ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL SITE GEOLOGY — MUD LOGGING

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

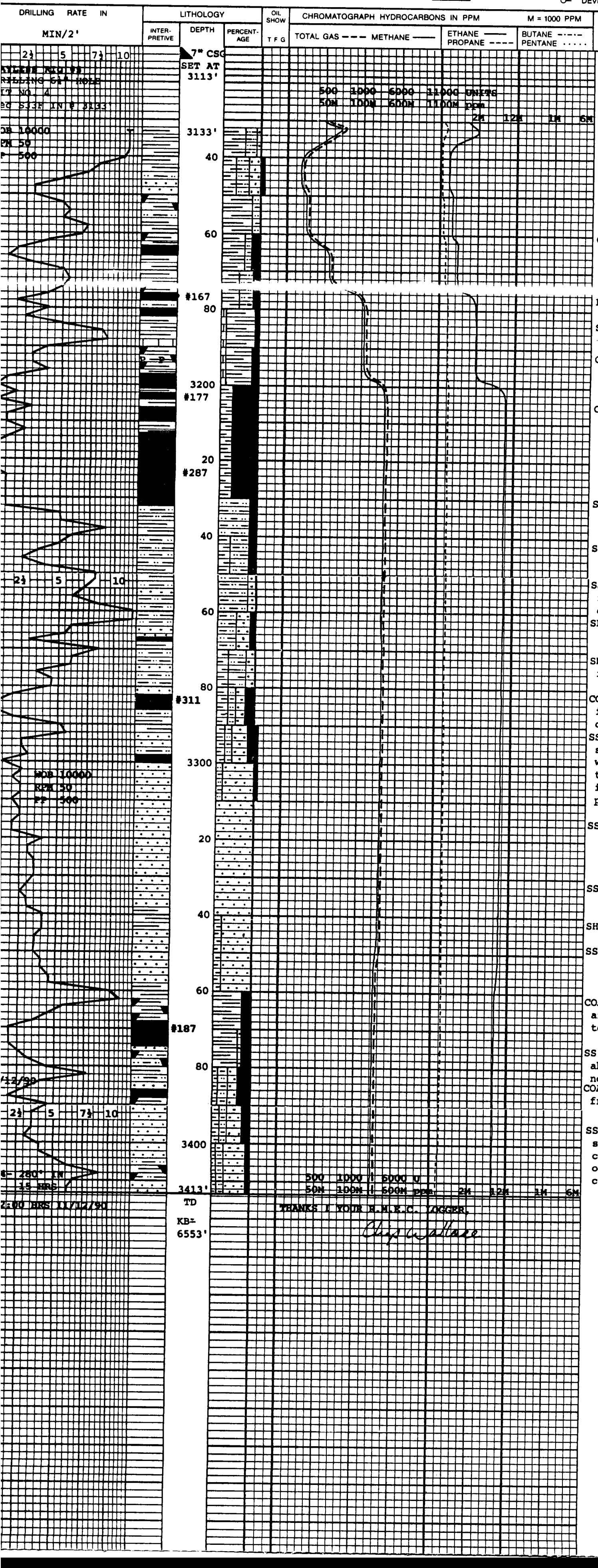
RECEIVED NOV 30 1990 OIL CON. DIV. DIST. 3

COMPANY NORTHWEST PIPELINE CORP.	LOCATION ~~NE-SW~~ Sec 18 T31N R7W		FROM / TO
WELL SAN JUAN 32-7 #227	COUNTY SAN JUAN	DEPTH LOGGED	3133' / 3413'
FIELD BASIN FRUITLAND COAL	STATE NEW MEXICO	DATE LOGGED	11/11/90 / 11/12/90
ELEVATION KB-6553', GL-6540'	DRILLING FLUID PRODUCTION WATER	ENGINEERS	CHIP WALLACE

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

R.M.E.C. UNIT #37 ON LOCA &
OPERATIONAL 21:00HRS,11/9/9

ABNT CMT
SS wh-ltgy-ltbrn,f-vfgr,msr
calc cmt,cln,ang
SLTST lt-dkgybrn,sdy-shy,oc
dk carb incl,calc ip,yel
flor,tr yel mky cut
SH gy-lt-dkgybrn,slty ip,oc
dk,org/carb-coaly lam

COAL blk-dkgybrn,dul rthy a
-occ cln vit/tr conch frac
p-n clt,fr vis dsrp,shy la
grdg to carb SH ip

LS wh-crm-ltbrn,chky-occ cl
calc xl-occ suc,sdy
SH dkgybrn,carb/abnt blk cr
-coal lam& prnts

COAL blk-dkbrn,rthy/arg-shy
strk grdg to carb SH AA,py

COAL blk-dkgy,rthy dul-occ
bri vit/arg strk,n-occ fr
dir clt,fr vis dsrp

SLTST gybrn/dk carb lam &
prnts,lt sdy incl,sl-m arg,
n calc,frm

SH dkgy,org/carb strk,slty
ip grdg to SLTST AA

SS clr-tn-ltgy,vf-slty-occ
fgr,msrt,ang-sbang,p-wcon/
calc,occ abnt wh calc mtx
SLTST sl incr cln,qtzc,calc

SH lt-mgy-gybrn,slty ip,wxy
ip,frm.n calc

COAL blk-dkgybrn/lt sdy incl
ip,cln-arg,bri-dul,rthy-vit
occ conch frac,n-occ fr clt
SS clr-tn-brn/occ gn glau,
s&p,m-occ vfgr,msrt,ang,m-
wcon/sil-occ calc,occ abnt
tn-ltbrn slty-cly mtx,fr
intgr ø ip,bri yel flor,vtr
pl yel ring cut

SS sl incr clr-wh,f-vfgr AA

SS AA/occ carb incl,rr slty

SH gybrn,slty ip

SS AA

COAL dkbrn-occ blk,rthy dul
arg-slty-sdy,occ mica grdg
to slty carb sh

SS brn-wh,mot/abnt lith clst,
abnt slty mtx ip,dul flor,
no cut
COAL sl incr cln bri/conch
frac,rr fr clt,tr vis dsrp

SS m-ltgybrn-occ wh,vfgr-
slty,m-wsrt,wcon/sil-occ
calc,sbang-ang,lith-occ qtz,
occ abnt slty mtx,fri,occ
carb incl NSFOC