Weatherford®

Surface Logging Systems

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WELL: PENNY PINCHER FED. COM #1
FIELD:
COUNTY: EDDY STATE: NEW MEXICO
LOCATION: 660' FNL & 990' FWL, SEC. 21, T19S,R31E, NMPM SURVEY

Spud Date: 3/21/10
Started: 4/2/10 At: 4195
Ended: At:
Api No.:
G.L.: 3480
K.B.: 3497
Geologist: MIKE MESTAS

Logging Personnel:
JAMESON WEST
ANTHONY WOMACK
Unit No.: 83
Rig: SILVER OAK # 11
Filename: cimarex-pennypincher-1.mlw

OCC Case No. 14418
CIMAREX ENERGY
Exhibit #13

Abbreviations:

NB...New Bit
CO...Circ Out
NR...No Returns
TG...Trip Gas
WOB...Wt on Bit
RPM...Rev/Min
SG...Survey Gas
DST...Drill Stem Test
DS...Directional Survey
CG...Connection gas
LAT...Logged After Trip
PP...Pump Pressure
SPM...Strokes/Min
DTG...Down Time Gas

Mud Data

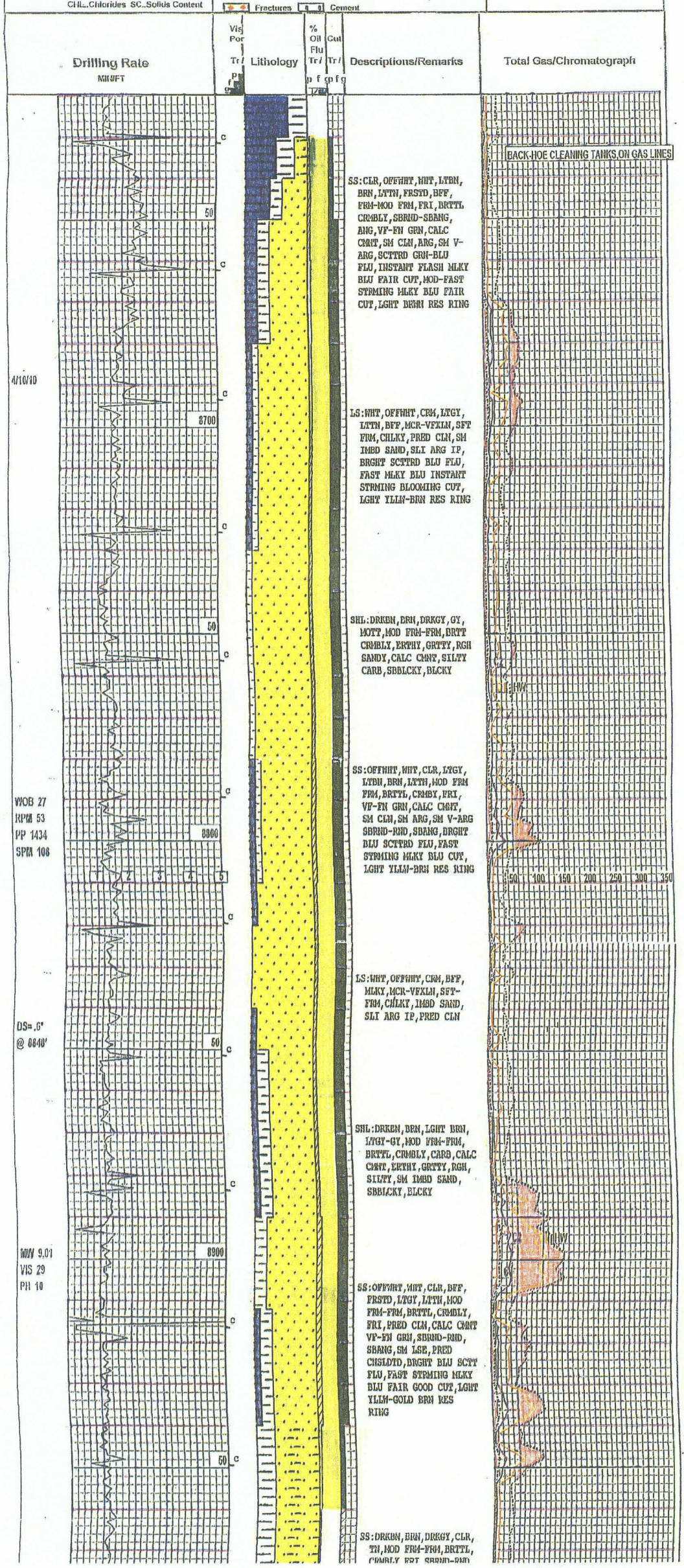
WT..Weight
V..Viscosity
PH..Acidity
F..Filtrate
CHL..Chlorides
SC..Solids Content

Lithology Symbols:

Anhydrite, Salt, Granite, Siltstone, Chert, Sandstone, Dolomite, Conglomerate, Limestone, Coal, Shale, Bentonite, Carb Shale, Granite Wash, Quartz Wash

Accessories

Glauconite, Pyrite, Fossils, Oolites, Fractures, Cement

Gas Chromatograph Analysis:

HW
C1
C2
C3
IC4
NC4