

RECEIVED ELECTRONIC REPORT

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT NOV

STINDBY NOTICES AND DEDODTS ON WELLS

| FORM APPROVED |
|------------------------|
| OMB NO. 1004-0135 |
| Expires: July 31, 2010 |

5. Lease Serial No.

| | 751 | 114 | 1038 | 3 | | |
|---|-----|-----|------|--------|------|---|
| - | | | | 100000 | | - |

| Do not use this form for propo abandoned well. Use form 3160 | sals to drill or to re-enter an | 6. If Indian, Allottee or Tribe Name UTE MOUNTAIN UTE |
|--|--|---|
| SUBMIT IN TRIPLICATE - Other | instructions on reverse side. | 7. If Unit or CA/Agreement, Name and/or No. |
| Type of Well | | 8, Well Name and No. PRAIRIE FALCON 19-2917 |
| Name of Operator BRIDGECREEK RESOURCES COLO E-Mail: cc. | ontact: CHRISTINE CAMPBELL ampbell@bridgecreekresources.com | 9. API Well No. 30.045.35737 |
| 3a. Address 405 URBAN STREET, SUITE 400 LAKEWOOD, CO 80228 | 3b. Phone No. (include area code) Ph: 303-945-2642 | 10. Field and Pool, or Exploratory VERDE GALLUP |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey De Sec 19 T31N R14W SESE 151FSL 335FEL | scription) | 11. County or Parish, and State SAN JUAN COUNTY, NM |

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION TYPE OF ACTION ■ Water Shut-Off □ Acidize □ Deepen □ Production (Start/Resume) Notice of Intent ☐ Fracture Treat □ Reclamation ■ Well Integrity ☐ Subsequent Report Casing Repair ■ New Construction ☐ Recomplete Other ☐ Final Abandonment Notice □ Plug and Abandon ☐ Temporarily Abandon Change Plans □ Convert to Injection ☐ Plug Back □ Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Bridgecreek Resources (CO), LLC, submits a revised drilling program for the Prairie Falcon 19-2917 location.

The changes highlighted in Yellow include: New surface casing set depth; Conductor pipe will not be used and a tin can cellar will be installed; Production hole will be changed from 8 3/4" to 7 7/8"; DV Tool will be utilized; Revised mud/cement volumes.

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OIL CONS. DIV DIST. 3

NOV 2 0 2015

| 14. I hereby certify that the | ne foregoing is true and correct. Electronic Submission #322200 verifie For BRIDGECREEK RESOURCES Committed to AFMSS for processing by BARE | CÓLO | LLC, sent to the Durango | | | |
|--------------------------------|--|--------|--------------------------|------|----|----|
| Name (Printed/Typed) | CHRISTINE CAMPBELL | Title | REGULATORY LEAD | | _ | |
| Signature | (Electronic Submission) | Date | 11/01/2015 | 125 | | Mi |
| | THIS SPACE FOR FEDERA | L OR | STATE OFFICE USE | EUT. | , | |
| Approved By | 1991 | Title | MSL | Date | 17 | 15 |
| certify that the applicant hol | ny, are attached. Approval of this notice does not warrant or ds legal or equitable title to those rights in the subject lease licant to conduct operations thereon. | Office | TRES RIOS FIELD OFFICE | | | |

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Additional data for EC transaction #322200 that would not fit on the form

32. Additional remarks, continued

Attachment to Application for Permit to Drill Drilling Plan

Bridgecreek Resources (Colorado), LLC 405 Urban St, Suite 400 Lakewood, CO 80228

PRAIRIE FALCON 19-2917

Surface Location: 151' FSL – 335' FEL
Section 19, T31N, R14W, N.M.P.M.
Latitude = 36.8796222° N
Longitude = 108.3427356°W
Ungraded GL Elev. = 5602'
Graded GL Elev. = 5602'

Proposed Bottom Hole Location: 5' FNL – 6' FWL Section 29, T31N, R14W, N.M.P.M. Latitude = 36.87919303° N Longitude = 108.3415706° W

SAN JUAN COUNTY, NEW MEXICO

Drilling Program written in compliance with Onshore Oil and Gas Order No. 1 (OO1 III.D.3, effective May 7, 2007) and Onshore Order No. 2, Dated November 18, 1988

Drilling Plan:

The PRAIRIE FALCON 19-2917 well is intended to be drilled as a slightly deviated well with limited directional guidance to the Graneros formation. After a 72" galvanized steel cellar is preset at a depth of 4' below ground level, the location will be prepared for operations, including all prudent storm water controls. This well will be drilled using a closed-loop mud system without the use of an earthen reserve pit.

The well will be spud with using a 12 ¼" bit and fresh water-based mud to a depth of 300' MD. At a minimum, wireline directional surveys will be run at intervals not exceeding 500'. At a depth of +/- 300' MD (to be adjusted according to KB of rig selected), 9-5/8" 36#/ft. J-55 STC surface casing will be run and cemented into place. Surface casing will be set at a minimum of 300'MD. The mudlogger and staff geologist will determine the exact set depth based upon the identification of a competent formation to set casing shoe. If, for some reason the cement is not circulated to surface, or if cement falls further than 10' from ground level, the 9-5/8" x 12-1/4" annulus will be filled to the surface from the top of cement using 1" tubing.

The surface casing will be drilled out using a 7-7/8" bit, performance BHA and water based mud to a total depth (TD) of 4,102' MD. Upon reaching TD, we will utilize open hole logs to evaluate prospective interval(s) from the Mancos marker to the base of the Greenhorn formation in which to perforate for stimulation. Planned logs to be run include GR/DIL/DEN/NEU/ML from TD to surface casing.

Depending on geologic conditions observed through mud logger analysis and results from open hole logs, Bridgecreek may elect to run and cement 5 ½" 17#/ft. N-80 LTC casing and cement into place.

1. Estimated Tops for Important Geological Formations

| Formation | Est/ MD | TVD | Comments |
|-----------------|---------|---------|---|
| Pictured Cliffs | 0' | 0' | Possible Pay (Oil/Gas)/Possible Aquifer (Water) |
| Cliffhouse | 884 ' | 852 ' | Possible Pay (Oil/Gas)/Possible Aquifer (Water) |
| Menefee | 1,015 ' | 983 ' | Deepest Coal |
| Point Lookout | 1,838 ' | 1,802 ' | None |
| Upper Mancos | 2,153 ' | 2,114' | None |
| MRZ | 2,590 ' | 2,548 | Possible Pay (Oil/Gas) |
| ElVado | 3,249 ' | 3,202 ' | Possible Pay (Oil/Gas) |
| Tocito | 3,500 ' | 3,451' | Possible Pay (Oil/Gas) |
| Juana Lopez | 3,668 ' | 3,618' | Possible Pay (Oil/Gas) |
| Greenhorn | 4,026 ' | 3,973 ' | Possible Pay (Oil/Gas) |
| Graneros | 4,092 ' | 4,039 ' | None |
| TD | 4,099 ' | 4,078 | None |

2. Anticipated Depths of Prospective Oil, Gas and Other Hydrocarbons

Primary objectives are productive zones within the Mancos (Top Mancos is anticipated at approximately 2,114' TVD) through the base of the Greenhorn (Top Greenhorn is anticipated at approximately 4,005' TVD).

3. Minimum Specifications For Pressure Control Equipment Complies with Onshore Order #2.A.1

The working pressure of all BOP shall exceed the anticipated surface pressure to which it may be subjected, assuming a partially evacuated hole with a pressure gradient of 0.22 psi/ft.

Bottom Hole pressure = 4,078' TVD x 0.45 psi/ft = 1,835 psi (based on measured offset bottom hole pressures, see plan point 8 for details).

Maximum Surface Pressure = 1,835 psi - (4,078' TVD x .22 psi/ft) = 1,835 psi - 897 psi = 938 psi (less than 3000 psi working pressure.)

Therefore 3000 psi BOP system required.

A. Wellhead Equipment 3,000 PSI System (See Exhibit A)

- 1. 9 5/8" slip-on / welded x 11" 3,000 psi casing head.
- 2. One (1) 11" x 3,000 psi WP single-ram preventer with one (1) set of pipe rams, complete with hand wheels and extension arms.
- 3. One (1) 11" 3,000 psi WP drilling spool with side outlets for 2" kill line and minimum 3" choke line
- One 11" 3,000 psi WP double-ram preventer with one (1) set of blind rams on bottom & one (1) set of pipe rams on top complete with hand wheels and extension arms.
- 5. One 11" x 3,000 psi WP Hydril GK (or equivalent) annular preventer.

- 6. Accumulator Four Station Koomey (or equivalent) 120 gallon closing unit with remote, backup. The accumulator shall have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer, with a 50% safety factor and retain a minimum of 200 psi above the pre-charge on the closing manifold without the use of the closing unit pumps. The reservoir capacity shall be double the usable accumulator capacity, and the fluid level shall be maintained at the manufacturer's recommendations.
- 7. The BOP system shall have two (2) independent power sources (electric and air) available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specification.
- 8. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

All BOP equipment will be hydraulically operated with controls accessible both on the rig floor and on the ground.

B. Auxiliary Equipment To Be Used – Minimum 3,000 PSI System (See Exhibit B)

- 1. Upper & lower kelly cock valve with handles available.
- 2. Safety valve and subs to fit drill pipe, on rig floor.
- 3. Choke manifold for 3,000 psi system with 2 chokes (pressure gauge on manifold).
- 4. Two (2) kill lines (2" minimum, one remote to end of substructure) both with 2" kill line full open valves, plus a check valve for each line.
- 5. Minimum 3" choke line.
- 6. Two choke line gate valves, 3" minimum, with one choke line gate valve being hydraulically operated.
- 7. Two chokes (1 remote, 1 manual) on choke manifold
- 8. Fill-up line above the uppermost preventer.
- 9. Wear Bushing or Bowl Protector in the casing head.
- 10. Inside BOP or (float sub) available
- 11. All BOPE connections subjected to well pressure shall be flanged, welded or clamped.
- 12. Choke line shall be straight lines unless turns use tee blocks or are targeted with running tees, and shall be anchored to prevent whip and reduce vibration.

The wellhead BOP equipment will be nippled-up on the 9-5/8" x 11" 3,000 psi casing head prior to drilling out from under surface casing. All ram preventers and related equipment will be tested to 250 psi for 10 minutes then 3,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 70% of internal yield pressure. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested every 14 days, after any repairs are made to the BOP equipment, and after the BOP equipment is subjected to pressure. Annular preventers will be functionally operated at least once per week. Pipe rams will be activated daily and blind rams shall be activated each trip or at least weekly. The Bureau of Land Management, the Bureau of Indian Affairs and Ute Mountain Ute Tribe will be notified 24 hours in advance of testing of BOPE.

4. Proposed Bit and Casing Program

A. Bit Program

12 1/4" Surface Hole = Surface to 300' MD 7 7/8" Production = 300' MD to TD (approximately 4,099' MD)

B. Casing Program - all casing stings are new casing

| Casing & Hole Size | Weight | Grade | Coupling | Setting Depth (MD) | Comments |
|-----------------------|--------|-------|----------|--------------------|-----------------------------------|
| 9-5/8" (12-1/4") | 36 ppf | J-55 | ST&C | 0' – 300' MD | New casing. Cement to surface. |
| 5-1/2" (7-7/8") | 17 ppf | N-80 | LT&C | 0'-4,102' MD | New casing. Cement to surface. |

Casing strings below the conductor casing will be tested to .22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used: Collapse - 1.0

Burst - 1.1 Jt. Strength - 1.3

Surface casing shall have a minimum of 1 centralizer per joint on the bottom three (3) joints, starting with the shoe joint for a total of (4) minimum centralizers. Centralizers will be placed 10' above the shoe on the shoe joint, on the 1st, 2nd and 3rd casing collars.

The production casing string shall utilize a DV (differential valve) tool in order to ensure an adequate cement job is completed to protect the Mesa Verde formation. The tool will be placed in the production casing string below the Mesa Verde formation, determined from the open hole logs once they are completed. The production casing string will be centralized using 1 centralizer the first 6 jts and then spaced +/- 1 centralizer / 4 jts through the remainder of the cement column.

5. Proposed Cementing Program

Surface Casing Single Stage Job – (0 - 300' MD):

Excess - 100% over gauge hole - 12-1/4" hole and 9-5/8" casing (0.3132 ft3/ft)

Top of Cement - Surface

Yield - 2.21 ft3/sx

Water requirement - 12.6 gal/sx

Total sacks of cement pumped = 90sx

Production Casing Single Stage Job – (0 – 4,102' MD):

Excess -25% over gauge hole - 7-7/8" hole and 5-1/2" casing (0.1733 ft3/ft)

Top of Cement - Surface

Yield - 1.21 ft3/sx

Water requirement -5.68 gal/sx

Total sacks of cement pumped = 740sx

6. Characteristics for Drilling Fluids (all depths are MD)

| Depth (MD) = | Hole Size | Туре | Fluid Density (ppg) | PV (cP) | YP (lb/100 ft ²) | API (mL) | рН | MBT (ppb) | Salinity (PPM) | Remarks |
|------------------|-----------|--------|---------------------------|---------|---------------------------------|---|-----------|--------------|-------------------|----------|
| 0 - 300' | 12-1/4" | FW/Gel | 8.4 - 8.8 | 2-8 | 2-10 | N/C | 8.5 - 9.5 | < 15 | < 500 | spud mud |
| 300' - 4,102' | 7-7/8" | WBM | 8.4 - 8.8 | 8 - 14 | 8-14 | = 6</td <td>8.5 - 9.5</td> <td>< 15</td> <td>< 1,000</td> <td>LSND</td> | 8.5 - 9.5 | < 15 | < 1,000 | LSND |

Sufficient weighting material will be on hand to weight mud up to 11.0 PPG, if required.

The formula for weight up with barite is listed below: Sacks of Barite per 100 bbl of mud = $1470 \times (W2 - W1) \div (35 - W2)$

Where; W1 = current mud weight

W2 = new mud weight

Sacks = $1470 \times (11.0 - 8.6)/(35-11.0) = 147sx * 20 (2000bbls minimum) = 2940sx$

Pason Pit Volume Totalizer (PVT) equipment will be on each pit to monitor pit levels. A closed-loop mud system will be utilized while drilling. Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations. All necessary spill prevention and remediation materials and procedures will be utilized to control any potential discharges on the surface. A steel tank will be used to collect all of the cuttings. The cuttings will be disposed of onsite in an approved lined cuttings disposal trench, in accordance with the rules and regulations of the BLM and New Mexico Oil Conservation Division.

7. Testing, Logging, Coring and Completion Program

A. Drill-Stem Testing Program: None

B. Logging Program:

The following logs (GR/DIL/DEN/NEU/ML) will be run in 7-7/8" hole from TD (~4,102' MD) to the surface casing shoe (~300' MD).

Submission of digital logging data shall be in Log ASCII Standard (LAS) file format.

BLM shall be provided with a final survey to establish the location of the bottom hole location. If reduced data are provided, the algorithm, datum, and projection should also be provided.

C. Mud Logging

Geologist & a manned mud-logging unit will be operational on the surface hole to TD. Samples will be caught every 30 feet during drilling, with the exception of possible pay zones, where samples will be caught every 5 feet.

- D. Coring: None
- E. <u>Cement Bond Log</u>: Will be run after the drilling of the well has been completed and as the start of the completion process. The CBL will confirm the quality of the

cement bond and the actual TOC. If either of these two data points were not satisfactory per BLM, State and standard procedure, remedial cement work, if required, will be performed after consultation and approval of a plan from both the BLM and State agencies.

F. <u>Drilling and Stimulation</u>: Drilling is expected to take 7 days. Completion (if the well is deemed productive) is estimated to take 2 days. The duration of flowback/testing operations is 3 days. We are planning a 5-stage nitrogen foam frac for this well. Based on frac modeling work, we anticipate an average frac length away from the wellbore to be ~400 feet in the horizontal direction. Estimated fresh water usage per stage during completion is ~476 bbls. A total of ~2,016 bbls of sand/nitrogen/water mix will be injected during the completion. A total of ~3,700 lb of premium white 40/70 sand and a total of ~70,300 lb of premium white 20/70 sand will be injected during the completion. A hydraulic fracture treatment will be designed for the completion of this well based on open hole log analysis and surface shows. If a hydraulic fracture treatment is warranted, The drill site, as approved, will be sufficient size to accommodate all completion activities.

8. Expected Bottom Hole Pressure and any Anticipated Abnormal Pressures, Temperatures or Other Potential Hazards

A. Based on offset information the expected bottom-hole pressure at the Graneros is 0.45 psi x 4,078' TVD = 1,835 psi.

| Well | TVD (ft) | BHP (PSI) | Pressure Gradient (psi/ft) | EMW (ppg) |
|---------------------|-------------|--------------|----------------------------|--------------|
| Harris Hawk 20-1 | 3578 | 1610 | 0.45 | 8.7 |
| Prairie Falcon 19-1 | 3269 | 1471 | 0.45 | 8.7 |
| Estimated BHP | 4078 | 1835 | 0.45 | 8.7 |

- B. Expected bottom-hole temperature @ the Graneros formation is ~110 deg F.
- C. No lost circulation is anticipated.
- D. No zones of potable water are expected to be encountered during the drilling of this well.
- E. No H2S sour gas is known to exist in the formations that we will drill through.
- F. Estimated fresh water usage for drilling operations will start at ~1,000 bbls of fresh water. The mud system will dewater after a well is drilled. We can reuse the same water over and over (re-use of drilling mud on subsequent wells). Accounting for fluid loss to formation and evaporation, we estimated needing to add approximately 250 bbls of new fresh water when the mud is transported to the next well. This assumes no lost circulation events.
- G. Estimated fresh water usage for cementing operations is ~162 bbls for surface casing, and ~351 bbls for production casing. Both of these estimates include using fresh water as the displacement fluid.
- H. Estimated maximum fresh water usage for completion operations is ~3,498 bbls. This includes 25% excess water on hand per stage. This assumes a 5-stage nitrogen foam frac. The water usage for the completion activities will vary depending on the number of stages selected for stimulation and will be provided in the completion report.

9. Plugging and Abandonment

No plugging and abandonment of the well would occur until after the well has been drilled, completed, hydraulically stimulated and production tested, unless extenuating circumstances arise. Full authorization will be verbally sought from the Bureau of Land Management and the New Mexico Oil Conservation Division prior to actual plugging operations being initiated with written reports submitted as a followed up.

10. Other

A Cultural Resource Inventory and Paleontology reconnaissance has been conducted for the well location and access route. The reports shall be submitted to the Ute Mountain Ute Tribe and the BLM upon their receipt.

Anticipated Commencement Date:

Within 30 days of APD approval based on ability to source appropriate rig to complete operations

11. Protecting Valuable deposits of fluid or solid minerals

We will run 2 strings of casing (surface and production) and cement to surface both. Surface casing cement will have 100% returns to surface. Production casing will have 25% returns to surface. This extra cement back at surface ensures that the quality of cement downhole is good. A CBL will be run from TD to surface to ensure the cement bond is good quality. We will drill the well with the appropriate mud weight based on anticipated and encountered pressures while drilling. Fresh water, usable water and coal deposits will be protected by surface casing and production casing. Oil and gas bearing zones will be isolated from fresh water and usable water zones by the production casing. Formations will be selected for completion and perforated. This ensures we are targeting only the zones of interest for completion.

Mesa West Directional
Telephone: 505.402.8944
www.mesawestdirectional.com

Bridgecreek Resources (Colorado) LLC

San Juan County, NM (NAD 83) Sec 19 T-31N R-14W Prairie Falcon 19-2917 DD UWI:

Plan: #1

Mesa West Planning Report

07 October, 2015



Reference Details - WELL CENTRE BRIDGECREEK RESCURCES Geodetic System: Universal Transverse Mercator (US Survey Feet) Geodetic System: Universal Transverse Mercator (
Ellipsoid: GRS 1980
Zone: Zone 12N (114 W to 108 W)
Northing: 13401599.87
Easting: 2417413.45
Latitude: 36* 52' 46.640 N
Longitude: 108* 20' 33.848 W
Grid Convergence: 1.60* West
Ground Elevation: 5602.0
KB Elevation: Est RKB @ 5614.0usft (KB 12') Site: Sec 19 T-31N R-14W Well: Prairie Falcon 19-2917 Wellbore: DD Plan: #1 PLAN DETAILS Azimuths to True North

T M Magnetic North: 9.63° MD 0.0 TFace 0.00 0.00 114.63 VSect 0.0 0.0 76.3 Inc 0.00 Azi 0.00 Dleg 0.00 Target 0.0 0.0 -31.8 -156.2 0.0 0.0 69.4 0.0 Magnetic Field 360.0 1623.9 0.00 0.00 360.0 1620.8 0.00 Strength: 50317.9snT Dip Angle: 63.37° 4099 1 114.63 4078.0 340.8 0.00 -180.00 374.9 Prairie Falcon 19-2917 tgt Date: 07/10/2015 Model: IGRF201015 A 100 KOP:360 KOP;360' South(-)/North(+) (100 usft/in) 500 0 EOB:1623.9' MD TD at 4099,1' MD Cliff House -100-Menefee 1000-Prairie Falcon 19-2917 tgt -200 EOB:1623.9' MD 1500 -300 usft/in) Point Lookout 300 400 100 -100 200 82000 West(-)/East(+) (100 usft/in) Depth Upper Mancos **ANNOTATIONS** TVD MD Annotation Vertical 360.0 360.0 KOP;360' 2500 1620.8 1623.9 EOB;1623.9' MD 4078.0 4099.1 TD at 4099.1' MD Mancos Res FORMATION TOP DETAILS TVDPath MDPath Formation 884.0 884.2 Cliff House 3000 Menefee 1015.0 1015.4 1834.0 1838.6 Point Lookout 2146.0 2152.9 Upper Mancos El_Vado 2580.0 2590.1 3248.9 Mancos Res. El Vado 3234.0 Tocito 3483.0 3499.8 3650.0 3668.0 Juana Lopez 3500 4005.0 4025.6 Greenhorn 4071.0 4092.1 Graneros TD at 4099 1' MD MESAWEST Greenhorn 4000 DIRECTIONAL Graneros Prairie Falcon 19-2917 tgt 4500 -500 500 1000 2500 3000 1500 Vertical Section at 114.63° (400 usft/in)

Mesa West Directional

Planning Report



Database: Company: Project:

WellPlan Services

Bridgecreek Resources (Colorado) LLC

San Juan County, NM (NAD 83)

Sec 19 T-31N R-14W Site: Well: Prairie Falcon 19-2917

DD Wellbore: #1 Plan:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Prairie Falcon 19-2917

Est RKB @ 5614.0usft (KB 12') Est RKB @ 5614.0usft (KB 12')

True

Minimum Curvature

Project

Site

Well

San Juan County, NM (NAD 83)

Map System:

Universal Transverse Mercator (US Survey Feet)

System Datum:

Mean Sea Level

Geo Datum:

NAD83 New Mexico - HARN

Zone 12N (114 W to 108 W)

Map Zone:

Sec 19 T-31N R-14W

Site Position: From:

Lat/Long

Northing: Easting:

13,406,021.87 usft 2,415,639,22 usft

Latitude: Longitude:

36° 53' 30.821 N

108° 20' 54,159 W 1.59°

Position Uncertainty:

0.0 usft

Slot Radius:

13-3/16 "

Grid Convergence:

Well Position

Prairie Falcon 19-2917

-4,469.6 usft 1,650.6 usft Northing: Easting:

13,401,599.87 usft 2,417,413.46 usft Latitude: Longitude:

36° 52' 46.640 N 108° 20' 33.848 W

Position Uncertainty

Wellhead Elevation: 0.0 usft

0.0 usft

Ground Level:

5,602.0 usft

Wellbore

DD

+N/-S

+E/-W

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|-----------|------------|-------------|-----------------|------------------|---------------------|
| | IGRF201015 | 07/10/2015 | 9.63 | 63.37 | 50,318 |

| Plan #1 | Paragraph of the Charles of the Char | | | | |
|--|--|-----------------|-----------------|---------------|--|
| Audit Notes: Version: | Phase: | PLAN | Tie On Depth: | 0.0 | |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| Sarking the Local Control of the Control | 0.0 | 0.0 | 0.0 | 114.63 | |

| Measured Depth (usft) | Inclination (*) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
|-----------------------------|-----------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|----------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 360.0 | 0.00 | 0.00 | 360.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,623.9 | 6.93 | 114.63 | 1,620.8 | -31.8 | 69.4 | 0.55 | 0.55 | 0.00 | 114.63 | |
| 4,099.1 | 6.93 | 114.63 | 4,078.0 | -156.2 | 340.8 | 0.00 | 0.00 | 0.00 | -180.00 | Prairie Falcon 19-29 |

Mesa West Directional

Planning Report



Database: Company: Project:

Site:

WellPlan Services

Bridgecreek Resources (Colorado) LLC

San Juan County, NM (NAD 83)

Sec 19 T-31N R-14W Prairie Falcon 19-2917

Well: Pra
Wellbore: DD
Plan: #1

Local Co-ordinate Reference:
TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well Prairie Falcon 19-2917 Est RKB @ 5614.0usft (KB 12') Est RKB @ 5614.0usft (KB 12')

True

Minimum Curvature

| Planned Surv | еу | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------------------------|------------------|-----------------|----------------------|-------------------------------|-------------------------------|------------------------------|----------------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth | Vertical Depth (usft) | Subsea (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft |
| 0.0 | 0.00 | 0.00 | 0.0 | -5,614.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| KOP;360' | | | | a Toph NE | | | | 8-6-465 | | Seal Control |
| 360.0 | 0.00 | 0.00 | 360.0 | -5,254.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.22 | 114.63 | 400.0 | -5,214.0 | 0.0 | 0.1 | 0.1 | 0.55 | 0.55 | 0.00 |
| 500.0 | 0.77 | 114.63 | 500.0 | -5,114.0 | -0.4 | 0.9 | 0.9 | 0.55 | 0.55 | 0.00 |
| 600.0 | 1.32 | 114.63 | 600.0 | -5,014.0 | -1.1 | 2.5 | 2.8 | 0.55 | 0.55 | 0.00 |
| 700.0 | 1.86 | 114.63 | 699.9 | -4,914.1 | -2.3 | 5.0 | 5.5 | 0.55 | 0.55 | 0.00 |
| 800.0 | 2.41 | 114.63 | 799.9 | -4,814.1 | -3.9 | 8.4 | 9.3 | 0.55 | 0.55 | 0.00 |
| Cliff Hous | | Phil Committee | and the same | | | | | | | Fellowals. |
| 884.2 | 2.87 | 114.63 | 884.0 | -4,730.0 | -5.5 | 12.0 | 13.1 | 0.55 | 0.55 | 0.00 |
| 900.0 | 2.96 | 114.63 | 899.8 | -4,714.2 | -5.8 | 12.7 | 13.9 | 0.55 | 0.55 | 0.00 |
| 1,000.0 | 3.51 | 114.63 | 999.6 | -4,614.4 | -8.2 | 17.8 | 19.6 | 0.55 | 0.55 | 0.00 |
| Menefee | | | | | | | | | | |
| 1,015.4 | 3.59 | 114.63 | 1,015.0 | -4,599.0 | -8.6 | 18.7 | 20.5 | 0.55 | 0.55 | 0.00 |
| 1,100.0 | 4.06 | 114.63 | 1,099.4 | -4,514.6 | -10.9 | 23.8 | 26.2 | 0.55 | 0.55 | 0.00 |
| 1,200.0 | 4.61 | 114.63 | 1,199.1 | -4,414.9 | -14.1 | 30.7 | 33.7 | 0.55 | 0.55 | 0.00 |
| 1,300.0 | 5.15 | 114.63 | 1,298.7 | -4,315.3 | -17.6 | 38.4 | 42.3 | 0.55 | 0.55 | 0.00 |
| 1,400.0 | 5.70 | 114.63 | 1,398.3 | -4,215.7 | -21.6 | 47.0 | 51.7 | 0.55 | 0.55 | 0.00 |
| 1,500.0 | 6.25 | 114.63 | 1,497.7 | -4,116.3 | -25.9 | 56.5 | 62.1 | 0.55 | 0.55 | 0.00 |
| 1,600.0 | 6.80 | 114.63 | 1,597.1 | -4,016.9 | -30.6 | 66.8 | 73.5 | 0.55 | 0.55 | 0.00 |
| EOB;1623 | .9' MD | | | | | | | | | Sand II |
| 1,623.9 | 6.93 | 114.63 | 1,620.8 | -3,993.2 | -31.8 | 69.4 | 76.3 | 0.55 | 0.55 | 0.00 |
| 1,700.0 | 6.93 | 114.63 | 1,696.4 | -3,917.6 | -35.6 | 77.7 | 85.5 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 6.93 | 114.63 | 1,795.6 | -3,818.4 | -40.7 | 88.7 | 97.6 | 0.00 | 0.00 | 0.00 |
| Point Loo | kout | | | | | THE REPUBLICATION OF | | | | |
| 1,838.6 | 6.93 | 114.63 | 1,834.0 | -3,780.0 | -42.6 | 92.9 | 102.3 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 6.93 | 114.63 | 1,894.9 | -3,719.1 | -45.7 | 99.7 | 109.7 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 6.93 | 114.63 | 1,994.2 | -3,619.8 | -50.7 | 110.6 | 121.7 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 6.93 | 114.63 | 2,093.4 | -3,520.6 | -55.8 | 121.6 | 133.8 | 0.00 | 0.00 | 0.00 |
| Upper Ma | ncos | | TO SERVED | | | unio de la constanta | Children | | diameter | |
| 2,152.9 | 6.93 | 114.63 | 2,146.0 | -3,468.0 | -58.4 | 127.4 | 140.2 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 6.93 | 114.63 | 2,192.7 | -3,421.3 | -60.8 | 132.6 | 145.8 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 6.93 | 114.63 | 2,292.0 | -3,322.0 | -65.8 | 143.5 | 157.9 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 6.93 | 114.63 | 2,391.3 | -3,222.7 | -70.8 | 154.5 | 170.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 6.93 | 114.63 | 2,490.5 | -3,123.5 | -75.9 | 165.5 | 182.0 | 0.00 | 0.00 | 0.00 |
| Mancos R | | | 5000 | | | in results | | HARLEST TO THE | neolog (Feb. | |
| 2,590.1 | 6.93 | 114.63 | 2,580.0 | -3,034.0 | -80.4 | 175.4 | 192.9 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 6.93 | 114.63 | 2,589.8 | -3,024.2 | -80.9 | 176.4 | 194.1 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 6.93 | 114.63 | 2,689.1 | -2,924.9 | -85.9 | 187.4 | 206.2 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 6.93 | 114.63 | 2,788.3 | -2,825.7 | -90.9 | 198.4 | 218.2 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 6.93 | 114.63 | 2,887.6 | -2,726.4 | -96.0 | 209.3 | 230.3 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 6.93 | 114.63 | 2,986.9 | -2,627.1 | -101.0 | 220.3 | 242.3 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 6.93 | 114.63 | 3,086.1 | -2,527.9 | -106.0 | 231.3 | 254.4 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 6.93 | 114.63 | 3,185.4 | -2,428.6 | -111.1 | 242.2 | 266.5 | 0.00 | 0.00 | 0.00 |
| El Vado | | | | | 13369 | 11/24 | 375 | | | |
| 3,248.9 | 6.93 | 114.63 | 3,234.0 | -2,380.0 | -113.5 | 247.6 | 272.4 | 0.00 | 0.00 | 0.00 |

Mesa West Directional

Planning Report



Database: Company: Project:

Site:

Well:

WellPlan Services

Bridgecreek Resources (Colorado) LLC

San Juan County, NM (NAD 83)

Sec 19 T-31N R-14W Prairie Falcon 19-2917

Wellbore: DD Plan: #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Prairie Falcon 19-2917 Est RKB @ 5614.0usft (KB 12') Est RKB @ 5614.0usft (KB 12')

True

Minimum Curvature

| Planned Survey | | | | | | | | | BESTUREZADITA | |
|-----------------------------|-------------------|----------------|-----------------------------|------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth | Vertical Depth (usft) | Subsea (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 3,300.0 | 6.93 | 114.63 | 3,284.7 | -2,329.3 | -116.1 | 253.2 | 278.5 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 6.93 | 114.63 | 3,384.0 | -2,230.0 | -121.1 | 264.1 | 290.6 | 0.00 | 0.00 | 0.00 |
| Tocito | | Habana | | | | | ri en | | | |
| 3,499.8 | 6.93 | 114.63 | 3,483.0 | -2,131.0 | -126.1 | 275.1 | 302.6 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 6.93 | 114.63 | 3,483.2 | -2,130.8 | -126.1 | 275.1 | 302.6 | 0.09 | -0.09 | 0.00 |
| 3,600.0 | 6.93 | 114.63 | 3,582.5 | -2,031.5 | -131.2 | 286.1 | 314.7 | 0.00 | 0.00 | 0.00 |
| Juana Lop | ez | | | | | | | | | |
| 3,668.0 | 6.93 | 114.63 | 3,650.0 | -1,964.0 | -134.6 | 293.5 | 322.9 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 6.93 | 114.63 | 3,681.8 | -1,932.2 | -136.2 | 297.0 | 326.8 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 6.93 | 114.63 | 3,781.0 | -1,833.0 | -141.2 | 308.0 | 338.8 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 6.93 | 114.63 | 3,880.3 | -1,733.7 | -146.2 | 319.0 | 350.9 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 6.93 | 114.63 | 3,979.6 | -1,634.4 | -151.3 | 329.9 | 362.9 | 0.00 | 0.00 | 0.00 |
| Greenhori | 1 | | | | | | | | | |
| 4,025.6 | 6.93 | 114.63 | 4,005.0 | -1,609.0 | -152.5 | 332.7 | 366.0 | 0.00 | 0.00 | 0.00 |
| Graneros | | | | ibida santisada | | milita , art. à | | | | E10 |
| 4,092.1 | 6.93 | 114.63 | 4,071.0 | -1,543.0 | -155.9 | 340.0 | 374.0 | 0.00 | 0.00 | 0.00 |
| TD at 4099 | 3.1' MD - Prairie | Falcon 19-2917 | 7 tgt | | 364.6 | 24年 | | | | |
| 4,099.1 | 6.93 | 114.63 | 4,078.0 | -1,536.0 | -156.2 | 340.8 | 374.9 | 0.00 | 0.00 | 0.00 |

| Design Targets | | THE RESERVE | | | | | CALLED THE STREET, STR | | |
|---|---------------|-------------|---------------|-----------------|-----------------|--------------------|--|------------------|-------------------|
| Target Name - hit/miss target - Shape | Dip Angle | Dip Dir. | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| Prairie Falcon 19-2917 te - plan hits target cent - Point | 0.00 ter . | 0.00 | 4,078.0 | -156.2 | 340.8 | 13,401,453.18 | 2,417,758.46 | 36° 52' 45.096 N | 108° 20' 29.655 V |

| Measured Depth (usft) | Vertical Depth (usft) | Subsea Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
|-----------------------|-----------------------------|---------------------------|------------------|-----------|------------|-------------------------|--|
| 884.2 | 852.0 | 4,730.0 CI | liff House | | 0.00 | | |
| 1,015.4 | 983.0 | 4,599.0 M | enefee | | | | |
| 1,838.6 | 1,802.0 | 3,780.0 Pd | oint Lookout | | | | |
| 2,152.9 | 2,114.0 | 3,468.0 U | pper Mancos | | | | |
| 2,590.1 | 2,548.0 | 3,034.0 M | ancos Res. Spike | | | | |
| 3,248.9 | 3,202.0 | 2,380.0 EI | Vado | | | | |
| 3,499.8 | 3,451.0 | 2,131.0 To | ocito | | | | |
| 3,668.0 | 3,618.0 | 1,964.0 Ju | uana Lopez | | | | |
| 4,025.6 | 3,973.0 | 1,609.0 G | reenhorn | | | | |
| 4,092.1 | 4,039.0 | 1,543.0 G | raneros | | | | |

07/10/2015 9:39:54AM

BRIDGECREEK RESOURCES (COLORADO), LLC

Mesa West Directional

Planning Report



Database: Company: Project: WellPlan Services

Bridgecreek Resources (Colorado) LLC

San Juan County, NM (NAD 83)

 Site:
 Sec 19 T-31N R-14W

 Well:
 Prairie Falcon 19-2917

Wellbore: DD Plan: #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Prairie Falcon 19-2917

Est RKB @ 5614.0usft (KB 12') Est RKB @ 5614.0usft (KB 12')

True

Minimum Curvature

| Plan Annota | tions | | | | |
|-------------|-----------------|-----------------|-----------------|-----------------|------------------|
| | Measured | Vertical | Local Coor | dinates | |
| | Depth (usft) | Depth (usft) | +N/-S (usft) | +E/-W (usft) | Comment |
| | 360.0 | 360.0 | 0.0 | 0.0 | KOP;360' |
| | 1,623.9 | 1,620.8 | -31.8 | 69.4 | EOB;1623.9' MD |
| | 4,099.1 | 4,078.0 | -156.2 | 340.8 | TD at 4099.1' MD |

3160

Bridgecreek Resources Tribal IMDA: 751141038 Well: Prairie Falcon # 19-2917

Surface Location: 151' FSL & 335' FEL

Sec. 19, T. 31 N., R. 15 W. San Juan County, New Mexico

Conditions of Approval - Sundry Notice to Change Drilling Plan:

- 1. Notify this office at least 3 days prior to:
 - a. spudding the well
 - b. running casing strings and cementing
 - c. BOP tests
 - d. Drill Stem Testing

OIL CONS. DIV DIST. 3 NOV 2 0 2015

For the above procedures, Operators must talk to BLM personnel directly. Do not leave messages on answering machines. Contact Dan Rabinowitz, BLM Petroleum Engineer: office: 970-385-1363, or Rod Brashear: office: 970-385-1347, and cell: 970-799-1244.

- 2. All BOP tests will be performed with a test plug in place. BOP will be tested to full stack working pressure and annular preventer to 50% maximum stack working pressure. All accumulators will be function tested as per Onshore Order #2. All 2M or greater systems require adjustable chokes as per Onshore Order #2.
- 3. No additional zones will be commingled without UMU Tribal and BLM approval.
- 4. If a BLM Inspector is not present during the initial BOP test, please provide chart record.
- 5. Submit copies of all logs to this office both paper and in Log ASCII Standard (LAS) format.

Continued on Page 2.

- 6. If any operations are to start over the weekend, notify this office by <u>noon</u> Friday. If any problems arise after hours or on weekends, call BLM personnel using the home phone or cell phone numbers listed on the following 'INFORMATIONAL NOTICE APD's'. Do not leave messages on answering machines.
- 7. If cement cannot be brought to at least 10 ft. from ground level in 9-5/8" surface string then the operator must run a CBL log and obtain BLM approval prior to drilling ahead.
- 8. A CBL is also required if cement is not circulated to the surface on the production casing string. BLM verbal approval will be required prior to squeezing.
- 9. The BLM must witness the topping-off of the Surface Casing Cement.
- 10. The tops of all major identifiable geologic units (formations) from surface to TD will be logged and recorded.
- 11. Stabilized bottomhole pressure measurements and flowrates <u>must</u> be collected and submitted to the BLM.
- 12. Please provide the following information if possible. All tests and operations on any well on subject lands shall be conducted at Operator's sole discretion.

All Wire Line Logs - Fields & Final Print (Electrical, Radioactive, Sonic, Velocity, Cement Bond, Temperature, etc with digitized and log analysis).

Drill Stem Tests - Field and Final Reports.

Core Analysis - Field and Final Reports.

Mud Log - Final Report.

Structure and Isopach Maps.

Location (Surveyors) Plat.

Application to Drill (Drilling Permit).

Daily Drilling Reports, Daily Work Over Reports and Final Drilling Report Summary.

Directional Survey.

Geological Summary Report.

Completion Report.

Production Tests (All Production Tests during Completion, AOF, Potential, GOR, etc).

30 Day Well Production Test Record

Bottom Hole Pressure Surveys including build up tests.

Shut in Surface Pressure Surveys.

Gas, Oil and Water Analyses.

State and/or BLM Completion Reports.

State and/or BLM and/or MMS Monthly Production and OGOR Reports.

Additional Governmental Permits and Reports.

Drilling Contracts.

Operating Agreements.

Oil and Gas Sales Contracts.

Plug and Abandon Reports.

Monthly, Gas and/or Plant Products Purchasing Statements.

Well Bore Profiles.

Division Orders/Title Opinions.

AFEs.

Final Drill and Completion Costs.

Other wellfile information as requested by the Tribal Department of Energy.