

GEOLOGIC & DRILLING PROGNOSIS

Prepared: 19-May-15
Updated: 8/6/2015 RGF
Changed BHL Xys and Footage Calls

WELL NAME: RU 434-6
Directional from the pad RU 34-6

STATE: CO
COUNTY: GARFIELD
BOTTOM HOLE LOCATION: Sec. 6 T 7S R 93W
TYPE OF UNIT: Not Spaced
SURFACE HOLE FOOTAGE: 987 FSL
BOTTOM HOLE FOOTAGE: 1114 FSL
SURFACE HOLE XY: X: 2346575.0
BOTTOM HOLE XY: X: 2345716.2
FEDERAL EA: NA
HARDLINE: No

API: 05045225490000
10 acre Fed
1916 FEL
2578 FWL
Y: 1603584.4
Y: 1603352.9
Sec. 6 T 7S R 93W
Sec. 6 T 7S R 93W

ELEVATION (ft):
PAD: 7537
KELLY BUSHING: 7558

RIG INFORMATION:
RIG NAME: H&P 318
KB HEIGHT (ft): 24

ESTIMATE TOPS:

Formation	TVD	MD	Comments
Wasatch	Surface	Surface	
Top of "G" Sand	3543	3606	
Base of "G" Sand	3643	3676	
Mesaverde	6003	6059	(Water zones may be encountered within the upper portion of the Mesaverde)
Approx. Top Gas	7000	7057	
Cameo Coals	8758	8815	
Coal D	9469	9526	
Rollins SS	9600	9657	Drill 150' below Top Rollins to reach TD.
TD	9750	9807	

MUD LOGGING (md): Out of surface casing to TD. (One man or computer unit with at least total gas and drill rate.)

LOGGING PROGRAM: Cased-hole logs

Type of Log: Cased-hole Pulsed Neutron log (e.g. RMTE, RPM, or RST)
Interval (md): GR from TD to Surface Casing
Pulsed Neutron from TD to Surface Casing

Strap drill pipe by latest trip prior to TD

CSG & CEMENT PROGRAM: SHOE TEST REQUIRED

	csq size (in)	depth set at (tvd)	depth set at (md)	hole size (in)	Approximate Cmt (ft3) Tail	Tail Yield ft ³ /Sx	Approx. Sx Tail	Approximate Cmt (ft3) Lear	Lead Yield ft ³ /Sx	Approx. SxLead	WOC (hrs)
Conductor:											
Surface:	9 5/8"	1100	1103	13 1/2"	352	2.11	167	295	2.37	124	8
Intermediate:											
Liner or Production:	4 1/2"	9750	9807	8 3/4"	1030	1.33	775	337	1.81	186	
					Surface (sacks): 291		Prod (sacks): 961				

Surface cement volumes are calculated w/ 20% excess in gauge hole,
Production cement: tail is calculated to be 300 ft above geologists pick of top of gas, lead TOC is calculated 300 ft above top of MVRD. 10% Excess added.

ANTICIPATED PRESSURES

MASP	Prod Csg Test Pressure	BHP	Pressure (psi)	Prod. Csg. Grade
2,150	7,000	6,825		P-110

MUD PROGRAM: (Do not deviate from mud engineer's recommendation without prior consent from Parachute office)

FROM (md)	TO (md)	TYPE MUD	#/GAL	VIS	WL	CHEMICALS
0	1103	Spud	9.0-9.5	45-50		
1103	9807	LSND	9.0-13.5	40-50	8-10	Visease & 507

(Write mud added to system on tour sheets and report all mud mixed and daily cost in morning report)

LOST CIRCULATION: Report depth and bbls of mud lost on morning report and tour sheet - Any severe lost circulation problems should be reported immediately to well supervisor.

SURVEYS: Run every 100' on surface hole and trips unless otherwise instructed.

WPX Energy Geologists: (note: if there are questions concerning TD or logging, please call Geologist)
Renee Wild 539-573-8939
Scott Meade 970-260-8131

Office 720-431-0381
Cell 970-260-8131
email renee.wild@wpxenergy.com
scott.meade@wpxenergy.com