Boxberger Geological Services
6344 CR 144 Unit D-6
Parachute, CO 81635
Tel: 970.285.9480
Fax: 970.285.9482

Operator: TEP Rocky Mountain LLC
Well: TI 416-21-597
Location: Sec. 21 T5S R97W
Field: Trail Ridge
County: Garfield
State: Colorado

Drilling Rig: HP 271
Ground Elevation: 8292
KB Elevation: 8316
TVD vs. MD: 227
Spud Date: 03/05/17
TD Date: 03/21/17

Surface Hole: 669' FSL x 1855' FWL
Bottom Hole: 672' FSL x 2291' FWL
Drilling Fluid: LSND / Air/Mist
Dates Logged: 03/18/17 - 03/21/17
Depth Logged: 8291 - 9600
Logger: Tatec Technique

ROP (Min/Inch)	Rotary (RPM)	Differential Pressure (PSI)	Stand Pipe Pressure (PSI)	PVT Mud Gain/Loss (barrels)	Total Mud (barrels)	Comments
0.0 — 12.0	0.0 — 80.0	0.0 — 400.0	0.0 — 2000.0	0.0 — 20.0	0.0 — 2000.0	

Logging depth = 8291
BGS service began on 03/16/17 at 17:00.

Ring Corner Grade = 8291' MD
Type: 4
R 1/4
North
MINOR
as at 6636'

Connection at 8226.0'

Connection at 8321.3'

Jet: 0.0 / 38
Out: 0.0 / 39

Pump 5×-sweep

Connection at 8415.7'

Trencher 50-cal
Connection at 8510.2'

Ring Rollins SS = 8581' MD

Connection at 8604.7'
Jet: 0.7 / 38
Out: 0.7 / 38

Connection at 8699.2'
Pump 5×-sweep

Ring Cotopaxi = 8772' MD

Connection at 8793.8'
Jet: 0.7 / 38
Out: 0.7 / 38

Intermediate Flow Data
8842 - 9025'
Severe washes/tears

Connection at 8888.4'

Jet: 0.0 / 38
Out: 0.0 / 38
Connection at 8983'
Pump 5×-sweep

Ring Corcoran = 9032' MD

Intermediate Flow Data
9042 - 9052'
Severe washes/tears

Connection at 9077.7'
Pump 5×-sweep

Jet: 55
Out: 60

Connection at 9172'
Pump 5×-sweep

Ring Saga = 9192' MD

Connection at 9266.6'
Pump 5×-sweep

Jet: 0.0 / 55
Out: 0.0 / 55

Connection at 9361.2'
Pump 5×-sweep
Trencher 50-cal

RO #4
PTG: 2100'
HS: 19.5

Connection at 9455.8'
Jet: 0.0 / 55
Out: 0.0 / 55

TD 416-21-597 TD at 9466' on 03/21/17 at 0830 hrs