ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL SITE GEOLOGY — MUD LOGGING

2450 INDUSTRIAL BLVD. PHONE (303) 243-3044 GRAND JUNCTION, CO 81505

RECEIVED JAN 14 1991 OIL CON. DIV. DIST. 3

COMPANY PHILLIPS PETROLEUM CO
WELL SAN JUAN 31-6 #218
FIELD BASIN FRUITLAND
ELEVATION GR 6514' DF 6525'

LOCATION 1999' FNL & 1280' FEL SEC 34 T31N R6W
COUNTY RIO ARRIBA
STATE NEW MEXICO
DRILLING FLUID WATER

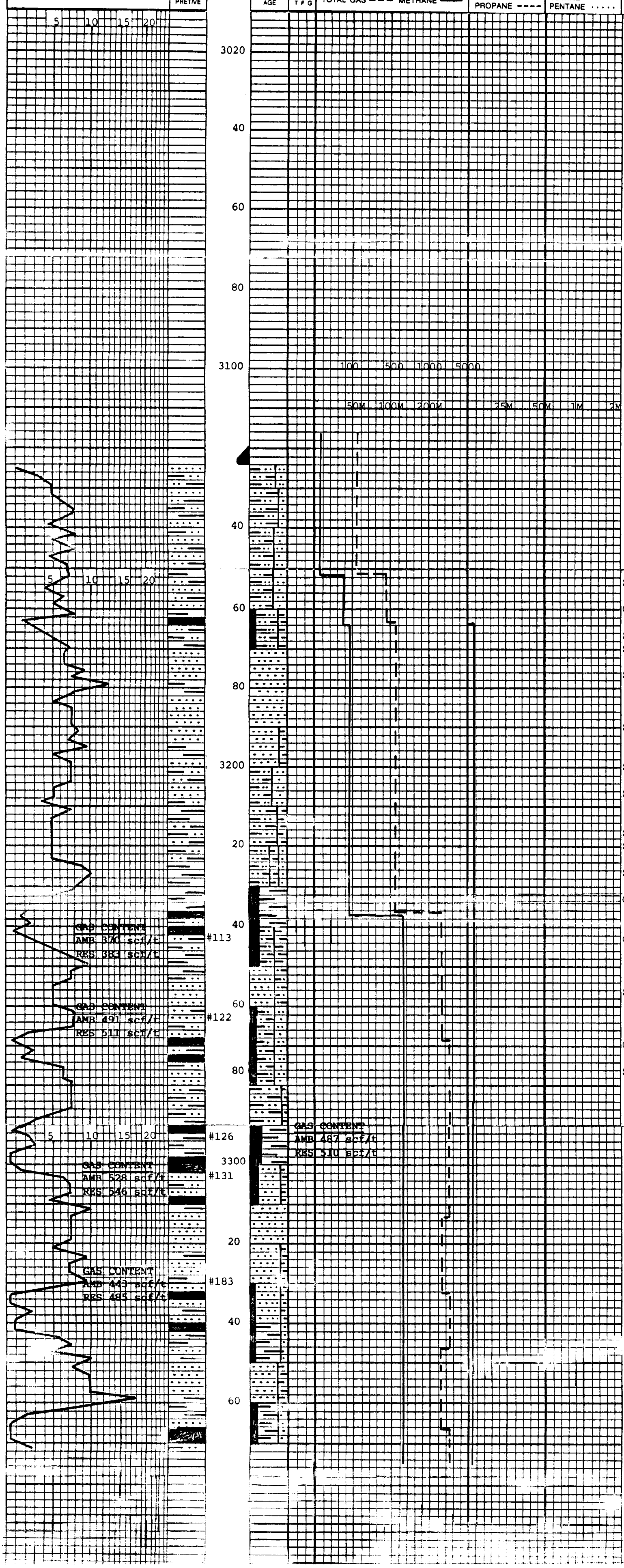
	FROM	TO
DEPTH LOGGED	3124'	3372'
DATE LOGGED	11/10/90	11/11/90

ENGINEERS JACK PALUGA

SHALE, DOLOMITE, COAL, SANDSTONE, CHERT, ANHY-GYP, LIMESTONE, SALT, SILTSTONE

DTG - DOWN TIME GAS
DST - DRILL STEM TEST
SLM - STEEL LINE MEAS.
LAT - LOGGED AFTER TRIP
WOB - WEIGHT ON BIT
RPM - REVOLUTIONS/MIN.
SPM - STROKES/MIN.
PP - PUMP PRESSURE
O— DEVIATION

TG - TRIP GAS
CG - CONNECTION GAS
NB - NEW BIT
NR - NO RETURNS
CO - CIRCULATE OUT
NS - NO SAMPLE
RR - RERUN
CB - CORE BIT
O SHOW REPORT



REMARKS

WT VIS WL CKE PH

RMEC FIELD UNIT #12 ON LOCATION 11/10/90 @ 0700

7" CASING SET @ 3124'

COAL BEDS	NET COAL
3162-64	
3236-38	24'
3240-42	
3268-70	
3272-74	
3290-92	
3298-3302	
3332-34	
3340-42	
3366-70	

DESORPTION CANISTER
#113 3235-45
#122 3268-76
#126 3290-96
#131 3296-3302
#183 3332-42

SS ltgy dns slty mtx vf grn p srtd p cmt sbang grdg to sltst
SLTST m-dkgy sdy carb hd plty
SS m-dkbrn dns slty mtx vf grn p srtd m cmt sbang

SLTST dkgy sdy sl carb plty

COAL blk-dkgy arg dul hd plty-sbblky tr bldg
SH dkgy slty carb hd plty
SLTST m-dkgy sl sdy sl carb plty
SS ltgy dns slty mtx vf grn m srdt w cmt ip sbang grdg to sltst ip

SS ltgy-wh-clr frst trans sl slty mtx vf-f grn m srtd w cmt sbrnd
SLTST dkgy-dkbrn sl sdy carb sl sooty hd plty
SS dkgy-dkbrn dns slty-sl carb mtx f grn p srtd m cmt sbang grdg to sltst
SH dkgy slty carb hd plty
SLTST dkgy sl sdy ip sl carb sl sooty grdg to ss
SH dkgy-dkbrn slty carb hd plty
COAL blk-dkbrn dul arg hd sbblky tr bldg

COAL dkgy-blk-dkbrn dul arg hd sbblky tr bldg interbd with sh dkgy-blk carb slty sbblky
SS ltgy-ltbrn slty-slcarb-sl sooty mtx dns f-vf grn p srtd m cmt sbang-sbrnd grdg to sltst ip
COAL blk-dkgy dul arg sl bnd tr bldg sbblky
SS dkbrn dns slty-sl carb mtx f grn p srtd m cmt sbang grdg to sltst ip

COAL blk-dkgy-dkbrn dul arg bnd tr conch frac vp-tr bldg tr clt interbd with sh dkgy
COAL blk-dkgy dul-sl bri sl arg sbblky tr bldg

SS ltgy-ltbrn dns slty-sl carb mtx f-vf grn p srtd m-w cmt sbrnd
SS ltgy-ltbrn dns slty mtx f grn m srtd m cmt sbrnd-sbang
COAL blk dul arg hd sbblky tr bldg interbd with ss ltbrn slty-carb-sl sooty mtx vf-f grn p srtd m cmt grdg to sltst ip
SS lt-mgy dns slty mtx f-m grn p srtd m-w cmt sbang
SH dkgy slty hd plty-sbblky
COAL blk-dkgy dul arg bnd tr-vp bldg tr clt interbd with ss dkgy slty-sl carb-sl sooty mtx dns f grn p srtd m cmt sbang grdg to sltst

UNIT RELEASED 11/11/90 @ 0700