·			RECEIVE	Ū		
Form 3160-5 (August 2007)	UNITED STATES	,	CTRONIC R	EPORT		APPROVED 0. 1004-0135
	UREAU OF LAND MANA		FEB 2 7 20	)15		July 31, 2010
Do not use th	NOTICES AND REPO	drill or to re	enter an		751141038	·····
abandoned we	abandoned well. Use form 3160-3 (APD) for such proposals. MANAGEMENT			6. If Indian, Allottee c UTE MOUNTAI		
SUBMIT IN TRI	SUBMIT IN TRIPLICATE - Other instructions on reverse side.			7. If Unit or CA/Agree	ement, Name and/or No.	
.1. Type of Well Oil Well Gas Well Ot	her				8. Well Name and No. PRAIRIE FALCO	N 19-1
2. Name of Operator BRIDGECREEK RESOURCE	Contact: S COLO E-Mail: ccampbell@	CHRISTINE palomarnr.co	CAMPBELL m		9. API Well No. 30-045-35628-0	00- <b>X</b> 1
<ul> <li>3a. Address</li> <li>8100 SOUTHPARK WAY, SULITTLETON, CO 80127</li> <li>4. Location of Well (Footage, Sec., 7)</li> </ul>		Ph: 303-66	. (include area code i8-8318	)	<ol> <li>Field and Pool, or VERDE GALLU</li> <li>11. County or Parish, and the second second</li></ol>	P
Sec 19 T31N R14W NWNE 6 36.891898 N Lat, 108.348346	66FNL 1971FEL	,			SAN JUAN COU	
12. CHECK APPI	ROPRIATE BOX(ES) TO	) INDICATE	NATURE OF	NOTICE, RI	EPORT, OR OTHE	R DATA
TYPE OF SUBMISSION			ТҮРЕ О	F ACTION		
□ Notice of Intent	🗖 Acidize	Dec	pen	Product	ion (Start/Resume)	Uwater Shut-Off
Subsequent Report	Alter Casing	, 🛛 🖾 Frac	ture Treat	🗖 Reclam	ation	Well Integrity
	Casing Repair		Construction	🗖 Recomp		Other
Final Abandonment Notice	Change Plans		g and Abandon		arily Abandon	
13. Describe Proposed or Completed Op	Convert to Injection	Plug			-	
If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involved testing has been completed. Final Al determined that the site is ready for f	ally or recomplete horizontally, rk will be performed or provide l operations. If the operation res bandonment Notices shall be file	give subsurface the Bond No. of sults in a multip	locations and meas n file with BLM/BL e completion or rec	ared and true vo A. Required sub completion in a page	rtical depths of all pertin osequent reports shall be new interval, a Form 316	ent markers and zones. filed within 30 days 0-4 shall be filed once
Bridgecreek Resources (CO), Prairie Falcon 19-1 for approv	LLC respectfully submits ral.	the proposed	I chemical list fo	r the frac on	the	
We have not finalized negotia these vendors will be perform shown on their respective atta	ing the frac job on this we	ourton and Ba Il using the re	iker Hughes), bu espective list of a	ut on AGG		
We are anticipating the compl	etion to begin mid-March	2015, weath	er dependent.		MAR 1 9 201	5
	OIL CO	NS. DIV D	IST. 3	By:	Du	-
				Tres	Rios Field Office	
	M	AR 30 20	15	Bure	eau of Land Mana	agement
14. I hereby certify that the foregoing is	s true and correct. Electronic Submission #2	202227 vorifio	d by the BLM Me	li Information	Suctom	
Com	For BRIDGECREEK	RESOURCES	CÓLO LLC, ser	t to the Dura	ngó	
	NE CAMPBELL	Sing by DARE		_ATORY SP	. ,	
Signature (Electronic	Submission)		Date 02/27/2	2015		•
	THIS SPACE FO	R FEDERA	L OR STATE	OFFICE U	SE	
						Dete
_Approved By			Title			Date
Conditions of approval, if any, are attached certify that the applicant holds legal or eq which would entitle the applicant to cond	uitable title to those rights in the		Office .			
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent					ake to any department or	agency of the United
** BLM REV	ISED ** BLM REVISED	)∕* BLM RI	EVISED ** BLI	M REVISED	) ** BLM REVISE	D **
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Proposal No: 118250127B

## Palomar, Natural Resources PRAIRIE FALCON 19 #1

API # 30-045-35628-0000 VERDE Field 19B-31N-14W San Juan County, New Mexico February 24, 2015

# **Well Proposal**

Prepared for: Dan Gralla VP NORTH AMERICAN OPERATIONS Palomar Natural Resources **Prepared by:** Patricia V Cabrera Area Engineer

 Service Point:

 PP, FARMINGTON

 Bus Phone:
 505-3276222

 Fax:
 505-327-5766

. 22 Service Representatives: Katherine Thompson Ferguson Account Manager

Gr4105

Powered by PowerVision

Operator Name: Well Name: Job Description: Date: Palomar Natural Resources PRAIRIE FALCON 19 #1 Stage 1 -70Q -Linear N2 Foam -51k Sand Brown February 24, 2015



Proposal No: 118250127B

## JOB AT A GLANCE

Surface Treating Pressure (max	)	2,715 psi
Slurry HHP (avg)		629 hhp
Total Rate (max)		25.00 bpm
Slurry Rate (max)		25.00 bpm
Nitrogen Rate (max)		17,424 scfm
Estimated Pump Time (HH:MM)		00:33
Nitrogen Pumped Volume		456,216 scf
Nitrogen Cooldown Volume		20,000 scf
Treatment Fluid	27,500 gals	24PPT Linear Foam
Flush	2,000 gals	Claytreat Water
Diagnostic	2,000 gals	Claytreat Water
Diagnostic	1 gals	SHUT DOWN
Proppants	51,000 lb	Sand, Brown, 20/40

Report Printed on: February 24, 2015 10:57 AM

Gr4111

Have more questions? You can find us at: http://www.bakerhughes.com/products-and-services/pressure-pumping Operator Name: Well Name: Job Description: Date:

Palomar Natural Resources PRAIRIE FALCON 19 #1 Stage 1 -70Q -Linear N2 Foam -51k Sand Brown February 24, 2015



Gr4127

Proposal No: 118250127B

## **FLUID SPECIFICATIONS**

Treatment Fluid: 24PPT Linea		
Foam Volume:	27,500 Gallons	
Pumped Liquid	8,250 Gallons	
Pumped Gas Volume:	456 Mscf Nitrogen	
Components:		
6 gpt		Foaming Agent
6 gpt		Gelling Agent
1 gpt		Clay Stabilization Product
1 gpt	-	Gel Breaker
1 gpt		Surface Tension Reducer
1 gpt		Non-Emulsifier
1 ppt		Gel Breaker
0.05 ant	(Last 5k gallons) Magnacide 575	Bacteria Control Product
0.05 gpt	Magnacide 575	
Flush: Claytreat Water		
Foam Volume:	2,000 Gallons	
Pumped Liquid	1,889 Gallons	
Components:		
2 ppt	GBW-5	Gel Breaker
1 gpt		Clay Stabilization Product
1 gpt		Surface Tension Reducer
0.05 gpt	Magnacide 575	Bacteria Control Product
Diagnostic: Claytreat Water		
	2,000 Gallons	
Components:	•.	
1 gpt	Clay Master-5C	Clay Stabilization Product
0.05 gpt		Bacteria Control Product
Disensetia: SHUT DOM/N		
Diagnostic: SHUT DOWN	1 Gallons	
Proppants	51,000 lb 100% Sand, Brow	n 20/40
Froppants	ST,000 ID TOU /0 Safiu, DIOW	n, 20/40
	nd customer supplied. Breaker and	

Base fluid will be 2% KCl water and customer supplied. Breaker and additive loading subject to change pending lab testing.

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Page 3

Have more questions? You can find us at: http://www.bakerhughes.com/products-and-services/pressure-pumping

Operator: Well Name: Job Description: Date: Palomar Natural Resources PRAIRIE FALCON 19 #1 Stage 1 -70Q -Linear N2 Foam -51k Sand Brown February 24, 2015



Proposal No: 118250127B

# FRACTURE TREATMENT SCHEDULE NITROGEN FOAM

#### **INPUT PARAMETERS**

TVD Depth (Mid Perfo	oration)			2,892 ft	
MD Depth (Mid Perfor	ation)			2,892 ft	
Perforations Number				16	
Perforation Diameter				0.380 in	
Bottom Hole Frac Pre	ssure			2,603 psi	
Bottom Hole Static Te	mperature			128 ° F	
Fluid Specific Gravity				1.010	
Fluid Temperature in	Tanks			60 ° F	
Nitrogen Temperature	at Surface			100 ° F	
	•			<u>Top</u>	<u>Bottom</u>
Casing	4 1/2" O.D.	(4.000" l.D.)	11.6 <b># N-</b> 80	0	3,151

#### CALCULATED TEMPERATURES

	<u>Maximum</u>	<u>Minimum</u>	<u>Average</u>
System at Wellhead	64 ° F	60 ° F	
System at Perforation	77 ° F	61 ° F	
System at Formation (mean)			107 ° F

#### **CALCULATED RATES, PRESSURES & HHP REQUIREMENTS**

	Maximum	<u>Minimum</u>	<u>Average</u>
Surface Treating Pressure (psi)	2,715	1,698	2,479
Slurry Rate (bpm)	25.0	1.0	10.3
Nitrogen Rate (scfm)	17,425	14,748	16,072
Proppant Rate (Ibs/min)	3,557	260	2,117
Slurry Hydraulic Horsepower	1,367	42	629

Volumes, Rates and Qualities are based on Downhole Temperature and Pressures.

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#### Page 4

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# 2.2 Procedure

## 2.2.1 Job Fluids

## 2% KCL Water/ 21000.0 (Gal)

Base Fluid	2% KCL WATER	21000 (Gal)	Additive Material	BE-6	2.00 (lbm)
	1000.00 (gal/Mgal)			0.15 (lbm/Mgal)	
Additive	Losurf-300D	18.00 (Gal)			
Material	1.00 (gal/Mgal)				

Notes:null

## Water Frac G 20#/ 52500.0 (Gal)

Base Fluid	2% KCL WATER	52500 (Gal)	Additive Material	BE-6	8.00 (lbm)
	1000.00 (gal/Mgal)			0.15 (lbm/Mgal)	
Breaker	GBW-30	53.00 (lbm)	Surfactant	Losurf-300D	53.00 (Gal)
	1.00 (lbm/Mgal)			1.00 (gal/Mgal)	

Notes:null

## **Delta-R Foam Frac 20#/ 46578.0 (Gal)**

Base Fluid	2% KCL WATER	46578 (Gal)	Breaker	GBW-30	47.00 (lbm)
	1000.00 (gal/Mgal)		and the second second	1.00 (lbm/Mgal)	
Surfactant	Losurf-300D	24.00 (Gal)	Additive Material	Optiflo HTE	94.00 (lbm)
	0.50 (gal/Mgal)			2.00 (lbm/Mgal)	
Additive	BE-6	7.00 (lbm)			
Material	0.15 (lbm/Mgal)		£		

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## 2.2.2 Job Totals

#### Fluids

Additive BE-6	17.00(lbm)	Additive Losurf-300D	95(Gal)
Material Material		Material	
Breaker GBW-30	100.00(lbm)	Additive Optiflo HTE	94.00(lbm)
		Material	

## **Proppants**

	Designed Qty	Requested
Premium White-20/40	240000 (lbm)	240000(lbm)

# **Customer Supplied Items**.

	Designed Qty.	Tank Bottom.	Requested with Tank Bottom
2% KCL WATER	120078 (Gal)	0 (Gal)	120078(Gal)

## CO2 and N2 Totals

N2 Volume	1130556 (scf)	

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