

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	3/2/2011
State:	NEW MEXICO
County:	COLFAX
API Number:	30-007-20826
Operator Name:	EI PASO E&P
Well Name and Number:	VPR A-314
Longitude:	-104.778
Latitude:	36.903
Long/Lat Projection:	NAD27
Production Type:	Gas
True Vertical Depth (TVD):	2,420
Total Water Volume (gal)*:	27,300

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
MAV 100	MAVERICK	GELLING AGENT	Guar Guam	9000-30-0	95.00%	8.50631%	
BREAKER 503L	MAVERICK	BREAKER	Ethylene Glycol	107-21-1	15.00%	0.00061%	
GB-3	MAVERICK	BREAKER	Ammonium persulfate	7727-54-0	100.00%	0.10745%	
WF-1-W	MAVERICK	FOAMER	Ethylene Glycol	107-21-1	11.00%	0.03940%	
MA-845	MAVERICK	SURFACTANT	Secondary Alcohol	Not Listed	100.00%	0.17908%	
MA-845	MAVERICK	SURFACTANT	Essential Oils	Not Listed	100.00%	0.17908%	
MAVHIB-3	MAVERICK	INHIBITOR	Proprietary	Proprietary	100.00%	0.00611%	
MAVHIB-3	MAVERICK	INHIBITOR	Methanol	67-56-1	100.00%	0.00611%	
MAVHIB-3	MAVERICK	INHIBITOR	2-Propyn-1-ol	107-19-7	100.00%	0.00611%	
HCL	MAVERICK	ACID	Hydrochloric Acid	7647-01-0	100.00%	3.05250%	
BIO-CLEAR 1000	MAVERICK	BIOCIDE	2,2-dibromo-3-nitrilopropionamide	10222-01-2	97.60%	0.08739%	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.