



Scale: 5" / 100'  
Measured Depth Log

**Well Name** HINER 36NB-23W\_Vert\_Extraction.mplot

**Location** Sec 36-T06N-R66W

**State** CO

**County** Weld

**Country** USA

**Rig Number** Xtreme7

**API Number** 05-123-37037

**AFE #** 14-28

**Region** DJ Basin

**Field** Wattenberg

**Spud Date** 7/31/2014

**Drilling Completed** 8/7/2014

**Surface Coordinates** N 1,407,447.05'  
E 3,217,331.93'  
Lat 40°26'57.181" N  
Long 104°43'8.710" W

**Bottom Hole Coordinates** X 3,213,461.47'  
Y 1,406,493.17'  
Lat 40°26'48.0876"  
Long 104°43'58.8792"

**Ground Elevation** 4661'

**K.B. Elevation** 4677'

**Logged Interval** 4000' **To** 6645'

**Total Depth** 11630'

**Formation** Niobrara B

**Type of Drilling Fluid** Water based mud

## Operator

**Company** Extraction Oil & Gas, LLC

**Address** 1888 Sherman St., Suite 500  
Denver, CO 80203

## Geologist

**Name** Hans Woldhousegryn & Edward Knight

Name Hana Valdausaurova & Edward Knight

Company ALS Empirica

Address 6360 W Sam Houston Pkwy N  
Suite 100  
Houston, TX 77041

## Other

Logging start date: 8/2/2014

Logging end date: 8/7/2014

2 man logging service ML-131

## Rock Types

UNKNOWN	CHALK	DOLOMITE	BRECCIA
SHALY SANDSTONE	MARLSTONE	CHERT	TILL
SANDSTONE	ANHYDRITE	COAL	BENTONITE
SALT AND PEPPER SAN...	GYPSUM	CLAYSTONE	TUFF
SILTY SHALE	SALT	SHALE GRAY	IGNEOUS
SILTSTONE	SIDERITE or LIMONITE	SHALE COLORED	METAMORPHIC
SHALE	LIMESTONE	CONGLOMERATE	CEMENT

## Accessories

### Fossils

ALGAE  
 AMPHIPORA  
 BELEMNITE  
 BIOCLASTIC  
 BRACHIOIPOD  
 BRYOZOA  
 CEPHALOPOD  
 CORAL  
 CRINOID  
 ECHINOID

FISH

FORAMINIFERA

FOSSIL

GASTROPOD

OOLITE

OSTRACOD

PELECYPOD

PELLET

PISOLITE

PLANT REMAINS

PLANT SPORES

SCAPHOPOD

STROMATOPOROID

### Minerals

ANHYDRITIC

ARGILLACEOUS

ARGILLITE GRAIN

BENTONITE

BITUMENOUS SUBSTANCE

BRECCIA FRAGMENTS

CALCAREOUS

CARBONACEOUS FLAKES

CHTDK

CHTLT

COAL - THIN BEDS

DOLOMITIC

FELDSPAR

FERRUGINOUS PELLET

FERRUGINOUS

GLAUCONITE

GYPSIFEROUS

HEAVY MINERAL

KAOLIN

MARLSTONE

MINERAL CRYSTALS

NODULES

PHOSPHATE PELLETS

PYRITE

SALT CAST

SANDY

SILICEOUS

SILTY

TUFFACEOUS

### Stringer

ANHYDRITE STRINGER

BENTONITE STRINGER

COAL STRINGER

DOLOMITE STRINGER

GYPSUM STRINGER

LIMESTONE STRINGER

MARLSTONE (CALC) STRG

MARLSTONE (DOL) STRG

SANDSTONE STRINGER

SHALE STRINGER

SILTSTONE STRINGER

## Other Symbols

### Oil Show

DEAD

EVEN

QUESTIONABLE

SPOTTED STAINING

### Porosity

EARTHY

FENESTRAL

ORGANIC

PINPOINT

VUGGY

### Engineering

BIT

CASING

CONNECTION (LEFT)

CONNECTION (RIGHT)

CONNECTION GAS

FORMATION TOP

GAS SHOW

MN DEPTH

NORMAL FAULT

OIL SHOW

OVERTURNED STRATA

REVERSE FAULT

SIDEWALL CORE (LEFT)

SIDEWALL CORE (RIGHT)

SLIDE

### Rounding

ANGULAR

ROUNDED

SUBANG

SUBRND

### Textures

BOUNDSTONE

CHALKY

LITHOGRAPHIC

MICROXLN

MUDSTONE

PACKSTONE

WACKESTONE

### Sorting

MODERATE

POOR

WELL

F FRACTURE

X INTERCRYSTALLINE

Φ INTEROOLITIC

M MOLDIC

↓ CORE - LOST

■ CORE - RECOVERED

⋮ DST INTERVAL

⚡ FAULT

DS SURVEY

TRIP GAS

◁ WIRELINE TESTED - LEFT

▷ WIRELINE TESTED - RT

CX CRYPTOXLN

E EARTHY

FX FINELYXLN

GS GRAINSTONE







































