

# APPENDIX D

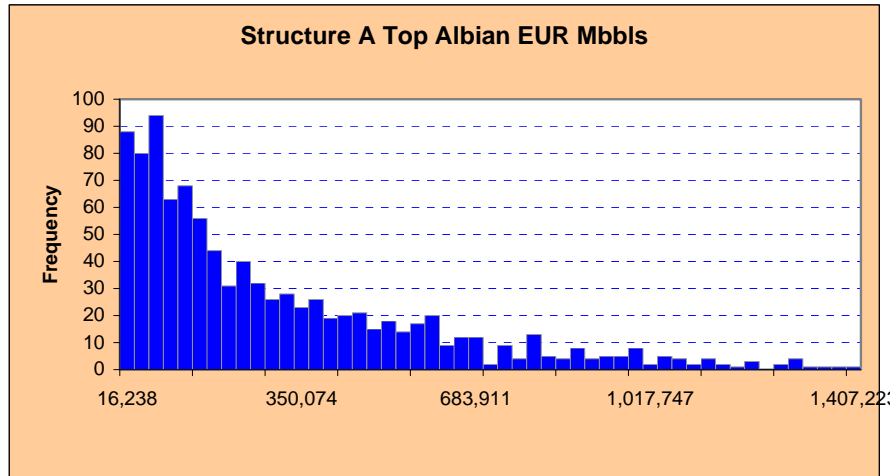
**Forecast: Structure A Top Albian EUR Mbbls**

Summary:

Entire range is from 2,328 to 3,716,209

Base case is 408,503

After 1,000 trials, the std. error of the mean is 12,237



**Forecast: Structure A Top Albian EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	2,328
P90	33,815
P80	67,739
P70	99,303
P60	143,882
P50	202,819
P40	286,159
P30	392,627
P20	545,711
P10	798,349
P0	3,716,209

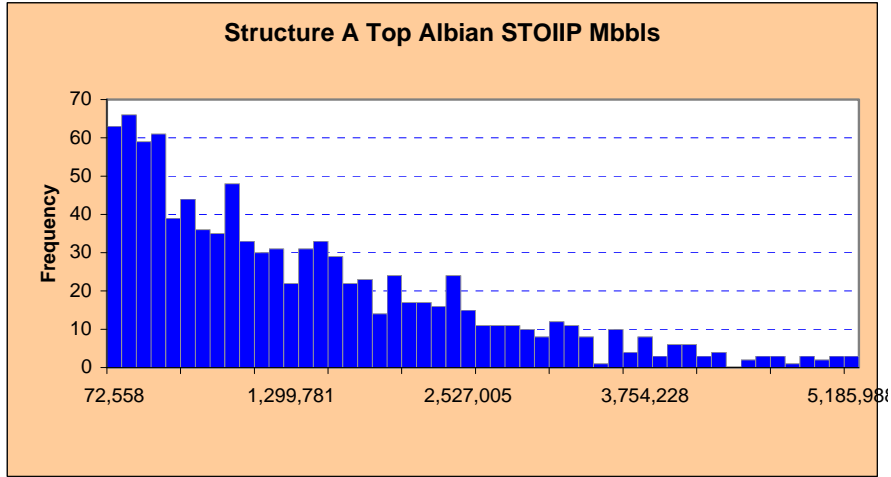
**Forecast: Structure A Top Albian STOIP Mbbls**

Summary:

Entire range is from 21,424 to 8,094,576

Base case is 1,651,188

After 1,000 trials, the std. error of the mean is 42,497



**Forecast: Structure A Top Albian STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	21,424
P90	189,955
P80	346,224
P70	565,798
P60	830,921
P50	1,087,569
P40	1,459,203
P30	1,836,769
P20	2,395,475
P10	3,258,486
P0	8,094,576

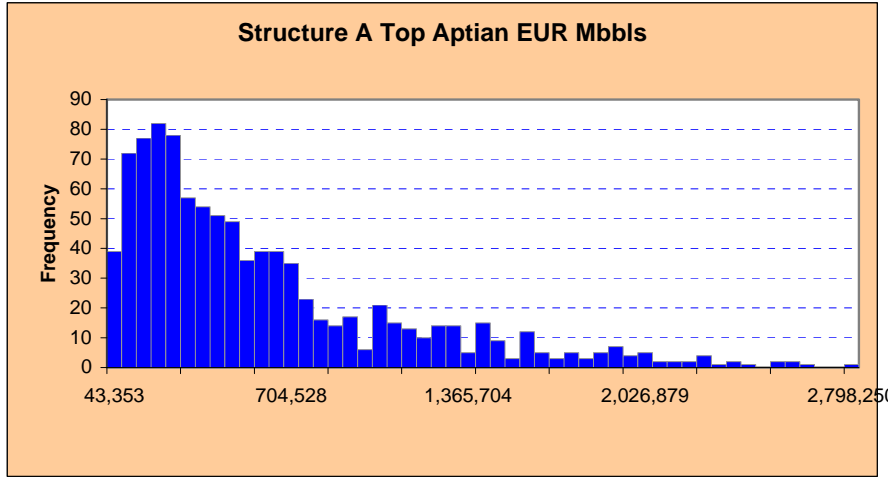
**Forecast: Structure A Top Aptian EUR Mbbls**

Summary:

Entire range is from 15,804 to 7,520,226

Base case is 923,247

After 1,000 trials, the std. error of the mean is 24,152



**Forecast: Structure A Top Aptian EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	15,804
P90	115,830
P80	189,351
P70	254,816
P60	340,986
P50	437,345
P40	577,770
P30	716,314
P20	1,052,035
P10	1,502,767
P0	7,520,226

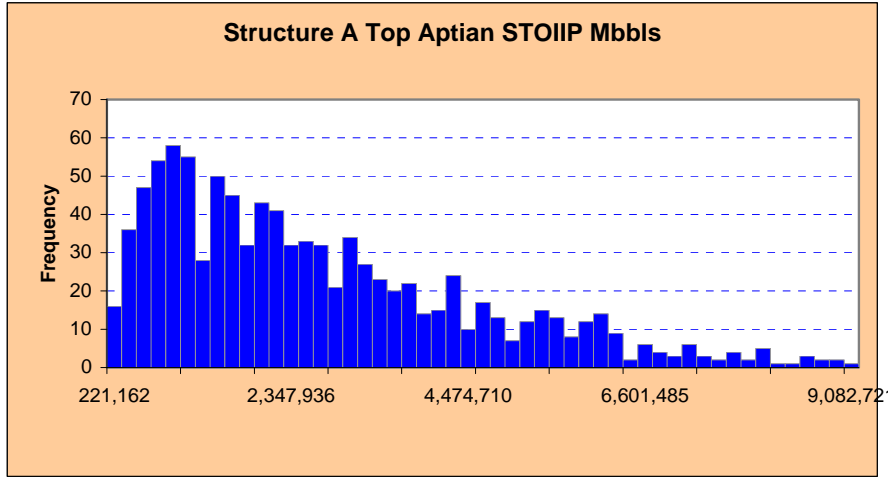
**Forecast: Structure A Top Aptian STOIP Mbbls**

Summary:

Entire range is from 132,546 to 17,220,694

Base case is 3,731,809

After 1,000 trials, the std. error of the mean is 71,396



**Forecast: Structure A Top Aptian STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	132,546
P90	664,688
P80	992,071
P70	1,405,967
P60	1,801,381
P50	2,234,206
P40	2,778,902
P30	3,463,481
P20	4,366,339
P10	5,836,023
P0	17,220,694

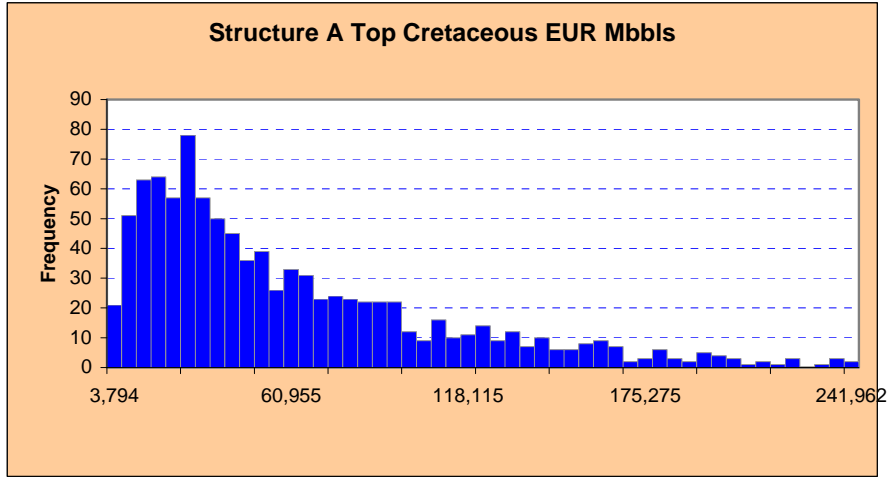
**Forecast: Structure A Top Cretaceous EUR Mbbls**

Summary:

Entire range is from 1,413 to 545,864

Base case is 81,759

After 1,000 trials, the std. error of the mean is 2,004



**Forecast: Structure A Top Cretaceous EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	1,413
P90	12,784
P80	20,483
P70	27,692
P60	35,750
P50	45,692
P40	60,840
P30	77,736
P20	101,952
P10	146,363
P0	545,864

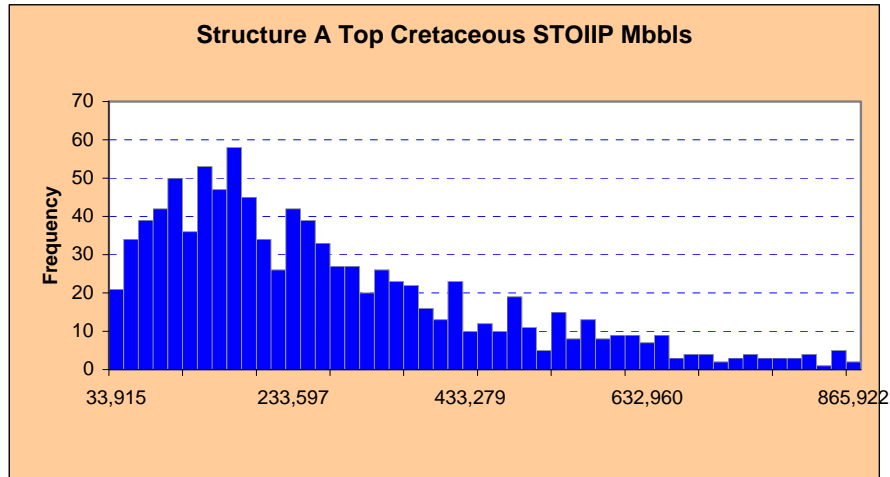
**Forecast: Structure A Top Cretaceous STOIP Mbbls**

Summary:

Entire range is from 25,595 to 1,292,164

Base case is 330,472

After 1,000 trials, the std. error of the mean is 6,641



**Forecast: Structure A Top Cretaceous STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	25,595
P90	78,685
P80	114,693
P70	150,711
P60	183,736
P50	231,443
P40	278,804
P30	342,243
P20	432,830
P10	575,945
P0	1,292,164

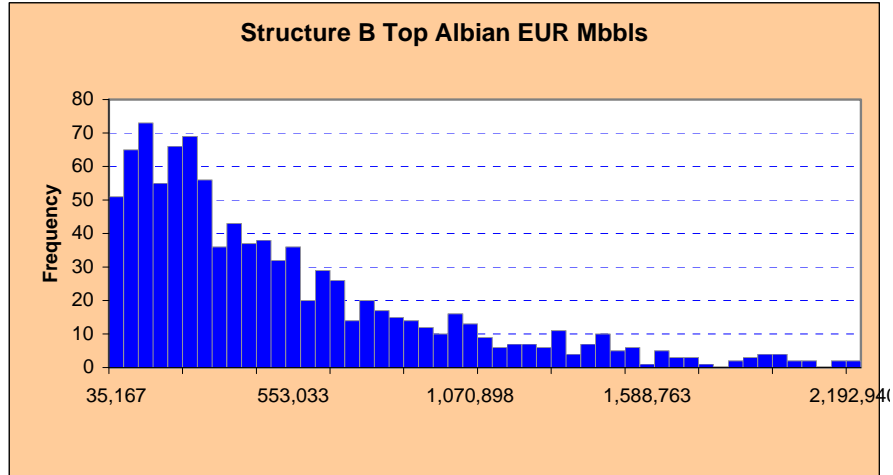
**Forecast: Structure B Top Albian EUR Mbbls**

Summary:

Entire range is from 13,590 to 6,088,483

Base case is 709,446

After 1,000 trials, the std. error of the mean is 18,544



**Forecast: Structure B Top Albian EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	13,590
P90	93,081
P80	149,324
P70	222,868
P60	289,167
P50	388,065
P40	503,155
P30	647,204
P20	887,390
P10	1,314,640
P0	6,088,483



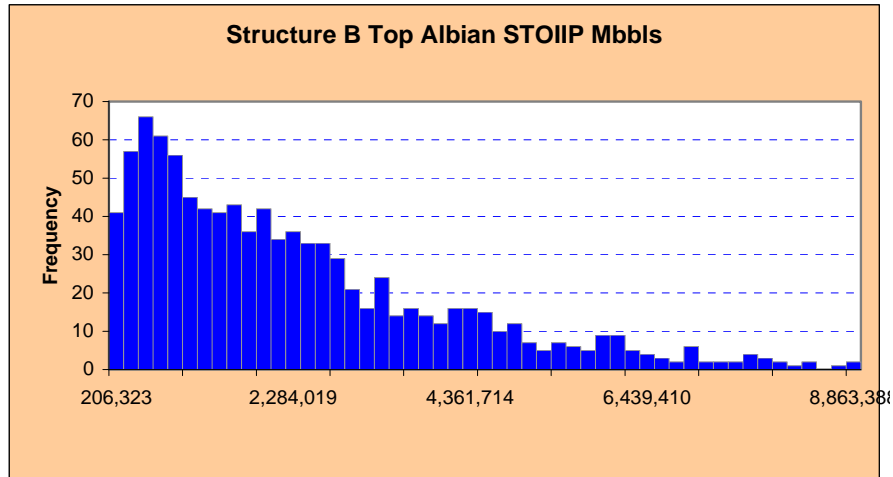
**Forecast: Structure B Top Albian STOIP Mbbls**

Summary:

Entire range is from 119,753 to 14,519,465

Base case is 2,867,616

After 1,000 trials, the std. error of the mean is 72,397



**Forecast: Structure B Top Albian STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	119,753
P90	479,001
P80	740,508
P70	1,061,169
P60	1,473,050
P50	1,904,687
P40	2,369,998
P30	2,933,113
P20	3,925,445
P10	5,433,549
P0	14,519,465

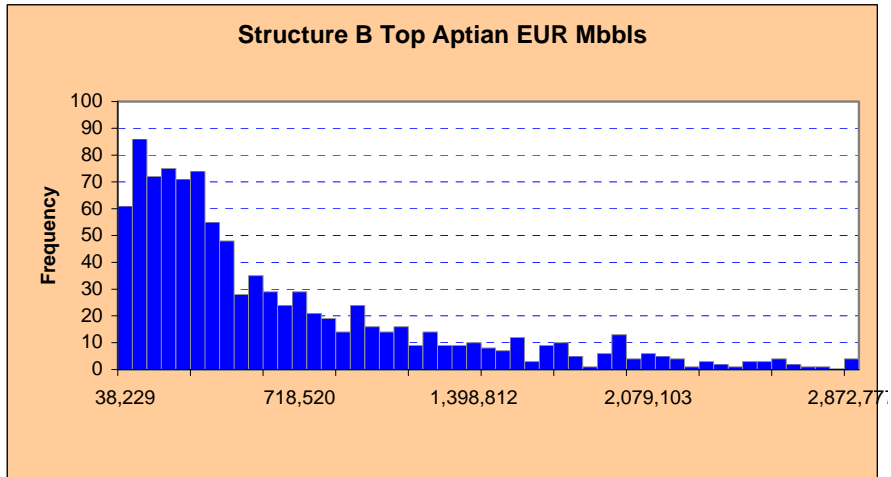
**Forecast: Structure B Top Aptian EUR Mbbls**

Summary:

Entire range is from 9,883 to 5,671,921

Base case is 899,330

After 1,000 trials, the std. error of the mean is 24,822



**Forecast: Structure B Top Aptian EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	9,883
P90	97,848
P80	162,573
P70	240,351
P60	320,416
P50	415,838
P40	563,324
P30	772,095
P20	1,104,568
P10	1,702,287
P0	5,671,921

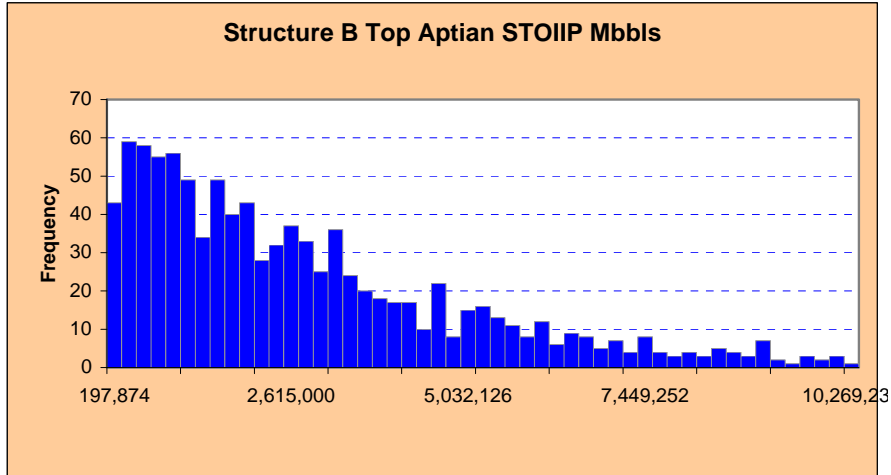
**Forecast: Structure B Top Aptian STOIP Mbbls**

Summary:

Entire range is from 97,160 to 19,603,286

Base case is 3,635,136

After 1,000 trials, the std. error of the mean is 83,634



**Forecast: Structure B Top Aptian STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	97,160
P90	493,985
P80	837,764
P70	1,191,840
P60	1,683,993
P50	2,227,262
P40	2,796,164
P30	3,510,910
P20	4,685,040
P10	6,445,700
P0	19,603,286

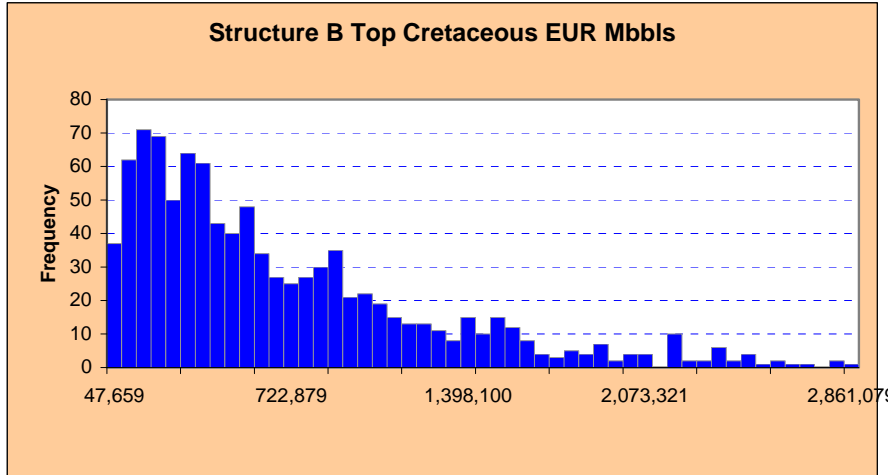
**Forecast: Structure B Top Cretaceous EUR Mbbls**

Summary:

Entire range is from 19,524 to 6,105,131

Base case is 938,523

After 1,000 trials, the std. error of the mean is 24,002



**Forecast: Structure B Top Cretaceous EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	19,524
P90	134,594
P80	206,430
P70	310,019
P60	403,092
P50	527,706
P40	677,028
P30	887,595
P20	1,140,461
P10	1,610,529
P0	6,105,131

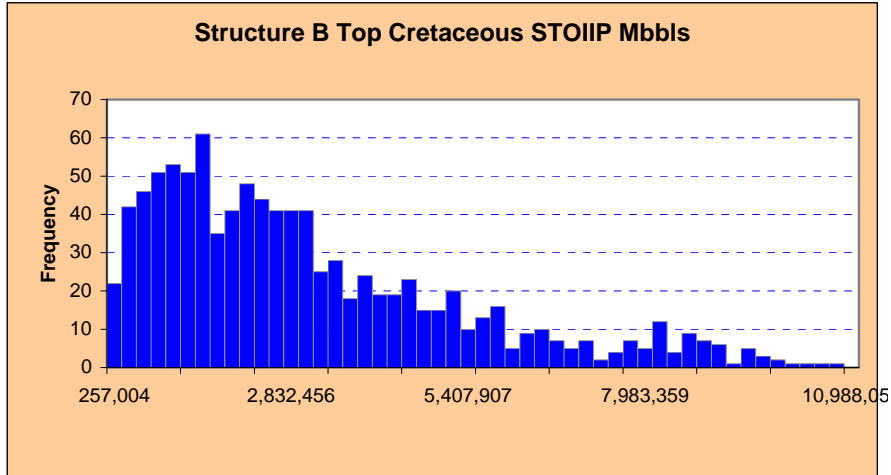
**Forecast: Structure B Top Cretaceous STOIP Mbbbls**

Summary:

Entire range is from 149,694 to 22,021,254

Base case is 3,793,554

After 1,000 trials, the std. error of the mean is 87,786



**Forecast: Structure B Top Cretaceous STOIP Mbbbls (cont'd)**

Percentiles:	Forecast values
P100	149,694
P90	752,753
P80	1,163,350
P70	1,537,835
P60	2,072,839
P50	2,572,318
P40	3,047,581
P30	3,916,861
P20	4,981,531
P10	7,053,746
P0	22,021,254

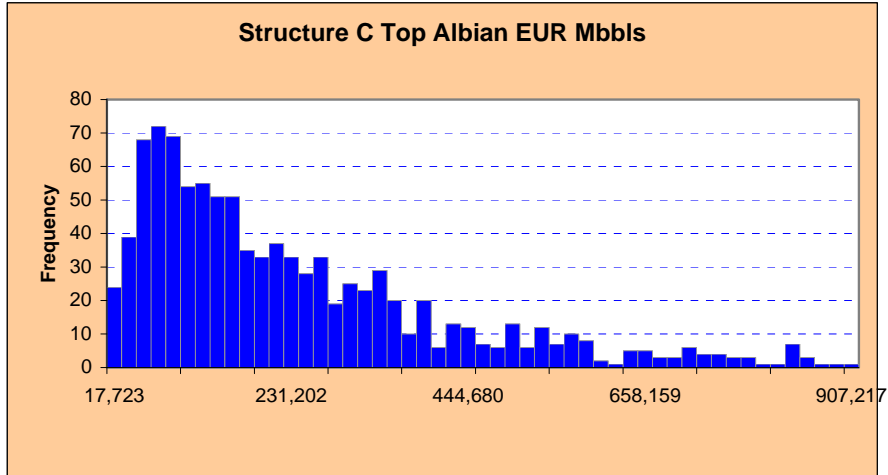
**Forecast: Structure C Top Albian EUR Mbbls**

Summary:

Entire range is from 8,829 to 2,277,848

Base case is 333,663

After 1,000 trials, the std. error of the mean is 7,512



**Forecast: Structure C Top Albian EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	8,829
P90	54,169
P80	79,315
P70	106,925
P60	139,159
P50	179,998
P40	227,750
P30	293,001
P20	367,949
P10	537,620
P0	2,277,848

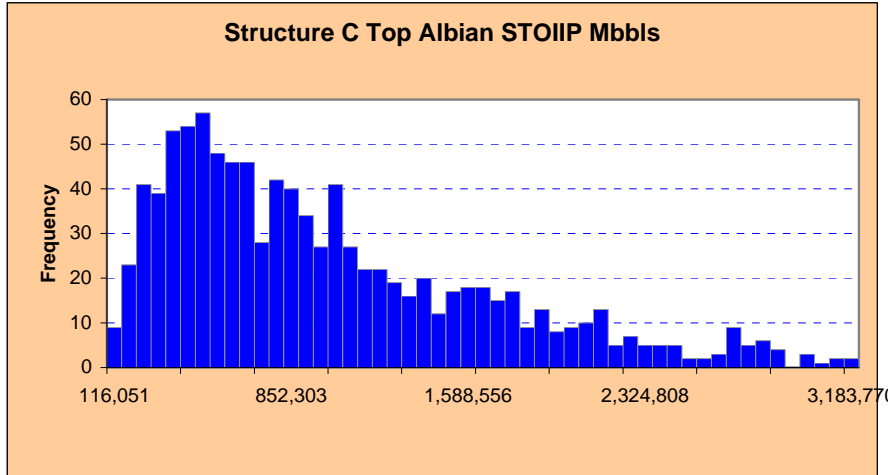
**Forecast: Structure C Top Albian STOIP Mbbls**

Summary:

Entire range is from 85,374 to 4,880,574

Base case is 1,348,682

After 1,000 trials, the std. error of the mean is 24,359



**Forecast: Structure C Top Albian STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	85,374
P90	312,181
P80	430,772
P70	552,590
P60	676,664
P50	839,768
P40	1,017,281
P30	1,256,490
P20	1,614,409
P10	2,109,707
P0	4,880,574

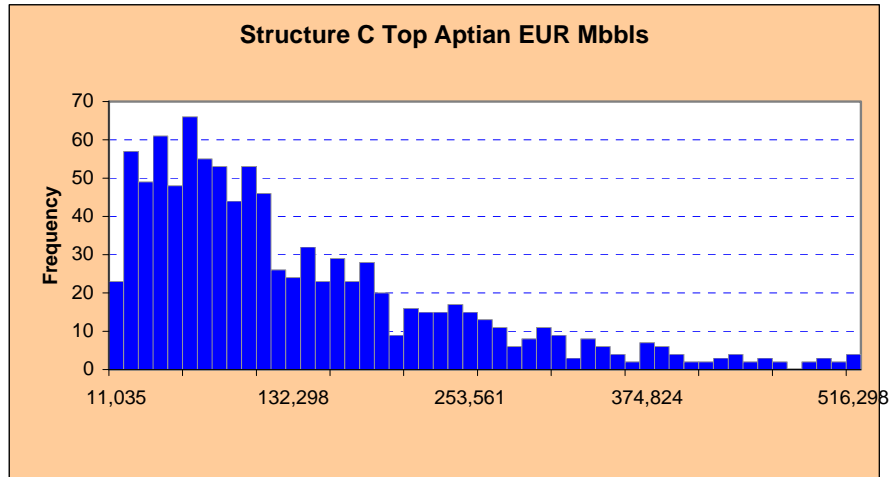
**Forecast: Structure C Top Aptian EUR Mbbls**

Summary:

Entire range is from 5,982 to 971,565

Base case is 216,519

After 1,000 trials, the std. error of the mean is 4,216



**Forecast: Structure C Top Aptian EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	5,982
P90	29,001
P80	48,637
P70	65,338
P60	84,043
P50	104,757
P40	134,724
P30	170,655
P20	228,162
P10	314,914
P0	971,565



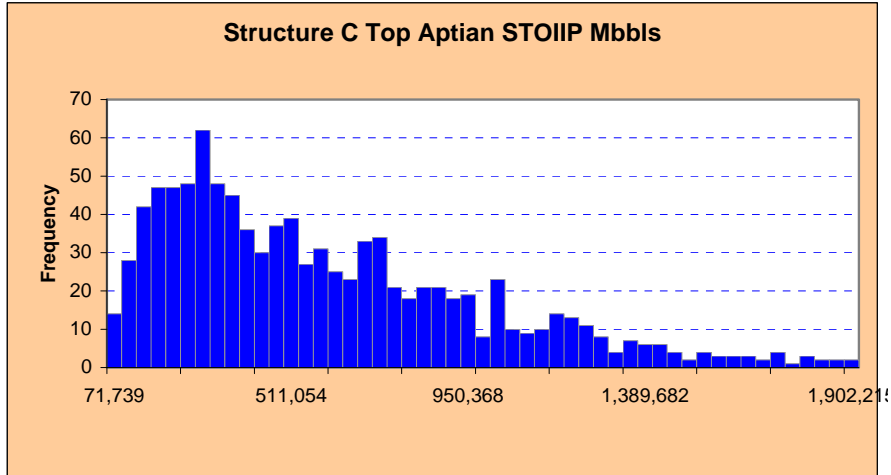
**Forecast: Structure C Top Aptian STOIP Mbbls**

Summary:

Entire range is from 53,435 to 3,469,275

Base case is 875,178

After 1,000 trials, the std. error of the mean is 14,595



**Forecast: Structure C Top Aptian STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	53,435
P90	174,748
P80	251,023
P70	319,182
P60	403,865
P50	511,741
P40	632,834
P30	754,898
P20	937,703
P10	1,222,943
P0	3,469,275

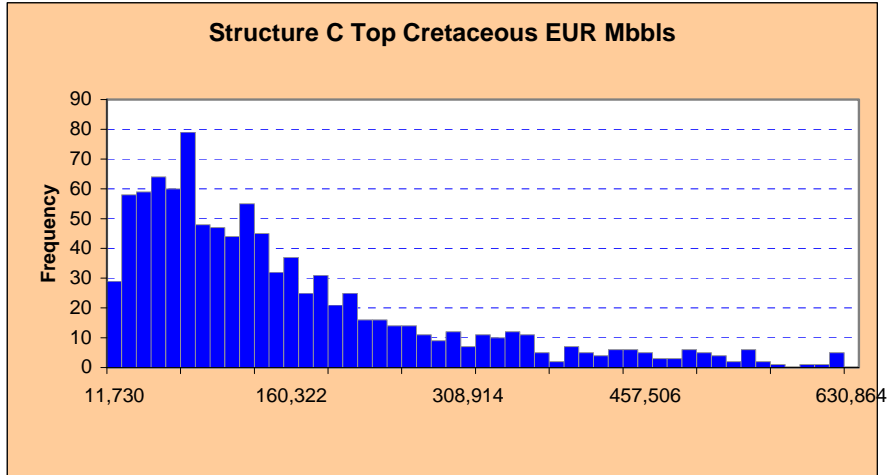
**Forecast: Structure C Top Cretaceous EUR Mbbls**

Summary:

Entire range is from 5,538 to 1,796,762

Base case is 204,217

After 1,000 trials, the std. error of the mean is 5,293



**Forecast: Structure C Top Cretaceous EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	5,538
P90	32,815
P80	52,059
P70	71,633
P60	92,680
P50	119,198
P40	146,823
P30	185,787
P20	246,830
P10	363,110
P0	1,796,762

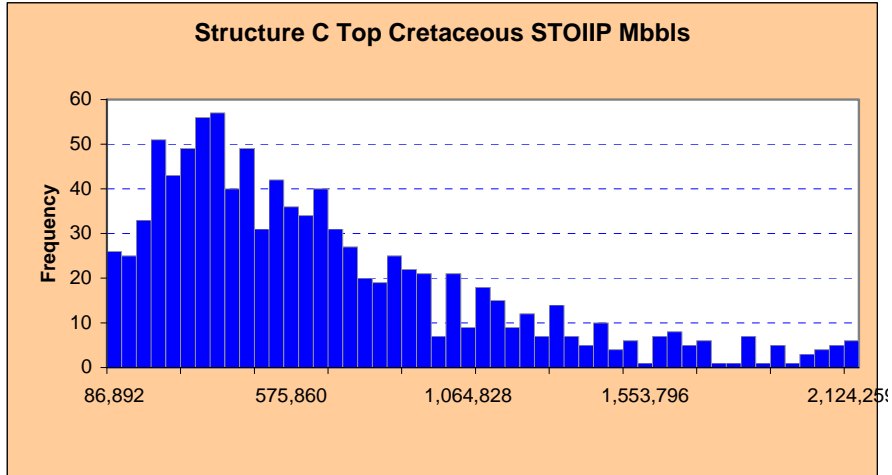
**Forecast: Structure C Top Cretaceous STOIP Mbbbls**

Summary:

Entire range is from 66,518 to 3,100,934

Base case is 825,453

After 1,000 trials, the std. error of the mean is 16,357



**Forecast: Structure C Top Cretaceous STOIP Mbbbls (cont'd)**

Percentiles:	Forecast values
P100	66,518
P90	201,752
P80	291,123
P70	358,485
P60	447,015
P50	552,565
P40	662,848
P30	816,085
P20	1,028,729
P10	1,397,312
P0	3,100,934

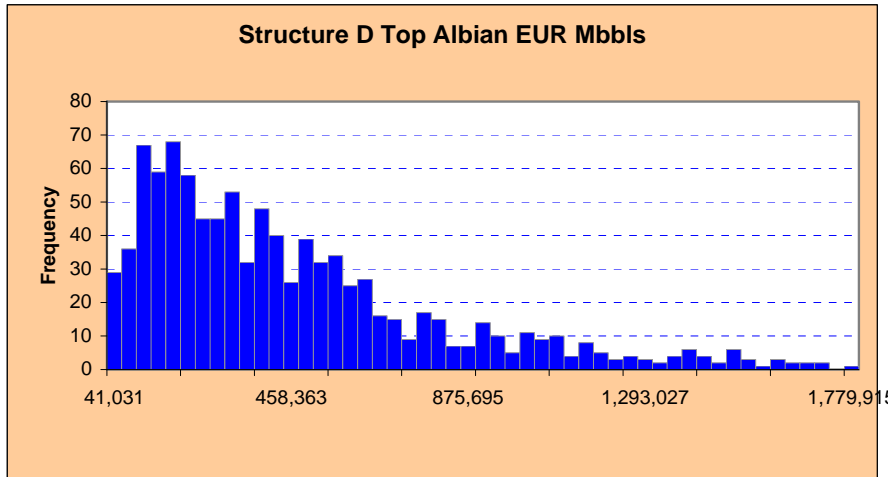
**Forecast: Structure D Top Albion EUR Mbbls**

Summary:

Entire range is from 23,642 to 3,589,776

Base case is 684,338

After 1,000 trials, the std. error of the mean is 14,583



**Forecast: Structure D Top Albion EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	23,642
P90	115,357
P80	166,195
P70	224,229
P60	295,991
P50	377,949
P40	466,556
P30	568,106
P20	742,930
P10	1,068,305
P0	3,589,776

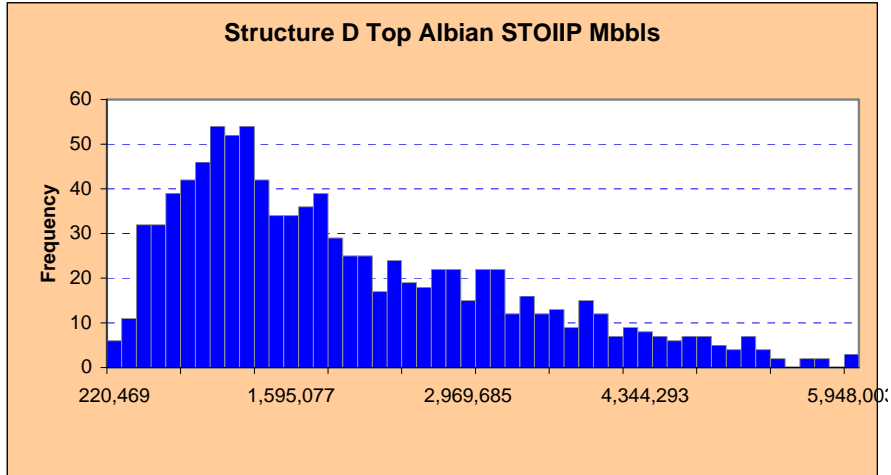
**Forecast: Structure D Top Albian STOIP Mbbls**

Summary:

Entire range is from 163,193 to 8,006,177

Base case is 2,766,129

After 1,000 trials, the std. error of the mean is 44,062



**Forecast: Structure D Top Albian STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	163,193
P90	677,899
P80	941,722
P70	1,163,749
P60	1,392,213
P50	1,703,475
P40	2,066,911
P30	2,623,057
P20	3,198,707
P10	4,029,830
P0	8,006,177

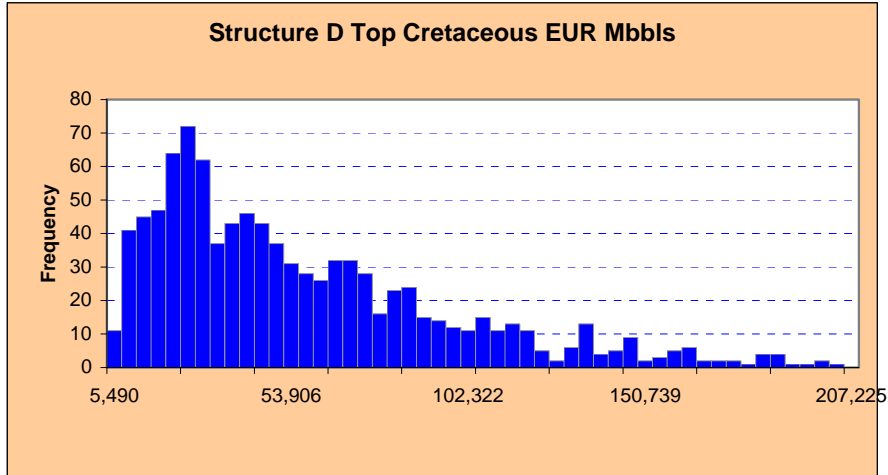
**Forecast: Structure D Top Cretaceous EUR Mbbls**

Summary:

Entire range is from 3,472 to 402,149

Base case is 76,452

After 1,000 trials, the std. error of the mean is 1,658



**Forecast: Structure D Top Cretaceous EUR Mbbls (cont'd)**

Percentiles:	Forecast values
P100	3,472
P90	15,695
P80	23,143
P70	28,867
P60	37,384
P50	46,823
P40	59,047
P30	72,392
P20	91,414
P10	132,009
P0	402,149

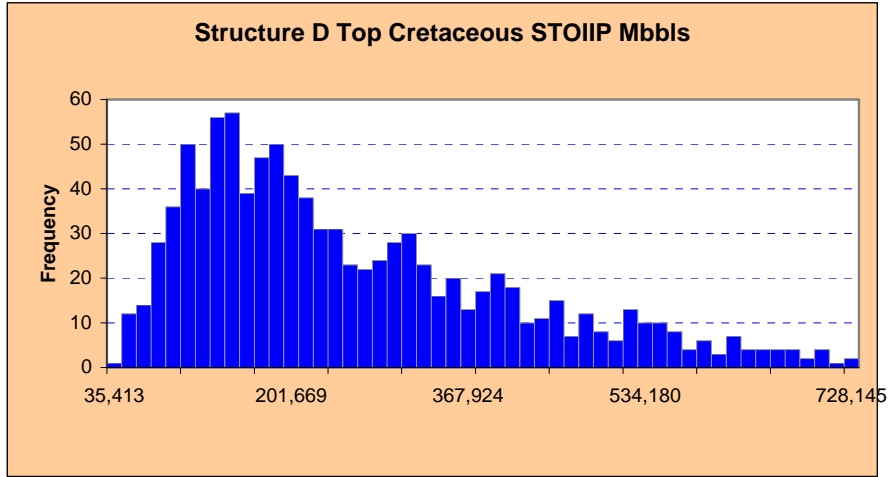
**Forecast: Structure D Top Cretaceous STOIP Mbbls**

Summary:

Entire range is from 28,486 to 995,201

Base case is 309,023

After 1,000 trials, the std. error of the mean is 5,273



**Forecast: Structure D Top Cretaceous STOIP Mbbls (cont'd)**

Percentiles:	Forecast values
P100	28,486
P90	99,396
P80	129,945
P70	155,363
P60	187,235
P50	217,450
P40	268,700
P30	319,334
P20	395,898
P10	517,710
P0	995,201

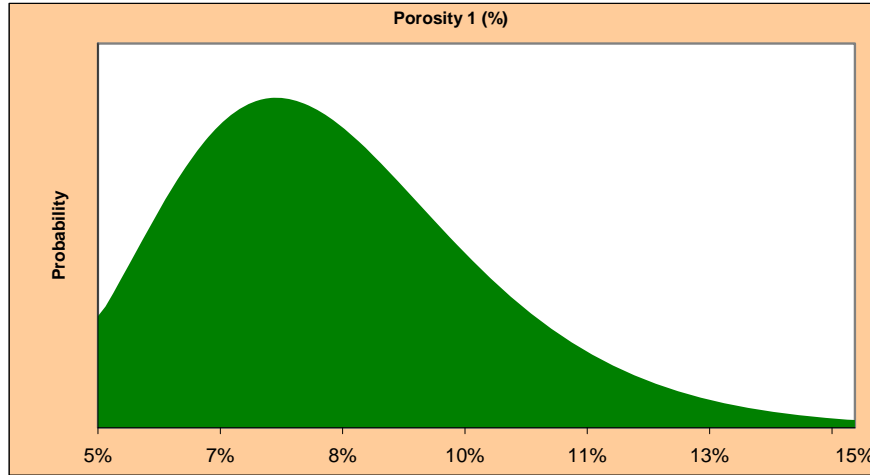
End of Forecasts

**Assumption: Porosity 1 (%)**

Lognormal distribution with parameters:

Location	0%
Mean	8% (=C\$32)
Std. Dev.	2% (=D\$32)

Selected range is from 5% to 15%

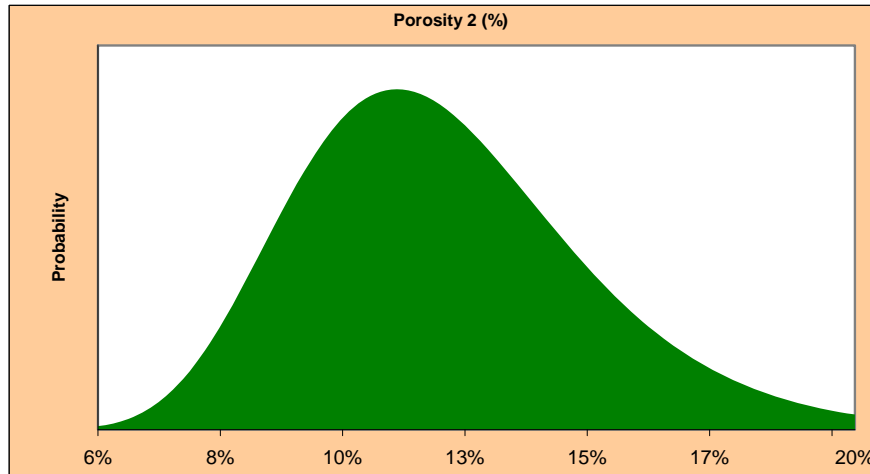


**Assumption: Porosity 2 (%)**

Lognormal distribution with parameters:

Location	0%
Mean	12% (=C\$33)
Std. Dev.	3% (=D\$33)

Selected range is from 5% to 20%



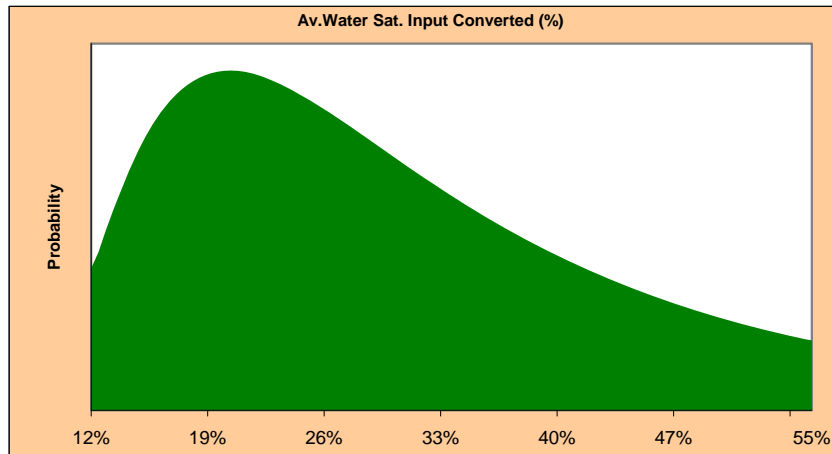


**Assumption: Av. Water Sat. Input Converted (%)**

Lognormal distribution with parameters:

Location	7%
Mean	36% (=C41)
Std. Dev.	24% (=D41)

Selected range is from 12% to 55%

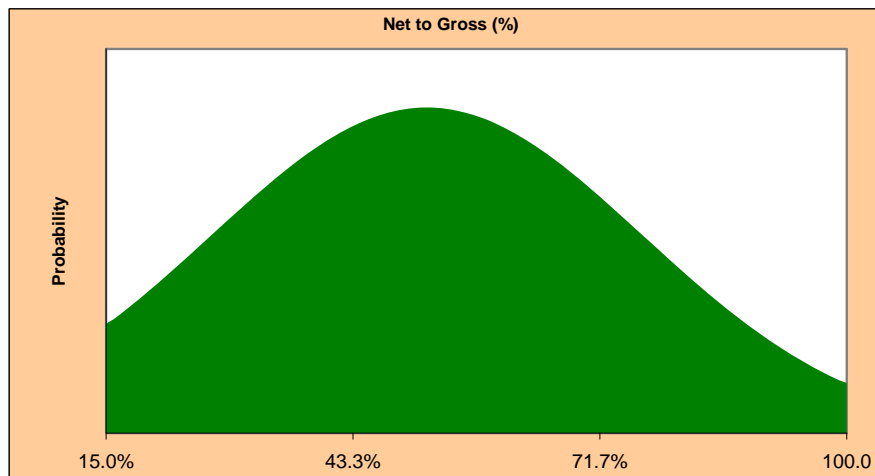


**Assumption: Net to Gross (%)**

Normal distribution with parameters:

Mean	51.8% (=C30)
Std. Dev.	24.8% (=D30)

Selected range is from 15.0% to 100.0%



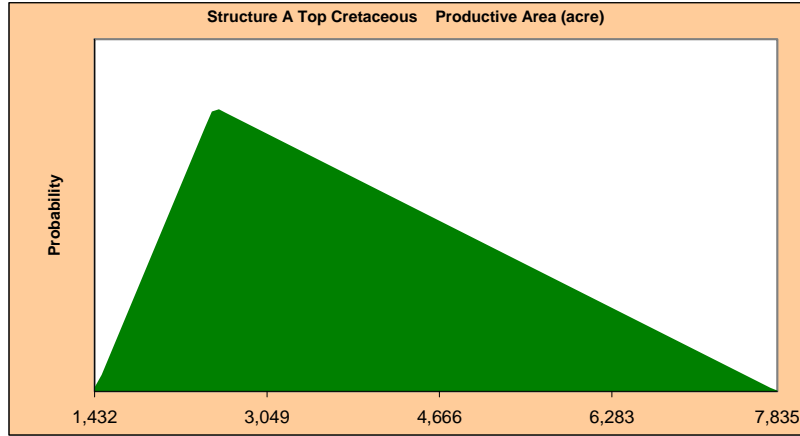
Correlated with:  
Gross Thickness 1 (feet) (G29)

Coefficient  
-0.88

**Assumption: Structure A Top Cretaceous Productive Area (acre)**

Triangular distribution with parameters:

Minimum	1,432	(=D63)
Likeliest	2,548	(=C63)
Maximum	7,835	(=B63)



Correlated with:  
Structure A Top Cretaceous Gross Thickness (feet) (G66)      Coefficient 0.89

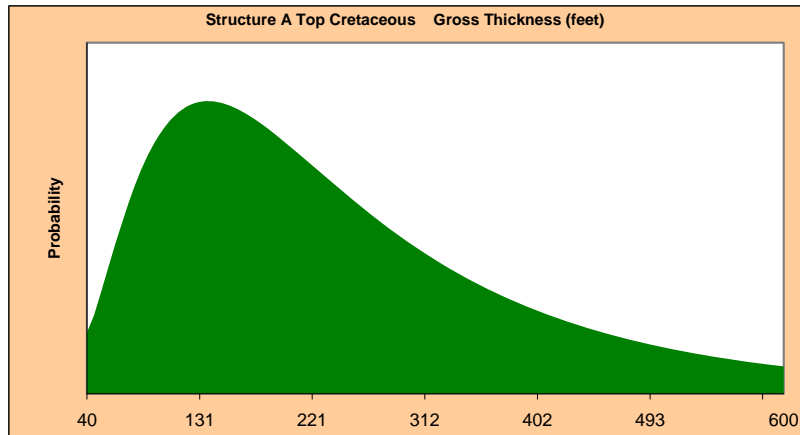
**Assumption: Structure A Top Cretaceous Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C66)
Std. Dev.	208 (=D66)

Selected range is from 40 to 600

**Assumption: Structure A Top Cretaceous Gross Thickness (feet) (cont'd)**

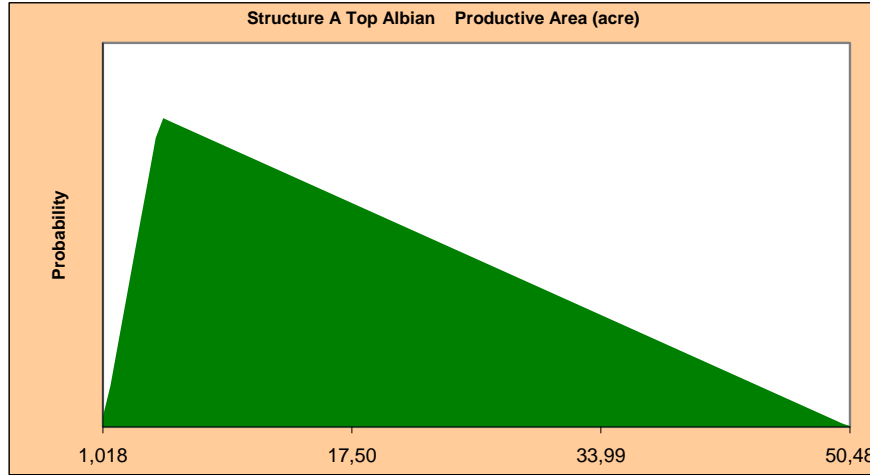


Correlated with:  
Structure A Top Cretaceous Productive Area (acre) (G63)      Coefficient 0.89  
G67 (G67)      -0.88

**Assumption: Structure A Top Albian Productive Area (acre)**

Triangular distribution with parameters:

Minimum	1,018	(=D78)
Likeliest	4,776	(=C78)
Maximum	50,482	(=B78)



Correlated with: Structure A Top Albian Gross Thickness (feet) (G81)      Coefficient 0.89

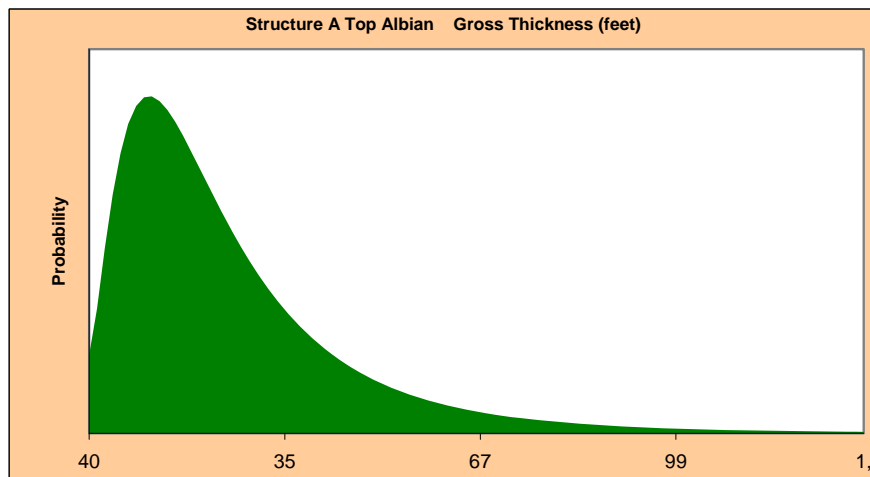
**Assumption: Structure A Top Albian Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C81)
Std. Dev.	208 (=D81)

Selected range is from 40 to 1,300

**Assumption: Structure A Top Albian Gross Thickness (feet) (cont'd)**

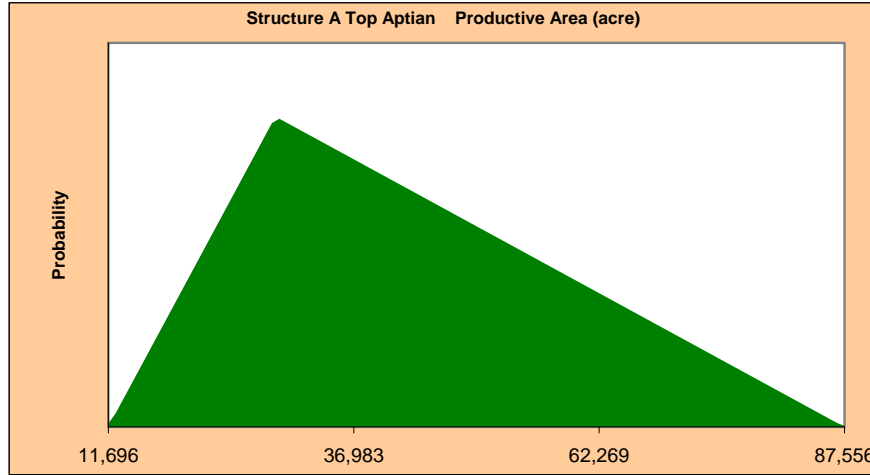


Correlated with: Structure A Top Albian Productive Area (acre) (G78)      Coefficient 0.89  
G82 (G82)      -0.88

**Assumption: Structure A Top Aptian Productive Area (acre)**

Triangular distribution with parameters:

Minimum	11,696	(=D93)
Likeliest	28,909	(=C93)
Maximum	87,556	(=B93)



Correlated with: Structure A Top Aptian Gross Thickness (feet) (G96)      Coefficient 0.89

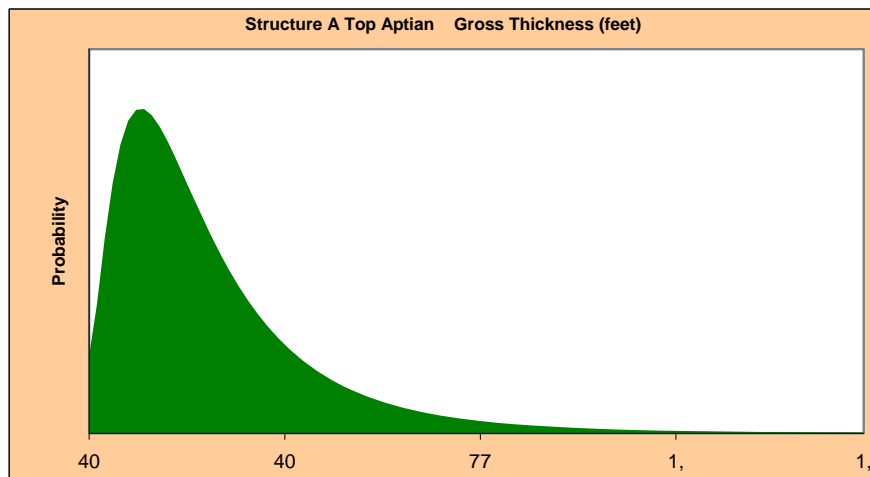
**Assumption: Structure A Top Aptian Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C96)
Std. Dev.	208 (=D96)

Selected range is from 40 to 1,500

**Assumption: Structure A Top Aptian Gross Thickness (feet) (cont'd)**

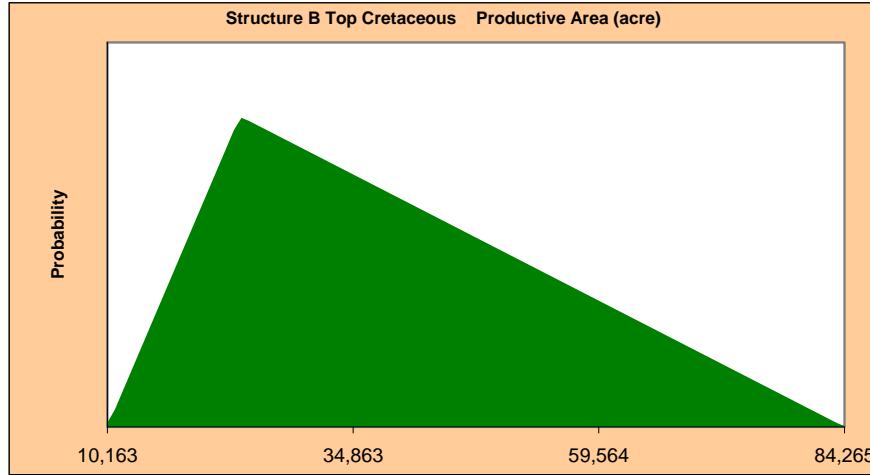


Correlated with: G97 (G97)      Coefficient -0.88  
Structure A Top Aptian Productive Area (acre) (G93)      Coefficient 0.89

**Assumption: Structure B Top Cretaceous Productive Area (acre)**

Triangular distribution with parameters:

Minimum	10,163	(=D112)
Likeliest	23,473	(=C112)
Maximum	84,265	(=B112)



Correlated with: Structure B Top Cretaceous Gross Thickness (feet) (G115) Coefficient 0.89

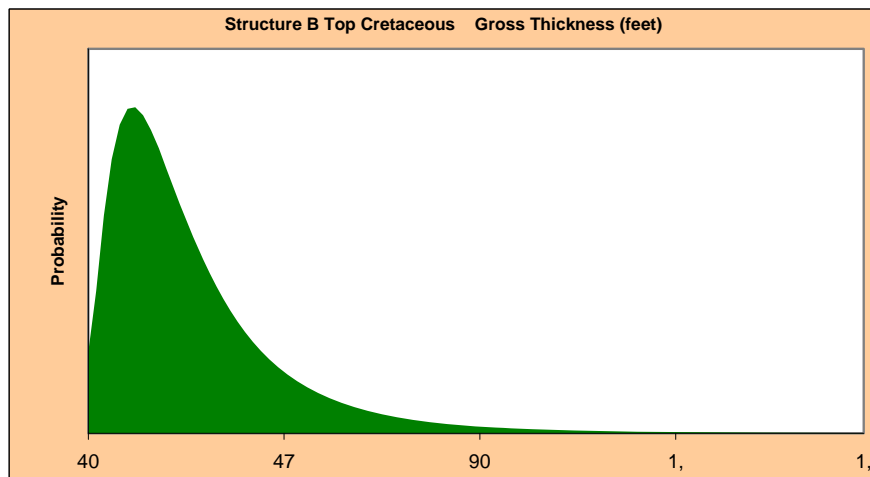
**Assumption: Structure B Top Cretaceous Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C115)
Std. Dev.	208 (=D115)

Selected range is from 40 to 4,200

**Assumption: Structure B Top Cretaceous Gross Thickness (feet) (cont'd)**

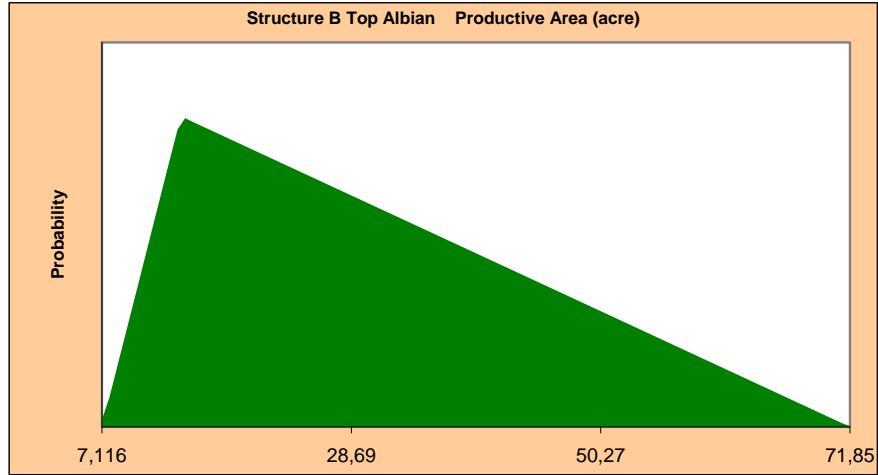


Correlated with: G116 (G116) Coefficient -0.88  
Structure B Top Cretaceous Productive Area (acre) (G112) Coefficient 0.89

**Assumption: Structure B Top Albian Productive Area (acre)**

Triangular distribution with parameters:

Minimum	7,116	(=D127)
Likeliest	13,939	(=C127)
Maximum	71,850	(=B127)



Correlated with: Structure B Top Albian Gross Thickness (feet) (G130)      Coefficient 0.89

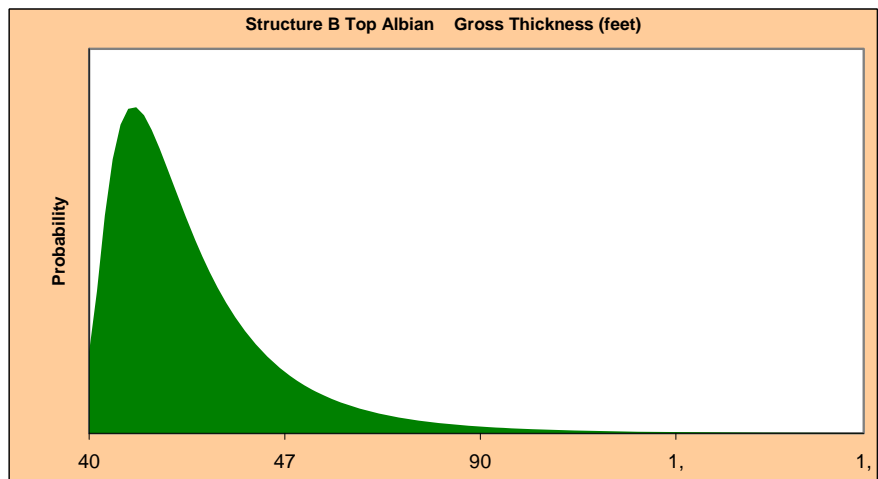
**Assumption: Structure B Top Albian Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C130)
Std. Dev.	208 (=D130)

Selected range is from 40 to 5,200

**Assumption: Structure B Top Albian Gross Thickness (feet) (cont'd)**

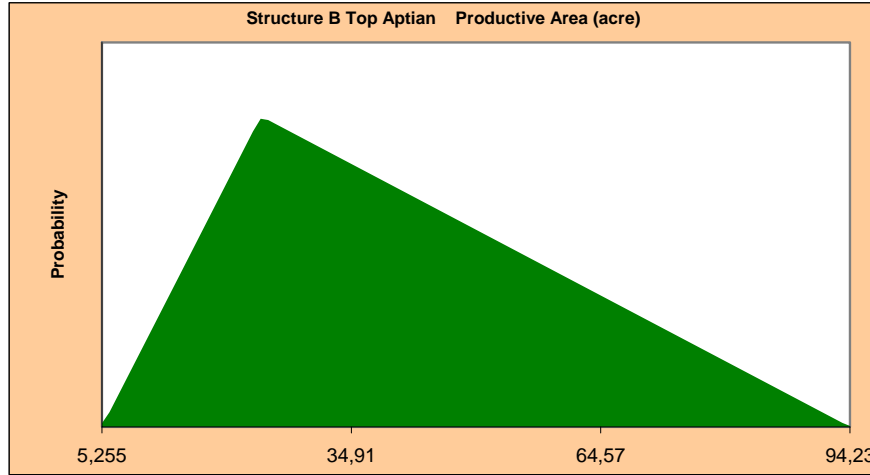


Correlated with: G131 (G131)      Coefficient -0.88  
Structure B Top Albian Productive Area (acre) (G127)      Coefficient 0.89

**Assumption: Structure B Top Aptian Productive Area (acre)**

Triangular distribution with parameters:

Minimum	5,255	(=D142)
Likeliest	24,152	(=C142)
Maximum	94,230	(=B142)



Correlated with: Structure B Top Aptian Gross Thickness (feet) (G145)      Coefficient 0.89

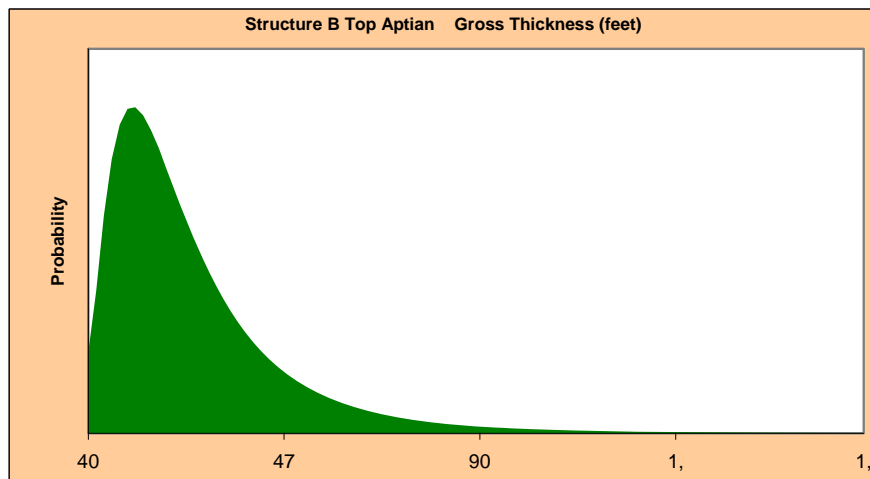
**Assumption: Structure B Top Aptian Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C145)
Std. Dev.	208 (=D145)

Selected range is from 40 to 6,400

**Assumption: Structure B Top Aptian Gross Thickness (feet) (cont'd)**

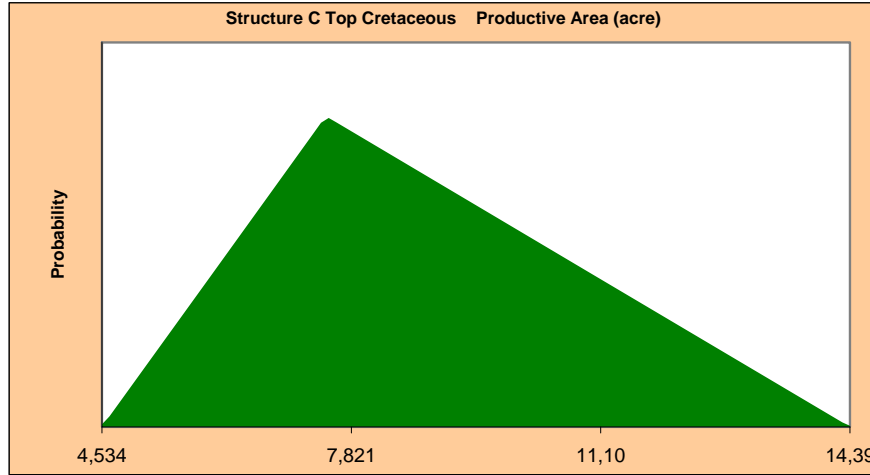


Correlated with: G146 (G146)      Coefficient -0.88  
Structure B Top Aptian Productive Area (acre) (G142)      Coefficient 0.89

**Assumption: Structure C Top Cretaceous Productive Area (acre)**

Triangular distribution with parameters:

Minimum	4,534	(=D161)
Likeliest	7,484	(=C161)
Maximum	14,394	(=B161)



Correlated with: Structure C Top Cretaceous Gross Thickness (feet) (G164) Coefficient 0.89

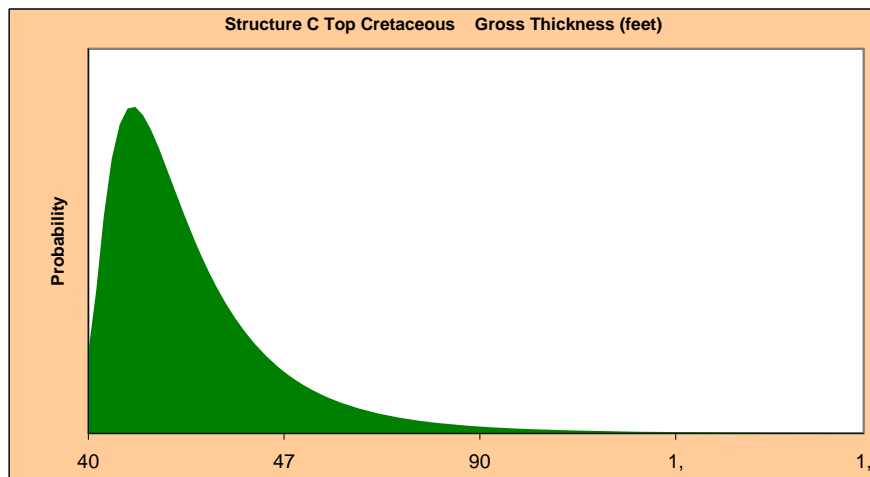
**Assumption: Structure C Top Cretaceous Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C164)
Std. Dev.	208 (=D164)

Selected range is from 40 to 1,800

**Assumption: Structure C Top Cretaceous Gross Thickness (feet) (cont'd)**



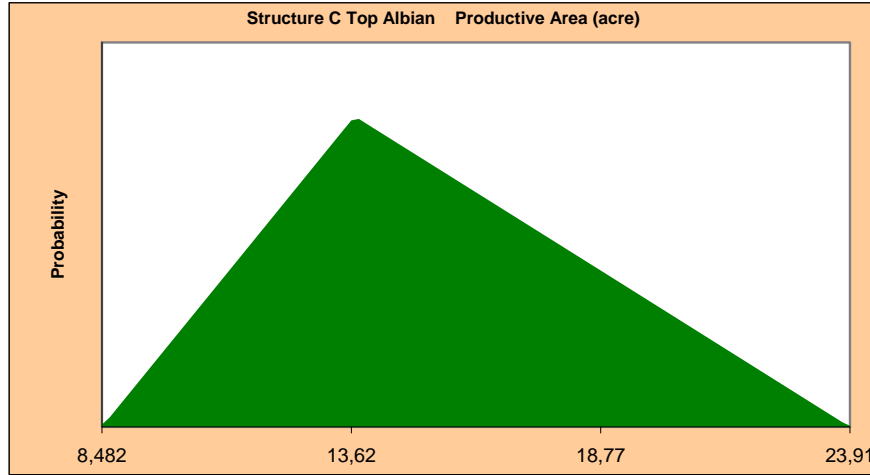
Correlated with: Structure C Top Cretaceous Productive Area (acre) (G161) Coefficient 0.89  
G165 (G165) -0.88



**Assumption: Structure C Top Albian Productive Area (acre)**

Triangular distribution with parameters:

Minimum	8,482	(=D176)
Likeliest	13,696	(=C176)
Maximum	23,916	(=B176)



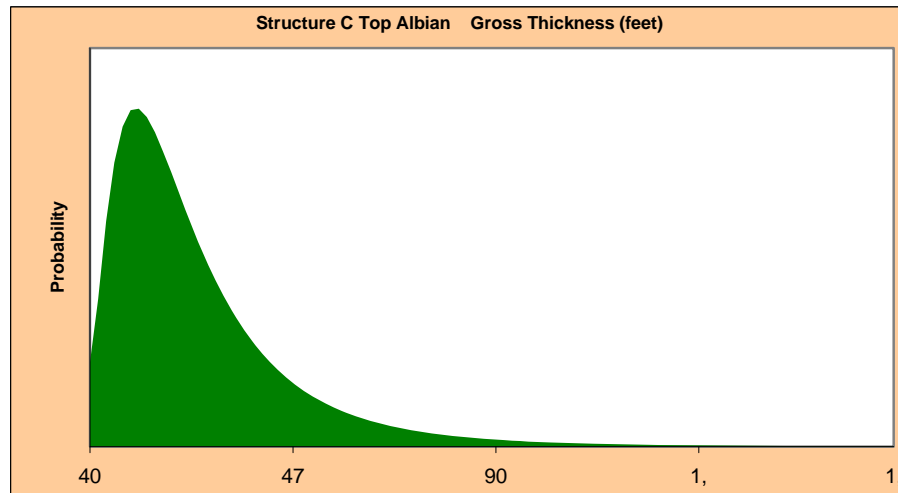
Correlated with: Structure C Top Albian Gross Thickness (feet) (G179)      Coefficient 0.89

**Assumption: Structure C Top Albian Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C179)
Std. Dev.	208 (=D179)

Selected range is from 40 to 3,200

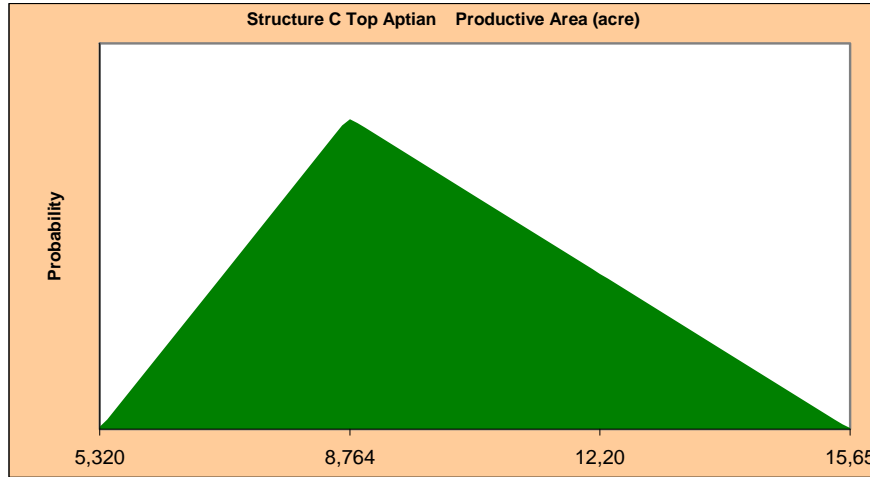


Correlated with: Structure C Top Albian Productive Area (acre) (G176)      Coefficient 0.89  
G180 (G180)      -0.88

**Assumption: Structure C Top Aptian Productive Area (acre)**

Triangular distribution with parameters:

Minimum	5,320	(=D191)
Likeliest	8,746	(=C191)
Maximum	15,653	(=B191)



Correlated with: Structure C Top Aptian Gross Thickness (feet) (G194)      Coefficient 0.89

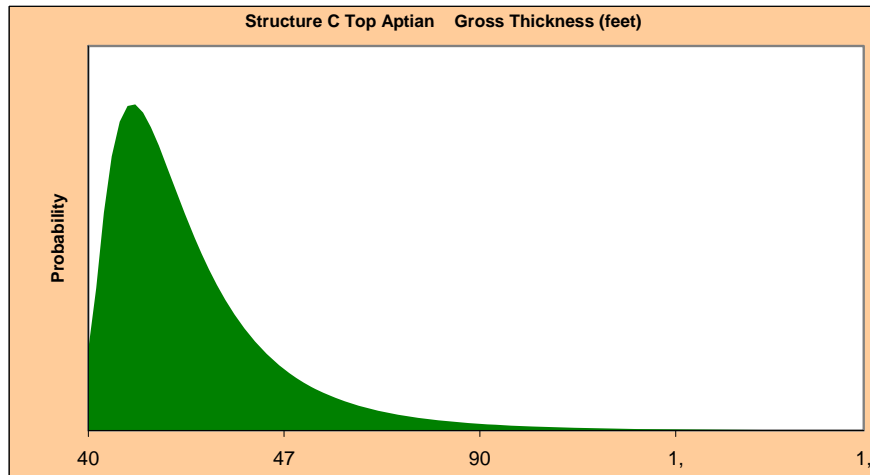
**Assumption: Structure C Top Aptian Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C194)
Std. Dev.	208 (=D194)

Selected range is from 40 to 3,000

**Assumption: Structure C Top Aptian Gross Thickness (feet) (cont'd)**

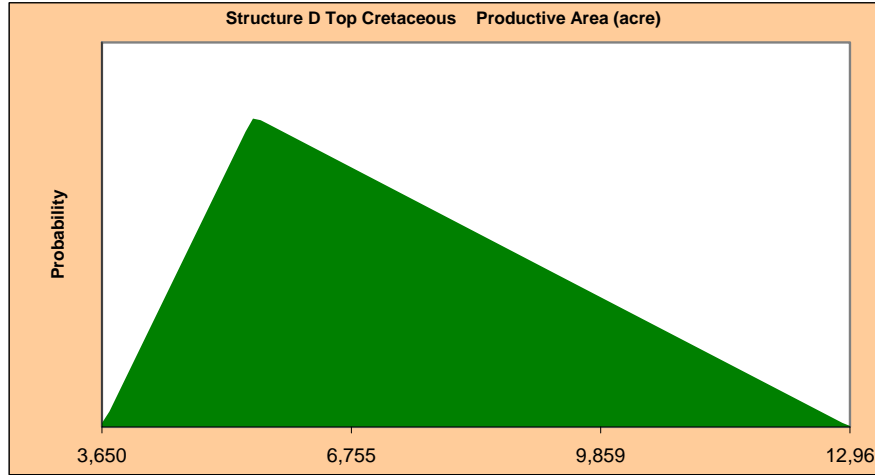


Correlated with: G195 (G195)      Coefficient -0.88  
Structure C Top Aptian Productive Area (acre) (G191)      Coefficient 0.89

**Assumption: Structure D Top Cretaceous Productive Area (acre)**

Triangular distribution with parameters:

Minimum	3,650	(=D211)
Likeliest	5,531	(=C211)
Maximum	12,964	(=B211)



Correlated with: Structure D Top Cretaceous Gross Thickness (feet) (G214) Coefficient 0.89

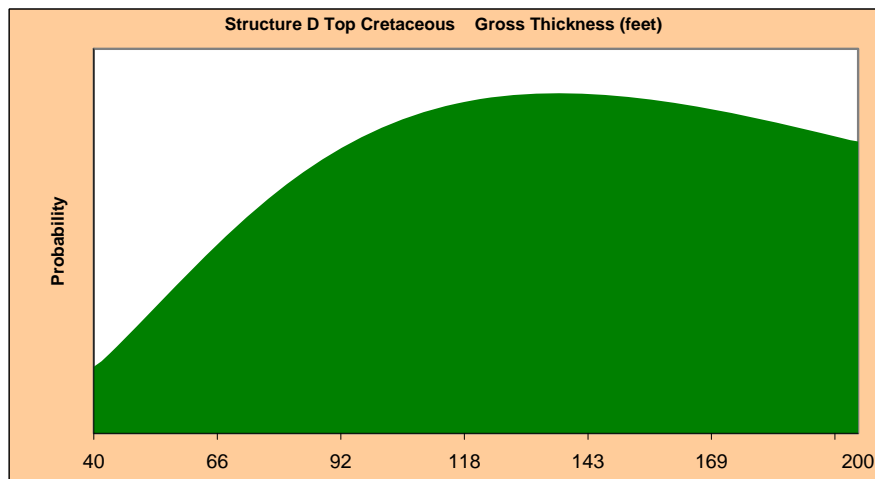
**Assumption: Structure D Top Cretaceous Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C214)
Std. Dev.	208 (=D214)

Selected range is from 40 to 200

**Assumption: Structure D Top Cretaceous Gross Thickness (feet) (cont'd)**

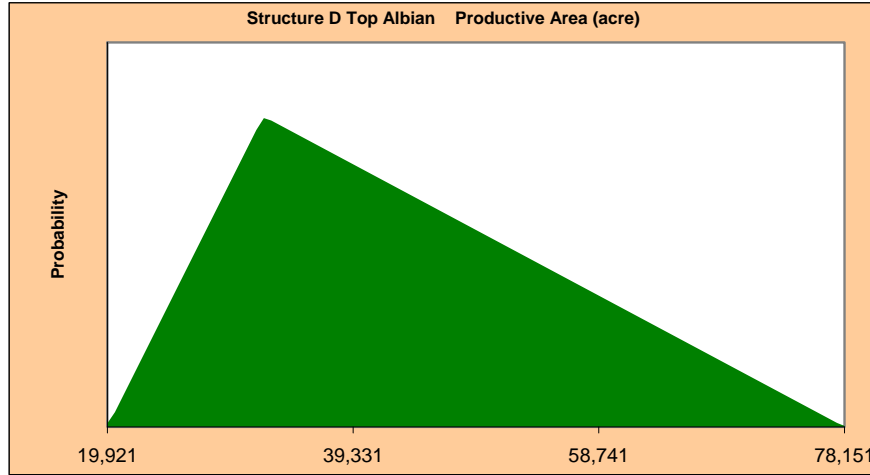


Correlated with: Structure D Top Cretaceous Productive Area (acre) (G211) Coefficient 0.89  
G215 (G215) Coefficient -0.88

**Assumption: Structure D Top Albian Productive Area (acre)**

Triangular distribution with parameters:

Minimum	19,921	(=D226)
Likeliest	32,224	(=C226)
Maximum	78,151	(=B226)



Correlated with: Structure D Top Albian Gross Thickness (feet) (G229)      Coefficient 0.89

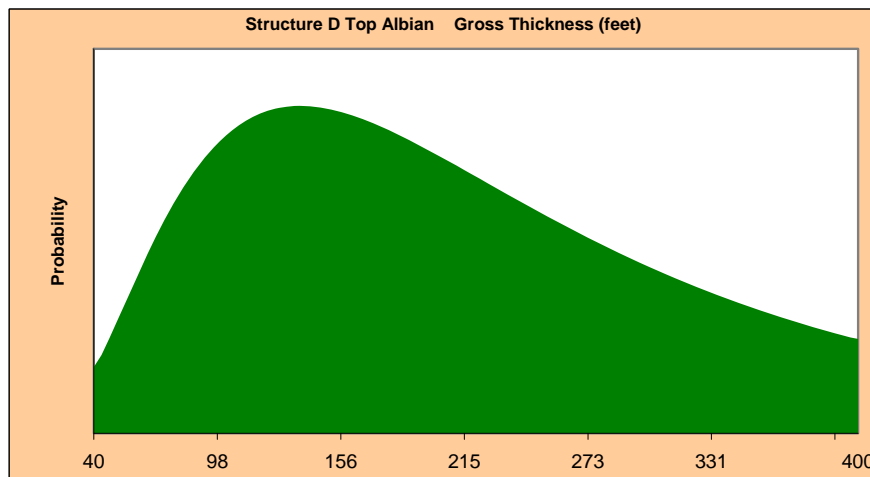
**Assumption: Structure D Top Albian Gross Thickness (feet)**

Lognormal distribution with parameters:

Location	(0)
Mean	273 (=C229)
Std. Dev.	208 (=D229)

Selected range is from 40 to 400

**Assumption: Structure D Top Albian Gross Thickness (feet) (cont'd)**



Correlated with: Structure D Top Albian Productive Area (acre) (G226)      Coefficient 0.89  
G230 (G230)      -0.88

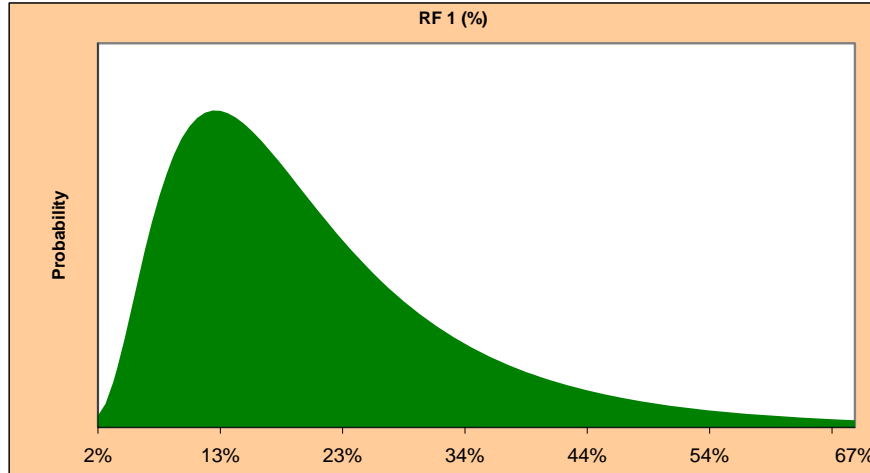
**Assumption: RF 1 (%)**

Lognormal distribution with parameters:

Location	0%
Mean	22% (=C53)
Std. Dev.	15% (=D53)

Selected range is from 2% to 67%

**Assumption: RF 1 (%) (cont'd)**



**Assumption: RF 2 (%)**

Lognormal distribution with parameters:

Location	0%
Mean	28% (=C54)
Std. Dev.	12% (=D54)

Selected range is from 7% to 58%

