

FORMATION TOPS

KB 6876'  
GL 6860'

<u>FORMATION</u>	<u>PROGNOSIS</u>	<u>ESTIMATED TOP</u>	<u>E-LOG</u>	<u>SUB-SEA</u>
WASATCH	SURFACE	SURFACE		
FORT UNION	1375'	1390'	1382'	+ 5494'
LANCE	2828'	2780'	2786'	+ 4090'
FOX HILLS	3588'	3530'	3521'	+ 3355'
LEWIS	3752'	3720'	3734'	+ 3142'
UPPER "A" SAND	3822'	3792'	3786'	+ 3090'
LOWER "A" SAND	4100'	4148'	4144'	+ 2732'
TOTAL DEPTH	4475'	4350'	4350'	+ 2526'

081-06649





DEVIATION SURVEY

<u>DEPTH</u>	<u>SURVEY</u>	<u>CHANGE</u>
250'		
1338'	3/4°	
2155'	3/4°	0
3065'	1/2°	- 1/4°
3873'	3°	2 1/2°
4350'	3°	0





SHOW REPORT

WELL NAME: JEEP TRAIL FEDERAL #1-32

AREA: WILDCAT COUNTY: MOFFAT STATE: COLORADO

SHOW No.: 1

FOOTAGE - from 3792' to 3825' Net ftg 33' PRESENT TD: 3842'

	DT	TOTAL GAS	CHROMATOGRAPH BREAKDOWN					other
			C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4I</sub>	C <sub>4N</sub>	
BEFORE	1.25	40	35	0	0	0	0	
DURING	.5	230	250	10	4	TR	TR	
AFTER	1.25	60	60	2	TR	0	0	

LITHOLOGY TYPE & DESCRIPTION: SS lt bwn to wh,vf-f grn,calc,occ s+p,wh clay cmt, rdd-sbrdd,w cmt,fri,tt app, v little or no vis Ø,poss lt bwn stng,no vis fluo or cut

POROSITY Est.: tt,silty 12-15%

STAIN DESCRIPTION: NONE

FLUORESCENCE and CUT DESCRIPTION: NONE

REMARKS: Peak of show was at 3820' - 3825'

GEOLOGIC SUMMARY  
 QUINTANA PETROLEUM CORPORATION  
 JEEP TRAIL FEDERAL #1-32

This wildcat was drilled to evaluate the Cretaceous age Upper Lewis sandstones from 3786' to 4350'. A two man mudlogging unit from Tooke Engineering was used for mud gas readings and cuttings sample collection. Welex wireline services logged the well with a BHC Sonic log, a DIL with GR and SP log, and a CNL-FDC log. All significant drilling rate increases were circulated out, and any hydrocarbon shows were evaluated completely before drilling resumed. This is a brief analysis of each formation encountered in the well.

Wasatch: Tertiary, Surface to 1382'

This formation was made up of multi-colored shales and siltstones, interbedded with unconsolidated sandstone.

The shale varied in color from shades of gray to red, yellow, gray-green, and maroon. It was non-calcareous and siliceous, grades to siltstone, and can be very finely sandy at times. The siltstone was largely gray, however various shades of red, yellow, and maroon were common. The sandstone was predominately a clear to gray quartzose, ranging from poorly to well sorted, and mostly unconsolidated. No significant gas shows were seen in this sandstone.

Fort Union: 1382' to 2786'

The Fort Union does not have multi-colored shales and becomes gray in color. The shale was gray, soft and fissile. The sand was clear to gray, quartzose, usually poorly cemented, and unconsolidated. The lower half of the Fort Union contain various thicknesses of coal, usually a good quality, hard bituminous coal. Although much sand was drilled here, no significant shows were noticed.

Lance Formation: Cretaceous, 2768' to 3521'

The lance top was picked at the first appearance of a salt and pepper sandstone. The interval consisted of interbedded gray shale, sandstones, and occasional coal stringers. The sands were primarily gray quartzoses with a salt and pepper appearance. Some white, siliceous, clay cement was present filling the space between much of the grains and reducing porosity values. The only gas increases were logged with the presence of coal, and no heavy hydrocarbons beyond C<sub>2</sub> were seen.

Fox Hills: Cretaceous, 3521' to 3734'

This top was picked at a coal stringer with massive sandstone beds immediately underneath. The sands were gray in color, quartzose, calcareous, salt and pepper, and much was very friable and unconsolidated. It exhibited good porosity, however no mud gas or sample shows were seen throughout the entire interval.

Lewis Shale and Sandstones: 3734' to 4350'

The interval separating the Fox Hills and Lewis was an unconformity. It was difficult to choose an accurate sample top. The Lewis shale proper was first noticed at 3740'. It was medium gray to gray brown, calcareous, fissile, and soft to firm. The Upper A sandstone was first noticed from a



drilling rate increase, and the sands were circulated out for evaluation. The gas increases peaked at 3820' to 3825' with a total of 230 units of gas. The breakdown indicated an interval predominant with methane and ethane. Heavier gas concentrations were very light. The sand was clear to light brown and mostly very fine grained, even to the point of grading to siltstone. No visible porosity, fluorescence, or cut was seen. The E-logs indicate an interval that reminds one exactly of narrow braided streambeds closer to a lower energy section of delta. The porosity logs indicate intervals of fairly high porosity, however the resistivity of the rock is quite low (around 5 to 7 ohms). Coupled with the poor mud gas and sample shows, nothing looks productive.

The lower A sand was quite similar in appearance. Thin bedded sand stringers of 2 to 5 feet interbedded with silt and shale. At 4170 to 4180 feet a sand produced a 26 unit increase. Another increase of 36 units was logged at 4250 to 4277 feet. The sands are similar in appearance to those above in the upper zone. Nothing with productive reservoir qualities, and a trap had developed along this lower interval.

If further information is needed, please feel free to call me at 638-4610.

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