

ARCO - Pacific #36-1  
Garfield County, Colorado

346' South of North Line, 623' East of West Line, Section 36, T6S, R98W, Elevation:  
7,844'

<u>INTERVAL</u>	<u>LITHOLOGY</u>	<u>DESCRIPTION</u>
0 - 5'		Weathered zone.
5 - 10'		Weathered zone.
10 - 15'	Sand	Tan-brown, carbonaceous, fine-very fine grained.
15 - 20'	Sand	Gray-gray brown, fine-very fine grained, shaley, carbonaceous.
20 - 25'	Sand	Gray brown silty, very fine grained, shaley. Pyrite. Carbonaceous.
25 - 30'	Marlstone	Dominantly tan with 10% dark brown and 20% brown.
30 - 35'	Marlstone	Dark brown-brown-tan with trace of <u>white ash</u> .
35 - 40'	Marlstone	Tan, brown with 20% dark brown - brown black.
40 - 45'	Marlstone	Brown-dark brown-brown black. 5% white siltstone.
45 - 52'	Marlstone	As above plus 20% brown-dark brown, carbonaceous sand, fine-very fine grained plus 15% white siltstone.
52 - 55'	Marlstone	Tan-brown-dark brown-brown black with trace brown carbonaceous sand.
55 - 60'	Sand	Tan, silty, carbonaceous and marlstone tan.
60 - 65'	Siltstone	Tan, sandy, carbonaceous with some tan marlstone.
65 - 70'	Marlstone	Brown-brown black.
70 - 75'	Marlstone	Tan brown with trace brown black. Trace of Pyrite.
75 - 80'	Marlstone	Brown-dark brown-brown black. 10% white tar stained tuff.
80 - 85'	Marlstone	Tan brown.
85 - 90'	Marlstone	Tan and reddish brown. Red brown marlstone has crystal cavities.

<u>INTERVAL</u>	<u>LITHOLOGY</u>	<u>DESCRIPTION</u>
90 - 95'	Marlstone	Brown-dark brown with scattered large white patches of crystals.
95 - 100'	Marlstone	Dark brown-brown black.
100 - 105'	Marlstone	Brown-dark brown.
105 - 110'	Marlstone	Brown-dark brown-brown black.
110 - 115'	Marlstone	Brown-dark brown.
115 - 120'	Marlstone	Brown-red brown. Brown crystalline masses (tuff?).
120 - 125'	Marlstone	Brown-red brown with scattered brown crystalline masses (tuff?).
125 - 130'	Marlstone	Tan-brown-dark brown with 30% brown. Mottled carbonaceous shaley, sandy siltstone.
130 - 135'	Marlstone	Tan-brown-dark brown with trace tan shaley, sandy siltstone.
135 - 140'	Marlstone	Tan-brown-dark brown with 40% tan. Mottled carbonaceous siltstone.
140 - 145'	Marlstone	Tan-dark brown.
145 - 150'	Marlstone	Brown-dark brown.
150 - 155'	Marlstone	Brown-dark brown with trace brown tuff.
155 - 160'	Marlstone	Brown dark brown, mottled, quite limey.
160 - 165'	Marlstone	Brown-dark brown with 20% dark brown, mottled, limey.
165 - 170'	Marlstone	Brown-dark brown, slightly limey.
170 - 175'	Marlstone	Brown, 60% siltstone tan shaley and sandy, carbonaceous.
175 - 180'	Siltstone	Sandy, shaley, tan, carbonaceous, limey plus 20% marlstone, brown.
180 - 185'	Siltstone	Sandy, shaley, limey, brown, carbonaceous plus 20% marlstone, brown.

<u>INTERVAL</u>	<u>LITHOLOGY</u>	<u>DESCRIPTION</u>
185 - 190'	Marlstone	Brown-dark brown-brown black.
190 - 195'	Marlstone	Tan to dark brown.
195 - 200'	Marlstone	Brown-dark brown with brown crystalline tuff.
200 - 205'	Marlstone	Organic. Brown-red brown.
205 - 210'	Marlstone	Dark brown-brown black.
210 - 215'	Marlstone	Brown-dark brown.
215 - 220'	Marlstone	Brown.
220 - 225'	Marlstone	Brown with trace of red brown.
225 - 230'	Marlstone	Brown-dark brown-red brown.
230 - 235'	Marlstone	Brown-red brown - organic.
235 - 240'	Marlstone	Brown-red brown, organic. Lost circulation at 242' $\pm$ .
240 - 245'	Marlstone	Brown with some red-brown.
245 - 250'	Marlstone	Tan, brown, red brown.
250 - 255'	Marlstone	Tan-brown.
255 - 260'	Marlstone	Brown-red brown.
260 - 265'	Marlstone	Tan-dark brown.
265 - 270'	Marlstone	Tan-brown-dark brown. Trace white ash.
270 - 275'	Marlstone	Brown-dark brown to brown black.
275 - 280'	Marlstone	Brown-dark brown to brown black.
280 - 285'	Marlstone	Dark brown.
285 - 290'	Marlstone	Brown-dark brown.
290 - 295'	Marlstone	Dark brown.
295 - 300'	Marlstone	Dark brown.

<u>INTERVAL</u>	<u>LITHOLOGY</u>	<u>DESCRIPTION</u>
300 - 305'	Marlstone	Dark brown.
305 - 310'	Marlstone	Dark brown.
310 - 315'	Marlstone	Brown-dark brown.
315 - 320'	Marlstone	Brown-dark brown.
320 - 325'	Marlstone	Dark brown.
325 - 330'	Marlstone	Brown-dark brown to brown black.
330 - 335'	Marlstone	Brown-dark brown.
335 - 340'	Marlstone	Brown-dark brown.
340 - 345'	Marlstone	Tan brown-brown.
345 - 350'	Marlstone	Brown-dark brown.

Core # 1, 350 - 360' ±, Recovered 9.62'.

350 - 351.6'	Marlstone	Brown with scattered interbeds of dark brown bituminous shale. Dark brown = 20%.
351.6 - 357.1'	Marlstone	Brown, thin laminated, organic.
357.1 - 358.2'	Oil Shale	With scattered laminae of brown marlstone.
358.2 - 359.6'	Marlstone	Brown with scattered organic laminae.
360' - Total Depth		Abandoned hole due to deep snow and extreme cold.

Evacuation Creek at Surface.

Top of Parachute Creek at 25'.

Daily Drilling Log  
Pacific #36-1

Date		Hours
11-7-68	Moved rig and water truck out of Grand Junction	10
11-8-68	Moved camp trailer to location. Moved rig and water truck on up to location.	11
11-9-68	Waiting on location. Serviced rig and water truck.	10
11-10-68	Moved rig on to location. Set up. Hauled water.	9
11-11-68	Finished rigging up. Cleaned up location. Waited on mud and mud pit. Started drilling surface hole at 3:15 p.m. Set 10 feet of surface pipe. Mixed mud. 3:15 to 6:15 p.m. drilling 6:15 to 6:30 p.m. drain pump and hoses	10
11-12-68	3:00 am-9:00 a.m. thawing out. warming up rig. 9:00 am-5:30 p.m. drilling. Lost some circulation at 30 feet. Mixed gel and lost circulation material. Hauled load of water. 5:30 pm-6:00 p.m. Tripped for new bit.	10
11-13-68	7:30 am-8:30 a.m. Thaw pump. Service rig. Trip in hole with new bit. 8:30 am-9:00 p.m. Drilling. Lost some circulation at 180 feet. Mixed gel and lost circulation material. 9:00 pm-9:30 p.m. Tripped out of hole.	14
11-14-68	7:30 am-10:00a.m. Thawing lines and pump. Service rig. Trip in hole. 10:00 am- 5:30p.m. Drilling. Mixed gel and lost circulation material. Hauled 35 bbl water. 5:30 pm- 6:00p.m. Tripped out of hole.	10.5
11-15-68	1:30 pm-3:00 p.m. Service rig. Thaw out pump and lines. Trip in hole with new bit. 3:00 pm-11:00pm. Drilling. Mixed gel and lost circulation material at 350 feet. 11:00 pm-12:00a.m. Trip out of hole.	10.5
11-16-68	12:00 am.-12:30am. Drain hoses and pump. 10:00 am.- 5:00pm. Waiting on Cat to clear road for hauling water. Got core barrel ready. Worked on water pump. Hauled water	7.5



November 18, 1968

Gunnison Drilling Company  
P. O. Box 683  
Delta, Colorado

Re: Pacific #36-1  
Garfield County, Colorado

Gentlemen:

Enclosed for your files is a fully executed copy of the Bid Sheet and Drilling Order covering drilling of the subject well.

Very truly yours,

R. O. Childers

ROC/mas  
Enclosure

Mrs. Cathey Wrights - 214 Dallas

R. O. Childers

Hamilton Drilling Company  
Delta, Colorado

November 18, 1966

Attached is a fully executed copy of Bid Sheet and Drilling Order with the subject company, for drilling work in Garfield County, Colorado.

RCC/mas