

MUD TYPE

Section	Dev	Interval	Type	Wt
Surface	28.3;323.7	0m to 1636m	KCL/PHPA	9.10
Main	28.3;323.7	1636m to 1636m	KCL/PHPA	9.10

Bit No.	Run No.	Size (in)	Make	Type	IADC Code	Serial No.	Nozzles			Motor Y / N	Shock-Sub Serial No.	Depth Out	Metres	Hours	ROP (m/hr)	Accum Hours	Bit Grading								WOB		RPM		Press (psi)	Pump (gpm)
																	I	O	D	L	B	G	O	R	Mn	Mx	Mn	Mx		
0												0		0		0														
1	1	6.0	HTC	STR-09D	437	BO9ZW	12	12	12	n		1209	1209	0	0.0	0	3	4	WT	A	E	1	ER	TD	2	15	125	185	2150	250
2	1	6.0	HTC	STR-09D	437	BO9ZW	12	12	12	n		1636	427	45	9.5	45	3	4	WT	A	E	1	ER	TD	2	15	125	185	2150	250

Comments :

IADC DULL BIT GRADING

CUTTING STRUCTURE				BEARINGS / SEALS	GAGE	OTHER DULL CHAR.	REASON PULLED
INNER	OUTER	DULL CHAR.	LOCATION				
①	②	③	④	⑤	⑥	⑦	⑧

① INNER CUTTING STRUCTURE (All inner rows)

② OUTER CUTTING STRUCTURE (Gage row only)

In columns 1 and 2 a linear scale from 0 to 8 is used to describe the condition of the cutting structure according to the following:

STEEL TOOTH BITS	INSERT BITS	FIXED CUTTER BITS
A measure of lost tooth height due to abrasion and / or damage	A measure of total cutting structure reduction due to lost, worn and / or broken inserts	A measure of lost, worn and / or broken cutting structure
0 - NO LOSS OF TOOTH HEIGHT	**0 - NO LOST, WORN AND/OR BROKEN INSERTS**	**0 - NO LOST, WORN AND/OR BROKEN CUTTING STRUCTURE**
8 - TOTAL LOSS OF TOOTH HEIGHT	**8 - ALL INSERTS LOST, WORN AND/OR BROKEN**	**8 - ALL OF CUTTING STRUCTURE LOST, WORN AND/OR BROKEN**

③ DULL CHARACTERISTICS (Use only cutting structure related codes.)

BC *	BROKEN CONE	**FC**	FLAT CRESTED WEAR	**RG**	ROUNDED GAGE
BF	BOND FAILURE	**HC**	HEAT CHECKING	**RO**	RING OUT
BT	BROKEN TEETH / CUTTERS	**JD**	JUNK DAMAGE	**SD**	SHIRT-TAIL DAMAGE
BU	BALLED UP BIT	**LC ***	LOST CONE	**SS**	SELF-SHARPENING WEAR
CC *	CRACKED CONE	**LN**	LOST NOZZLE	**TR**	TRACKING
CD *	CONE DRAGGED	**LT**	LOST TEETH / CUTTERS	**WO**	WASHED OUT BIT
CI	CONE INTERFERENCE	**OC**	OFF-CENTRE WEAR	**WT**	WORN TEETH / CUTTERS
CR	CORED	**PB**	PINCHED BIT	**NO**	NO DULL CHARACTERISTICS
CT	CHIPPED TEETH / CUTTERS	**PN**	PLUGGED NOZZLE / FLOW PASSAGE		
ER	EROSION			* Show Cone # or #'s under location ④	

④ LOCATION

ROLLER CONE		
N	NOSE ROW	**CONE #**
M	MIDDLE ROW	1
G	GAGE ROW	2
A	ALL ROWS	3

FIXED CUTTER			
C	CONE	S	SHOULDER
N	NOSE	G	GAGE
T	TAPER	A	ALL AREAS

⑤ BEARINGS /SEALS

NON-SEALED BEARINGS	
A linear scale estimating bearing life used.	
0	No life used
8	All life used (No bearing life left.)

SEALED BEARINGS			
E	SEALS EFFECTIVE	**X**	FIXED CUTTER (BEARINGLESS)
F	SEALS FAILED		
N	NOT ABLE TO GRADE		

⑥ GAGE (Measure in sixteenths of an inch)

0	1	2	4
- IN GAGE	1/16" OUT OF GAGE	1/8" OUT OF GAGE	1/4" OUT OF GAGE

⑦ OTHER DULL CHARACTERISTIC (Refer to column ③ codes)

⑧ REASON PULLED OR RUN TERMINATED

BHA	CHANGE BOTTOM HOLE ASSEMBLY	**LIH**	LEFT IN HOLE	**HR**	HOURS ON BIT
		RIG	RIG REPAIR	**PP**	PUMP PRESSURE
DMF	DOWNHOLE MOTOR FAILURE	**CM**	CONDITION MUD	**PR**	PENETRATION RATE
DTF	DOWNHOLE TOOL FAILURE	**CP**	CORE POINT	**TD**	TOTAL DEPTH / CASING DEPTH
DSF	DRILL STRING FAILURE	**DP**	DRILL PLUG	**TQ**	TORQUE
DST	DRILL STEM TEST	**FM**	FORMATION CHANGE	**TW**	TWIST OFF
LOG	RUN LOGS	**HP**	HOLE PROBLEMS	**WC**	WEATHER CONDITIONS