

LEASE DESCRIPTION: Skold Ranch 946-14-21  
LOCATION: 802' FNL & 1591' FWL, NENW Section 14-T9N-R46W  
COUNTY: Sedwick STATE: **Colorado** API #: 05-115-06095-00

Black Raven Energy  
ELEV: 3914' GR  
FIELD: WILDCAT

**12/14/11:** MIRU SCHAAL DRILLING CO. PREVIOUS 24 HRS - SPUD SURFACE @ 8:30 A.M. ON 12/13/11. 9 7/8" HOLE DRILLED 0' TO 503' TD @ 11:45 A.M. CIRC. TOO. RAN 12 JTS OF 7", 17# CSG MEAS 486.15'. SET @ 498.15'. CMT W/110 SKS OF TYPE 1 NEAT CMT. CIRC 4 BBL TO PIT. PLUG DOWN @ 1:15 P.M. ON 12/13/11. RDMO. SHALE @ 420'

EDC: \$5348

**1/8/12:** MIRU ADT #168. NIPPLE UP B.O.P. ASSEMBLE BHA. MIX MUD. DRILL OUT CMT PLUG. SPUD @ 7:00 P.M. ON 1/2/12. DRILL FROM 498' TO 3905'. TD @ 3905' @ 1:30 P.M. ON 1/4/12 CIRC. POOH. LAY DOWN BHA. RIG UP PSI. RAN TRIPLE COMBO LOGS. LOGGER TD @ 3889'. TOP 2958'. BTM 2992. AVG. 2.5, MAX 2.5, 0% POROSITY, 0' ZONE. RDMO PSI. TIH, RAN 95 JTS OF 11.6#, 4 1/2" CSG MEAS 3854.56. SET @ 3866.56'. PBTD 3824.33'. RIG UP CMTRS. CMT W/158 SKS TYPE 1 NEAT CMT. DISPLACED W/59.2 BBLS. CIRCULATION SLOWED DOWN HALF WAY THROUGH DISPLACEMENT. PLUG DOWN @ 2:30 P.M. ON 1/7/12. HELD OK. **RELEASE RIG** @ 3:00 P.M. FLANGE UP WELL HEAD. RDMO RIG # 168.

**SURVEYS:**

500'--.59  
1000'--.35  
1500'--1.17  
2000'--3.18  
2500'--3.46  
3000'--1.60  
3500'--.91  
3800'--.93

**CASING PRESSURE:**

5 MIN-1525  
10 MIN-1600  
15 MIN-1625

CENTRALIZERS WERE PLACED ON TOP OF 2<sup>ND</sup>, 4<sup>TH</sup>, 6<sup>TH</sup>, 8<sup>TH</sup>, 10<sup>TH</sup>, 27<sup>TH</sup>, 29<sup>TH</sup>, 30<sup>TH</sup>, AND 33<sup>RD</sup> JOINT

SCRATCHERS: 2 WERE PLACED ON THE 21<sup>ST</sup>, 23<sup>RD</sup>, 24<sup>TH</sup>, AND 25<sup>TH</sup> JOINTS.

BASKET WAS PLACED ON 26<sup>TH</sup>.

SHORT JOINT: #26

EDC: \$85,772