

Rudolph ATX State Com. #5H

30-015-38566

Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 9,300' MD (8,983' TVD). A 6 1/8" hole will then be drilled to 13,417' MD (9,010' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 8400'.

2nd Intermediate

0 ft to 1,000 ft		Make up Torque ft-lbs		Total ft = 1,000	
O.D.	Weight	Grade	Threads	opt.	min. mx.
7 inches	26 #/ft	J-55	LT&C	3670	2750 4590
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift	
4,320 psi	4,980 psi	367,000 #	415,000 #	6.151	

1,000 ft to 5,700 ft		Make up Torque ft-lbs		Total ft = 4,700	
O.D.	Weight	Grade	Threads	opt.	min. mx.
7 inches	23 #/ft	J-55	LT&C	3130	2350 3910
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift	
3,270 psi	4,360 psi	313,000 #	366,000 #	6.25	

5,700 ft to 8,000 ft		Make up Torque ft-lbs		Total ft = 2,300	
O.D.	Weight	Grade	Threads	opt.	min. mx.
7 inches	26 #/ft	J-55	LT&C	3670	2750 4590
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift	
4,320 psi	4,980 psi	367,000 #	415,000 #	6.151	

8,000 ft to 9,300 ft		Make up Torque ft-lbs		Total ft = 1,300	
O.D.	Weight	Grade	Threads	opt.	min. mx.
7 inches	26 #/ft	L-80	LT&C	5110	3830 6390
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift	
5,410 psi	7,240 psi	511,000 #	604,000 #	6.151	

DV tool placed at 4700'.

Stage I: Cemented w/975sx PVL (YLD 1.41 Wt 13) TOC= 4700'

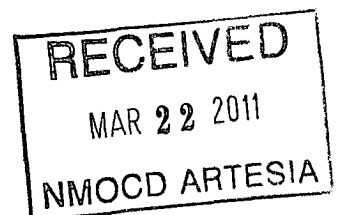
Stage II: Lead w/200sx Lite Crete (YLD 2.78 Wt 9.9), tail w/100sx PVL (YLD 1.41 Wt 13) TOC= 2500'

Production

0 ft to 13,417 ft		Make up Torque ft-lbs		Total ft = 13,417	
O.D.	Weight	Grade	Threads	opt.	min. mx.
4.5 inches	11.6 #/ft	HCP-110	LT&C	3020	2270 3780
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift	
8,650 psi	10,690 psi	279,000 #	367,000 #	3.875	

DV tool placed at approx. 8400' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 8400'.

Cemented w/675sx PVL (YLD 1.41 Wt 13) TOC= 8400'



Co: Yates Petroleum Corporation
 Drillers: 0
 Well Name: Rudolph ATX State Com. #5H
 Location: Sect. 16, 19S-31E

Units: Feet, ° 100ft
 Elevation:
 Northing:
 Easting:

Tgt TVD: 9010.00
 Tgt MD: 0.00
 Tgt N/S: 4619.00
 Tgt Displ.: 0.00
 Tgt EW: -432.00
 Method: Minimum Curvature

No.	MD	CL	Inc.	Azi.	TVD	VS	+N/S-	+EW-	BR	WR	DLS	Comments
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Rustler
1	450.00	450.00	0.00	360.00	450.00	0.00	0.00	0.00	0.00	0.00	0.00	Tansill
2	2090.00	1640.00	0.00	360.00	2090.00	0.00	0.00	0.00	0.00	0.00	0.00	Yates
3	2280.00	190.00	0.00	360.00	2280.00	0.00	0.00	0.00	0.00	0.00	0.00	Seven Rivers
4	2440.00	160.00	0.00	360.00	2440.00	0.00	0.00	0.00	0.00	0.00	0.00	Queen
5	2800.00	360.00	0.00	360.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	Capitan
6	3100.00	300.00	0.00	360.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	Cherry Canyon
7	4450.00	1350.00	0.00	360.00	4450.00	0.00	0.00	0.00	0.00	0.00	0.00	Brushy Canyon
8	5190.00	740.00	0.00	360.00	5190.00	0.00	0.00	0.00	0.00	0.00	0.00	Bone Springs
9	6700.00	1510.00	0.00	360.00	6700.00	0.01	0.01	0.00	0.00	0.00	0.00	1st Bone Springs
10	7980.00	1280.00	0.00	360.00	7980.00	0.01	0.01	0.00	0.00	0.00	0.00	KOP
11	8505.65	8505.65	0.00	354.66	8505.65	0.01	0.01	0.00	0.00	-0.06	0.00	12.00
12	8600.00	94.35	11.32	354.66	8599.39	9.30	9.26	-0.87	12.00	0.00	0.00	12.00
13	8700.00	100.00	23.32	354.66	8694.68	39.02	38.85	-3.63	12.00	0.00	0.00	12.00
14	8750.60	50.60	29.40	354.66	8739.99	61.47	61.21	-5.72	12.00	0.00	0.00	12.00 2nd Bone Springs
15	8800.00	100.00	35.32	354.66	8781.71	87.90	87.52	-8.18	12.00	0.00	0.00	12.00
16	8900.00	100.00	47.32	354.66	8856.67	153.81	153.14	-14.32	12.00	0.00	0.00	12.00
17	9000.00	100.00	59.32	354.66	8916.29	233.86	232.85	-21.78	12.00	0.00	0.00	12.00
18	9100.00	100.00	71.32	354.66	8957.97	324.56	323.15	-30.22	12.00	0.00	0.00	12.00
19	9200.00	100.00	83.32	354.66	8979.88	421.95	420.12	-39.29	12.00	0.00	0.00	12.00
20	9252.57	746.92	89.63	354.66	8983.10	474.39	472.33	-44.17	12.00	0.00	0.00	12.00 Target Sand
21	13417.43	4164.86	89.63	354.66	9010.00	4639.17	4619.01	-432.00	0.00	0.00	0.00	0.00 Lateral TD



