

SOFTROCK GEOLOGICAL SERVICES

591 CR 233, Durango, CO (970) 247-7726

WELL INFORMATION

COMPANY: Phillips Petroleum Company
 WELL NAME: San Juan 30-5 Unit No. 243
 LOCATION: Sec. 15, T30N-R5W, 2220' FNL 1657' FEL
 Rio Arriba County, New Mexico
 ELEVATION: GL: 6454' KB: 6471'
 FIELD: Basin Friutland

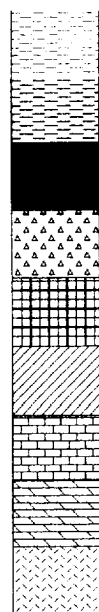
INTERVAL LOGGED: 3090' - 3208' DATE LOGGED: 11/12/98
 CONTRACTOR: Key *37, David Green Co. Man
 SPUD DATE:

WELLSITE GEOLOGISTS: Ron Horton, Mike Tichi
 GAS INSTRUMENTATION: FID Chromatograph and Total Gas Detector

SECTION 15



CONGL



SS



SLTST

SH

COAL

CHERT

SALT

ANHY

LS

DOL

IGNEOUS

BENTONITE

TUFF

HOLE SIZES - CASING DATA - MUD TYPES----

HOLE SIZES: 12 1/4" to 380'
 8 3/4" to 3090'
 6 1/4" to 3208'
 CASING SIZES: 9 5/8" to 380'
 7" to 3090'

MUD TYPES: Air & Water Mist

RECEIVED
 DEC - 4 1998

OIL CON. DIV.
 DIST. 3

ABBREVIATIONS

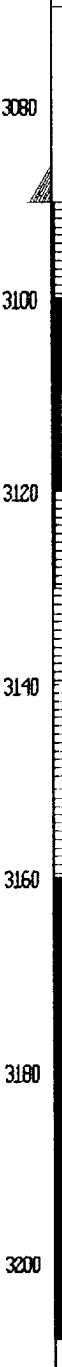
Ck - Filter Cake
 CO - Circulate Out
 CG - Connection Gas
 DC - Depth Correction
 DS - Directional Survey
 DST - Drill Stem Test
 DTG - Down Time Gas
 LAT - Logged After Trip
 NB - New Bit
 OB - Old Bit
 NR - No Returns
 pH - pH of Mud
 PP - Pump Pressure
 RPM - Rotary Speed
 SPM - Pump Strokes
 TG - Trip Gas
 Vis - Viscosity of Mud
 WL - Water Loss of Mud
 WOB - Weight on Bit
 WT - Weight of Mud

LITHOLOGY MODIFIERS

A - Anhydritic
 B - Bentonitic
 C - Calcareous
 CC - Carbonaceous / Coaly
 D - Dolomitic
 F - Fossiliferous
 G - Glauconitic
 O - Dolitic
 P - Pyritic
 S - Siliceous

SPECIAL SYMBOLS

- Core - DST
 - Desorption Can
 - Slide

Company: Phillips Petroleum Company										Well: San Juan 30-5 Unit No. 243														
DRILL RATE					TOTAL GAS UNITS					C1 - C4 PPM					DESCRIPTIONS / COMMENTS									
ROP					1 UNIT GAS = 100 PPM Hydrocarbons										VERTICAL SCALE: 5" = 100'									
Minutes Per Foot					TOTAL GAS																			
0 2.5 5 7.5 10					C1/C2-C4					0 500 1.0														
POROSITY					LITHOLOGY					DEPTH					LITHOLOGY					SHOWS				
																								
					Drilling with air & water mist. 7" Casing set at 3090' Bit #4: 6 1/4", HTC, GT-1, in at 3090'										COAL 3101'- 02' & 3107'- 09' Primarily intermediate semi bright black satin lustered coal (50%) with some dull black to gray black (35%) and thin bands of bright black vitreous material (15%). Fair cleat development and occasional conchoidal fractures. Sub platy to blocky, mostly sub blocky. Fair quality coal.									
					COAL INTERVALS 3101 - 3102 1' 3107 - 3109 2'					WOB 6-8K RPM 70 PP 250-300 1400 CFM Air 10 Brls/Hr Water														
															SANDSTONE: off white to light gray to light gray brown. Very fine to fine grained, moderately well sorted, sub angular. Moderately cemented with calcite and minor clay. Primarily a quartz sand with traces of carb- onaceous material and bronze mica flakes. Silty in part with occasional siltstone interbeds. Looks tight, moderately hard, rare yellow mineral fluorescence, no cut or show.									
															COAL: 3167'- 94' & 3197'- 3203' Coal varies from bright to dull, reflecting the overall banded nature of the coal. Mainly a combination of semi bright black satin (45%-55%) and dull black (25%-35%) with rare to some thin bands and lenses of bright black vitreous coal (5-10%). Occasionally thinly interbedded with dark gray carbonaceous shale (5-10%). Common micro laminated bedding texture with bright vitreous micro laminae in dull and satin matrix. Sub platy to rare blocky, primarily sub blocky. Rare to occasional intersecting cleat faces. Cleating ranges from poor to fair. Rare to occasional conchoidal fractures. Rare scattered microscopic pyrite crystals. Trace amounts of thin white calcite seen attached to coal and filling micro fractures in one piece of coal. Ranges from rather poor to fair quality coal.									
					3167 - 3194 27' 81 Units 3'- 5' FLARE 131 Units					WOB 6-8K RPM 70 PP 250-300 1400 CFM Air 15 Brls/Hr Water														
					3197 - 3203 6' 130 Units 3'- 5' FLARE																			
					TOTAL COAL: 36'					Bit #4: 6 1/4", HTC, GT-1, made 118' in 4.5 hours.														