

Hydraulic Fracturing Fluid Product Component Information Disclosure							
	Fracture Date:	12/15/2011					
	State:	California					
	County:	Kern					
	API Number:	04-030-37933					
	Operator Name:	Vintage Prod Of Cal					
	Well Name and Number:	Bear Mountain 1-17					
	Longitude:	-119.20907					
	Latitude:	35.23054					
	Long/Lat Projection:	NAD27					
	Production Type:	Oil					
True Vertical Depth (TVD):		11,523					
Total Water Volume (gal)*:		80,052					
Hydraulic Fracturing Fluid Composition:							
Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier	Water	7732-18-5	100.00%	84.91775%	0
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30.00%	0.02200%	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.01139%	SmartCare Product
0	0	0	Water	7732-18-5	97.00%	0.36837%	0
High Perm CRB	Baker Hughes	Breaker	Ammonium Persulphate	7727-54-0	100.00%	0.00382%	SmartCare Product
0	0	0	Crystalline Silica Quartz	14808-60-7	15.00%	0.00057%	0
BC-3	Baker Hughes	Breaker Catalyst	Non-Hazardous Ingredient	Trade Secret	100.00%	0.00583%	0
Caustic Liquid, 25% Solution	Baker Hughes	Buffer	Sodium Hydroxide	1310-73-2	25.00%	0.01542%	0
0	0	0	Water	7732-18-5	75.00%	0.04625%	0
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	50.00%	0.44940%	SmartCare Product
XLW-56	Baker Hughes	Crosslinker	D-Glucitol	50-70-4	10.00%	0.06318%	0
0	0	0	Glyoxal	107-22-2	30.00%	0.18955%	0
0	0	0	Sodium Hydroxide	1310-73-2	5.00%	0.03159%	0
0	0	0	Sodium Tetraborate	1330-43-4	10.00%	0.06318%	0
GLFC-1B	Baker Hughes	Gelling Agent	Alkanes / Alkenes	Multiple	45.00%	0.46971%	0
0	0	0	Guar Gum	9000-30-0	50.00%	0.52189%	0
Sand, White, 100 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00%	0.38168%	0
Econoprop, 30/50	Baker Hughes	Proppant	Mullite	1302-76-7	70.00%	8.95211%	0
0	0	0	Silicon Dioxide (Crystalline)	60676-86-0	25.00%	3.19718%	0
GasFlo G, 330 gal	Baker	Surfactant	Methanol	67-56-1	30.00%	0.05421%	SmartCare Product

