

**PASON SYSTEMS USA CORP.**  
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**OPERATOR: NW NATURAL**  
**WELL: OM 22-26-65 RE-DRILL**  
**LOCATION: NW 1/4 SEC 26, T6N, R5W**  
**COUNTY: COLUMBIA**  
**STATE: OREGON**  
**SPOT: 1852.62'FSL, 2433.36'FEL**  
**ELEVATION: KB 631', GL 621'**  
**FIELD: REICHHOLD POOL DEVELOPMENT-**

**SPUD DATE: RE ENTER MAY 18, 2000**  
**TD DATE: 5/21/00**  
**DATES LOGGED: 5/18/00-5/21/00**  
**DEPTHS LOGGED: 491'(KOP) - 2101'**  
**LOGGERS: ED PERRY, SCOTT WAGGONER**  
**DRILLING FLUID: LNSD**  
**DRILLING RIG: TAYLOR RG 87**

**LOG TYPE: MUD LOG**

**SCALE: 1:240 (5.0 INCH/100 FT)**

**REMARKS:**  
**PUMPS 1 & 2: 5 1/2" X 14", DUPLEX**  
**ALL DEPTHS BASED ON KB.**

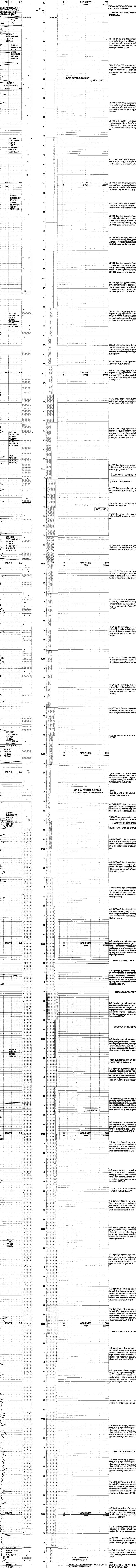
LITHOLOGIES		MODIFIERS	
SANDSTONE	SILTSTONE	ALGAE LAMINATED	ALGAE NON-DESCRIBED
LMESTONE	DOLOMITE	AMULET GRAN	BELMITE
CONGLOMERATE	TUFF	BRIOZOA	CALCARIOUS
CHERT	WELLED TUFF	CHERT	CHERT, TRIPOLITE
LMIE SANDSTONE	LMIE SANDSTONE	DOLOMITE STRINGERS	DOLOMITE
CALCAREOUS DOLOMITE	ARGILLACEOUS DOLOMITE	FERRUGINOUS STRINGERS	FERRUGINOUS
DOLOMITE QUARTZSTONE	DOLOMITE FAULTSTONE	GLAUCONITE	GLAUCONITE
GRAY CLAYSTONE	CLAYSTONE	LMESTONE	LMESTONE
DULL SHALE	COALY SHALE	OLITE	OLITE
MSL	MSL	PHOLITE	PHOLITE
LM. S. S. S.	LM. S. S. S.	SANDY	SANDY
SHALE	SHALE	SUCKERHOLES	SUCKERHOLES

POROSITY/SORTING/ROUNDNESS SYMBOLS	
X INTERSTITIAL	V VUGGY
O MOLDIC	6 EARTH
A ANGULAR	M SUBANGULAR
W WELL	B BURNING
	P PORED

ENGINEERING SYMBOLS	
▲ BIT CHANGE	▲ LOST CIRCULATION
▷ WIRELINE TEST	◁ WIRELINE TEST
○ SPOTTED STAINING	◊ LEAD OIL
⊙ CONNECTION GAS	⊙ TRIP GAS
⊙ NORMAL FAULT	⊙ REVERSE FAULT
▲ CASING	▲ CASING
▲ GAS TO SURFACE	▲ OIL TO SURFACE
○ QUENCHABLE	● SHOW
⊙ MENSUR. DEPTH	⊙ MENDIGHT SDRH
⊙ RETURNED STRAIN	⊙
▲ SEWAL CORE	▲ SEWAL CORE
▲ WATER TO SURFACE	▲ WATER TO SURFACE
▲ GAS SHOW	▲ GAS SHOW
▲ OIL AND GAS SHOW	▲ OIL AND GAS SHOW
▲ BIENING	▲ BIENING
▲ OFF BOTTOM	▲ OFF BOTTOM

BAR SYMBOLS	
□ CORE RECOVERED	□ CORE LOST
□ DIST. INTERVAL	□ ROTATING
□ SLIDING	□ CENTER

ABBREVIATIONS			
CB - CORE BIT	DST - DRILL STEM TEST	NR - NO RETURNS	RPM - REVOLUTIONS PER MIN
CC - CONNECTION GAS	DTS - DOWN TIME START	NR - NO SAMPLE	SLM - SEWAL MEASURE
CO - CORRUPT OUT	LAT - LOGGED AFTER TRIP	PP - PUMP PRESSURE	
SPM - STROKE PER MIN	TRP - TRIP CAS	WOB - WEIGHT ON BIT	



SCANNED

LOG TOP OF COWLITZ 1065'

NOTE LITH CHANGE

LOG TOP OF CAV SAND 1376'

POOR SAMPLE QUALITY

POOR SAMPLE QUALITY

POOR SAMPLE QUALITY

POOR SAMPLE QUALITY

LOG TOP OF HAMLET 2034'

LOG TOP OF HAMLET 2034'