

Submit within 45 days of well completion

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Revised February 15, 2012

1. WELL API NO.
30-015-38953

2. Well Name:
ARCTURUS 18 FEDERAL #003H

3. Well Number:
003H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:M Lot:4 Section:18 Township:19S Range:31E
Feet from:1200 N/S Line:S
Feet from:340 E/W Line:W

5. Bottom Hole Location:
Unit:M Lot:4 Section:18 Township:19S Range:31E
Feet from:1200 N/S Line:S
Feet from:340 E/W Line:W

6. latitude: 32.6563998727303 longitude: - 103.915918324998

7. County:
Eddy

8. Operator Name and Address:
DEVON ENERGY PRODUCTION COMPANY, LP
333 W. Sheridan Avenue
Oklahoma City 73102

9. OGRID:
6137

10. Phone Number:
405-228-8588

11. Last Fracture Date: 2/6/2012 Frac Performed by: Baker Hughes

12. Production Type:
O

13. Pool Code(s):
97020

14. Gross Fractured Interval:
9,809 ft to 13,503 ft

15. True Vertical Depth (TVD):
8,859 ft

16. Total Volume of Fluid Pumped:
29,695 bbls

17. HYDRAULIC FLUID COMPOSITION AND CONCENTRATION:

Trade Name	Supplier	Purpose	Ingredients	(CAS #) Chemical Abstract Service #	Maximum Ingredient Concentration in Additive (% by mass)	Maximum Ingredient Concentration in HF Fluid (% by mass)
Water	Operator	Carrier	Water	7732-18-5	100%	83.78987%
HCl, 5.1 - 7.5%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	7.5%	0.04966%
			Water	7732-18-5	92.5%	0.61246%
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5%	4E-05%
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10%	8E-05%
			Crystalline Silica: Cristobalite	14464-46-1	1%	1E-05%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	1E-05%
			Diatomaceous Earth, Calcined	91053-39-3	60%	0.00051%
			Magnesium Chloride	7786-30-3	5%	4E-05%
			Magnesium Nitrate	10377-60-3	10%	8E-05%
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30%	0.00793%
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3%	0.00186%
			Water	7732-18-5	97%	0.06015%
High Perm CRB	Baker Hughes	Breaker	Ammonium Persulfate	7727-54-0	100%	0.00161%
			Crystalline Silica Quartz	14808-60-7	15%	0.00024%
GBW-18	Baker Hughes	Breaker	Sodium Persulfate	7775-27-1	100%	0.00089%
GBW-33D	Baker Hughes	Breaker	Calcium Carbonate	471-34-1	7%	3E-05%
			Corn Meal	N.A.	83%	0.00033%
			Linseed Meal	8001-26-1	10%	4E-05%
BF-9L, 55 gal drum	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60%	0.03662%
			Potassium Hydroxide	1310-58-3	30%	0.01831%
ClayCare, tote	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75%	0.06748%
			Water	7732-18-5	30%	0.02699%
Clay Master-5C	Baker Hughes	Clay Control	Oxyakylated Amine Quat	138879-94-4	60%	0.00019%
CI-27	Baker Hughes	Corrosion Inhibitor	Alkenes^ C>10 Alpha-	64743-02-8	5%	5E-05%
			Ethoxylated Alcohols^ C14-15	68951-67-7	30%	0.00027%
			Methanol	67-56-1	60%	0.00054%
			Propargyl Alcohol	107-19-7	10%	9E-05%
			Tall Oil Acid	61790-12-3	30%	0.00027%
			Thiourea Polymer	68527-49-1	30%	0.00027%
XLW-4	Baker Hughes	Crosslinker	Sodium Borate Decahydrate	1303-96-4	30%	0.00901%
XLW-30G, drum	Baker Hughes	Crosslinker	Borate Suspension	Trade Secret	99.8%	0.07843%
			Crystalline Silica Quartz	14808-60-7	0.2%	0.00016%
FRW-14 (Small Tote)	Baker Hughes	Friction Reducer	No Hazardous Ingredients	Trade Secret	100%	0.01429%
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	40%	0.26015%
			Petroleum Distillates Blend	Trade Secret	70%	0.45527%
AG-12	Baker Hughes	Gelling Agent	Acrylic Polymers	26006-22-4	60%	0.00118%
			Distillates, Petroleum, Hydrotreated Middle	64742-47-8	30%	0.00059%
			Nonylphenol Ethoxylate	64742-46-7	5%	0.0001%
Ferrotrol 280L	Baker Hughes	Iron Control	Ammonium Hydroxide	1336-21-6	5%	9E-05%
			Cupric Chloride	10125-13-0	5%	9E-05%
			Thioglycol	60-24-2	100%	0.00176%
NE-945, tote	Baker Hughes	Non-emulsifier	Oxyalkylated alcohol	Trade Secret	5%	0.00437%
Sand, White, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	10.81882%
Sand, White, 100 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	0.42947%
BDX93148 Oil Plus, 20/40, bulk	Baker Hughes	Proppant	Quartz (SiO2)	14808-60-7	100%	3.17994%
ES-4A, Greenskeeper Solvent	Baker Hughes	Solvent	Petroleum Distillates Blend	Trade Secret	100%	0.01183%
InFlo 250W	Baker Hughes	Surfactant	2-Butoxyethanol	111-76-2	20%	0.00867%
			Methanol	67-56-1	30%	0.013%
			Surfactants	Trade Secret	80%	0.03467%
Flo-Back Prime (tote)	Baker Hughes	Surfactant	Essential Oils	Trade Secret	100%	0.00059%
			Secondary Alcohol	Trade Secret	100%	0.00059%
Additional Ingredients			Aliphatic Hydrocarbon	Trade Secret	0%	0%
			Citrus Terpenes	94266-47-4	0%	0%
			Crystalline Silica	14808-60-7	0%	0%
			Cured Acrylic Resin	Trade Secret	0%	0%
			Ethylene Glycol Monobutyl Ether	111-76-2	0%	0%
			Formaldehyde	50-00-0	0%	0%
			Glycerin	56-81-5	0%	0%
			Isopropanol	67-63-0	0%	0%
			Mannan Endo-1,4-B-Mannosidase	37288-54-3	0%	0%
			Methanol	67-56-1	0%	0%
			Organic Polyol	112-27-6	0%	0%
			Oxyalkylated Alcohol	Trade Secret	0%	0%
			Poly (oxy-1,2-ethanediyl)	24938-91-8	0%	0%
			Polyglycol Ester	Trade Secret	0%	0%
			Polyol Ester	Trade Secret	0%	0%
			Quaternary Ammonium Compounds bis [Hydrogenated Tallow Alkyl] Dimethyl Salts With Bentonite	68953-58-2	0%	0%
			Sodium Chloride	7647-14-5	0%	0%
			Surfactants	Trade Secret	0%	0%
			Vinyl Copolymer	Trade Secret	0%	0%
			Water	7732-18-5	0%	0%

18. I, as Operator, hereby certify that the information shown on this disclosure form is true and complete to the best of my knowledge and belief.

Signature: Signed Electronically

Printed Name: Derek Berg

Title: Engineering Technician

Date: 11/6/2012

E-mail Address: derek.berg@dvn.com

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