

CASE STUDY ANALYSIS

EAGLE FORD



Hidalgo County, Texas

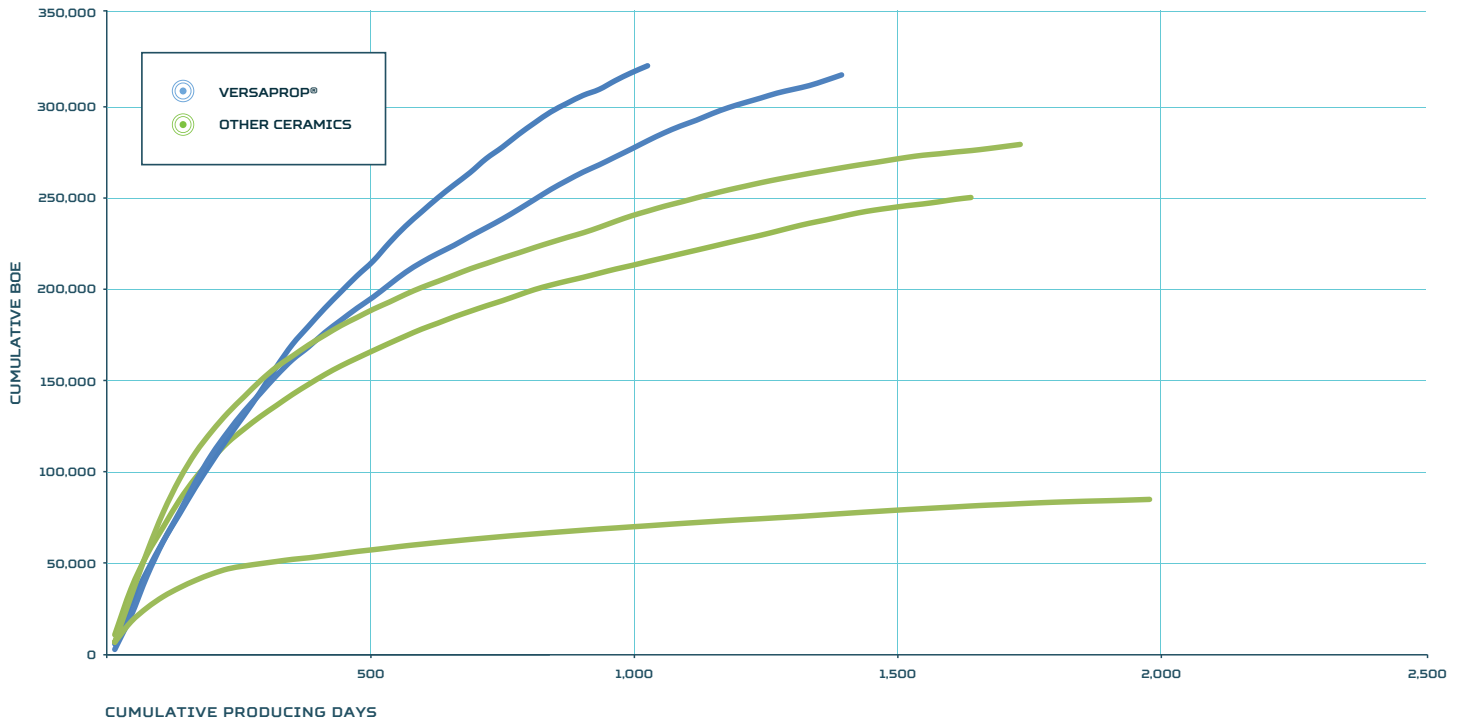
CASE SUMMARY

Proppants have a tough job. They must retain fracture geometry and provide sustainable conductivity to the wellbore at application conditions. How well they do their job depends on the application environment. Unconventional wells, with their thin fractures, minimize proppant pack height and increase the pressure on the proppant bead. In thin layer/monolayer conditions, only the highest strength and highest quality proppants have the strength to maximize well production.

Only some proppants are Well Worth It™!



CUMULATIVE PRODUCTION, VERSAPROP® VS NEIGHBORING WELLS



VERSAPROP® DIFFERENTIATION

OVER CERAMIC COMPLETIONS

↑70%↑
INCREASE

1020-Day Cumulative BOE

↑66%↑
INCREASE

3-Year Cash Flow

Proppant Type	1020-Day Cumulative BOE	3-Year Cash Flow (\$ MIL)
VersaProp®	276,583	2.80
VersaProp®	316,863	3.18
Other Ceramics	71,250	0.73
Other Ceramics	239,514	2.51
Other Ceramics	212,119	2.16

PARAMETERS USED IN ECONOMIC ANALYSIS: WTI@\$55, 20% ROYALTY, GAS @ \$4.00

API #	42-215-34106	42-215-34136	42-215-34059	42-215-34077	42-215-34076
Basin	Gulf Coast	Gulf Coast	Gulf Coast	Gulf Coast	Gulf Coast
State, County	TX, Hidalgo	TX, Hidalgo	TX, Hidalgo	TX, Hidalgo	TX, Hidalgo
Well Name	MCALLEN, A. A. 'B'	MCALLEN, A. A. 'B'	MCALLEN, A. A. 'B'	MCALLEN, A. A. 'B'	MCALLEN, A. A. 'B'
Well Number	94	97	88	91	90
Latitude	26.660860	26.661608	26.655438	26.658431	26.663584
Longitude	-98.256690	-98.245175	-98.259326	-98.254393	-98.251230
Service Provider	Available upon request	Available upon request	Available upon request	Available upon request	Available upon request
Operator	Available upon request	Available upon request	Available upon request	Available upon request	Available upon request
Trajectory	Vertical	Vertical	Vertical	Vertical	Vertical
Fracture Date	2/19/2014	2/15/2015	6/17/2012	3/14/2013	6/10/2013
True Vertical Depth (ft)	14,633	14,390	14,905	14,400	14,588
Vertical Producing Interval (ft)	-	-	-	-	-
Total Water Volume (gal)	781,478	636,068	309,567	639,171	718,337
Frac Fluid Type	CrossLink	CrossLink	CrossLink	CrossLink	CrossLink
Saint-Gobain Ceramic Proppant (Y/N)	Y	Y	N	N	N
Proppant Type	Ceramic Only	Ceramic Only	Ceramic Only	Ceramic Only	Ceramic Only
Total Proppant Mass (lbs)	885,250	1,294,560	531,260	1,200,000	1,064,000
Total SG Proppant Mass (lbs)	885,250	1,294,560	0	0	0
SG Proppant Name	VersaProp®	VersaProp®	-	-	-
Total Sand Proppant Mass (lbs)	0	0	0	0	0
Sand Proppant Name	-	-	-	-	-
Total Other Proppant Mass (lbs)	0	0	531,260	1,200,000	1,064,000
Other Proppant Name	-	-	Other Ceramics	Other Ceramics	Other Ceramics



Saint-Gobain Proppants

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