ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL SITE GEOLOGY — MUD LOGGING

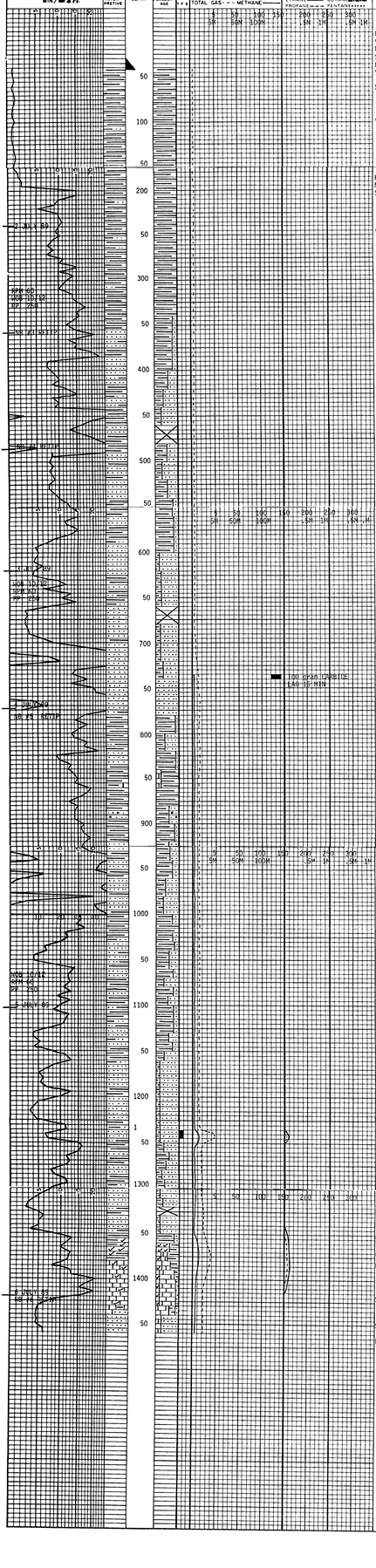
2450 INDUSTRIAL BLVD. PHONE 243-3044 GRAND JUNCTION COLORADO 81501

COMPANY	CAMO OIL CO.	LOCATION	SEC 4 T1S R2E	DEPTH LOGGED	FROM 42' TO 1461'
WELL	QUINLAN #2	COUNTY	RIO ARRIBA	DATE LOGGED	1 JULY 89 6JULY 89
FIELD	W/C	STATE	NEW MEXICO		
ELEVATION	GR 7884 KB 7888	DRILLING FLUID	AIR/ GEL MUD	ENGINEERS	L.A. PRENDERGAST

SHALE · SANDSTONE · LIMESTONE · DOLOMITE · CHERT · SALT · COAL · ANHY.GYP · SILTSTONE · OIL SHOW · TRACE · FAIR · GOOD · CORE NO. · DST NO. · DEVIATION

NB - NEW BIT
NR - NO RETURNS
CO - CIRCULATE OUT
NS - NO SAMPLE
TG - TRIP GAS

DRILLING RATE IN MIN/M ft. · LITHOLOGY · INTER-PRETIVE · DEPTH · PERCENTAGE · OIL SHOW · CHROMATOGRAPH HYDROCARBONS IN PPM · TOTAL GAS - - METHANE · ETHANE — BUTANE — PROPANE — PENTANE · REMARKS WT VIS WL PH CKS



RMEC UNIT 25 ON LOCATION 9:00 a.m. 1JULY 1989. RIGGED AND LOGGING 1-MAN SERVICE 11:30 a.m. DRILLING 7 7/8" HOLE 9 5/8" CSG @ 42'

SH dk gry-blk frm blky slty calc s/w thin SLTST strgrs

VPS DRLG W/AIR

HOLE BECAME WET AT 183' MUD UP TO DRILL WITH MUD SH m-dk gry blk firm blky slty calc w/thin interlms SLTST, vfg sbrdd SS

VPS PRED CVGS

VPS PRED CVGS DRLG MUD BECAME VERY VISCOUS 100+

SS wh clr frstd vf-mg s/cg m sort sbang-sbrdd p-m cmt sli calc-sil s/w clay mtx thin Sh interlams n-p ø

SS aa abn SH cvgs tr org CHT incl

SS aa NSOFC

SS aa bec pred v w cmt v sli-n calc hd tt n v ø

common yel,gold min fluo

SS aa SH dk gry sblky sli calc

VPS PRED CVGS
V ABN min fluo
SS clr wh vf-fg sbrdd p-m cmt sli calc NSOFC

TOH bite hole circulate to condition mud
SS wh clr frstd vf-cg p sort subang-sbrdd p-m cmt sli calc-sil comm clay mtx v abn org cht comm PYR NSOFC

8.7 36 9.6 8.5 2/32
C1 500

SS aa bec v p sort cg-cong

100 gram CARBIDE
LAG 15 MIN

SS cong aa vp sort NSOFC

SH red-brn brick red slty calc s/grdng to SLTST
SS buff wh vf-fg subang vw cmt sli calc-sil w/clay mtx s/red-brn slty vw cmt hd tt nvp NSOFC

SH red-brn lav pale grn frm blky-sptry slty tp sbwxy tp n-v sli calc
LS lt tan lithic v chty
SS vcg-cong ang-sbrdd p-w cmt sli-n calc
SH pale grn gry-grn wxy sbblky slty tp bentic tp

SH pale gry-grn sbblky waxy v sli calc s/v slty

8.9 40 9.0 8.5 1/32
C1 500

SS wh lt gry lt tan vf-fg w sort w cmt sli calc w/cly mtx NSOFC comm PYR incl

SS wh lt tan vf-mg m sort subrdd-subang p-m cmt calc s/w cly mtx v p tr yel fluo v scant tr yel cut 1040-50' possible slight fluid loss to formation 1050' NO GAS INCREASE

SH aa SS aa w/vcg-debb incl
SH bec red-brn brick red firm sbblky slty w/s grdng to SLTST

SS lt tan buff vf-mg p sort ang-subrdd vw cmt hd tt v sli calc-sil w/abn cht incl
SS wh clr frstd lt gry vf-mg p-m sort vw cmt sli calc-sil w/cly mtx tr-comm cht incl NSOFC

SS aa w/incr cg cht incl

SS clr frstd f-mg w/s vfg m sort rdd-subrdd p-m cmt calc s/w cly mtx tr yel fluo tr yel cut
SHOW SHEET 1

SS wh buff lt tan vf-fg w/s mg m-vw cmt sil-sli calc s/w org blk incl tr PYR comm cly mtx

ANHY wh soft gummy

8.9 40 9.0 8.5 1/32
C1 500

LS brn dk brn dk gry-brn crypticln-micxln hd dnse w/clr Anhy incl tr Calc xl incl

SH dk gry gry firm slty sli calc-sil splty

SS clr lt gry vf-fg subrdd p-m cmt calc s/w dk min incl
DRILLER TD 1461 CO FOR LOGS