Permit # 80 082

MIDWEST SURVEYS

LOGGING & PERFORATING • CONSULTING SERVICES

P.O. Box 1714 Phone (307) 235-5168
Casper, Wyoming 82602 P.O. Box 1436
Rock Springs, Wyoming 82901

F.INC.NO.

COMPANY Protaal Resources, Inc.

WELL No. 33-17

FIELD GROVE LEASE

COUNTY BAY COUNTY, MO.

LOCATION 2 3/8" FNL 948' FEL

SEC 17 TOWN 1S RGE 20W

PERMANENT DATUM G.L. ELEV. 0 ft.

LOG MEASURED FROM G.L. ft. ABOVE PERM. DATUM

DRILLING MEASURED FROM G.L.

DATE 1-5-81

RUN NO. ONE

TYPE LOG GAMMA RAY

DEPTH-DRILLER 443.2

DEPTH-LOGGER 442.2

BOTTOM LOGGED INTERVAL 442.2

TOP LOG INTERVAL SURFACE

TYPE FLUID IN HOLE WATER

SALINITY PPM Cl.

DENSITY

LEVEL FULL

MAX. REC. TEMP. 90°F

CIRCULATION STOPPED

RECORDED BY PRATT

WITNESSED BY NELSON

DATE 1-5-81

RUN NO. ONE

TYPE LOG NEUTRON

DEPTH-DRILLER 443.2

DEPTH-LOGGER 442.2

BOTTOM LOGGED INTERVAL 442.2

TOP LOG INTERVAL SURFACE

TYPE FLUID IN HOLE WATER

SALINITY PPM Cl.

DENSITY

LEVEL FULL

MAX. REC. TEMP. 90°F

CIRCULATION STOPPED

RECORDED BY PRATT

WITNESSED BY NELSON

BIT RECORD				CASING RECORD			
RUN NO.	BIT	FROM	TO	SIZE	WGT	FROM	TO
				2 3/8"		0.0	3.0

TOOL HERE

THIS HEADING AND LOG CONFORMS TO API RP 33

RECEIVED
AUG 12 1982
MO. OIL & GAS COUNCIL

OTHER SERVICES
CCL

REF. K.B. ft.
D.F. ft.
G.L. ft.

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	1 NW	RUN NO.	1 NW
TOOL MODEL NO.	102	LOG TYPE	NEU/NEU
DIAMETER	1 11/16"	TOOL MODEL NO.	102
DETECTOR MODEL NO.	E-1017	DIAMETER	1 11/16"
TYPE	SCINT.	DETECTOR MODEL NO.	E-1031
LENGTH	1" x 4"	TYPE	HE-3
DISTANCE TO N. SOURCE	7.0	LENGTH	1" x 6"
		SOURCE MODEL NO.	71-1
		SERIAL NO.	71-1-355B
		SPACING	19"
		TYPE	AM241BE
		STRENGTH	1 CI

GENERAL

HOIST TRUCK NO.	NA
INSTRUMENT TRUCK NO.	102
TOOL SERIAL NO.	NS-0003

LOGGING DATA

GENERAL					GAMMA RAY			NEUTRON		
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	100.0	442.2	20	4.0	800/100	2L	10	3.0	300/100	5L	20

REFERENCE LITERATURE 2 3/8" - CEMENTED

REMARKS D.T. - MOGAMI DRILLING CO.

GAMMA RAY DEPTH NEUTRON

CASING COLLARS

T.D. 443.2
R.D. 435.2

T.D. 443.2
R.D. 442.2

NO. 33-17
PROTAAL RESOURCES, INC.
BAY CO.
JAN. 6, 1981