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ELECTRONIC REPORT

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 05 2015

BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
751141038

6. If Indian, Allottee or Tribe Name
UTE MOUNTAIN UTE

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
HARRIS HAWK 20-1

2. Name of Operator
BRIDGECREEK RESOURCES COLO LLC
Contact: CHRISTINE CAMPBELL
E-Mail: ccampbell@palomarnr.com

9. API Well No.
30-045-35631-00-X1

3a. Address
8100 SOUTHPARK WAY, SUITE A1
LITTLETON, CO 80127

3b. Phone No. (include area code)
Ph: 303-668-8318

10. Field and Pool, or Exploratory
VERDE GALLUP

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 20 T31N R14W NWSE 1980FSL 1980FEL
36.884645 N Lat, 108.330312 W Lon

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			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 respectfully submits a revised drilling plan for the Harris Hawk 20-1 well.

We are anticipating spud of this well on or about 2/9/15.

RECEIVED
FEB 13 2015
NMOCD
DISTRICT III

SEE ATTACHED CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #290691 verified by the BLM Well Information System
For BRIDGECREEK RESOURCES COLO LLC, sent to the Durango
Committed to AFMSS for processing by BARBARA TELECKY on 02/05/2015 (15BDT0126SE)

Name *(Printed/Typed)* CHRISTINE CAMPBELL — Title REGULATORY SPECIALIST

Signature (Electronic Submission) — Date 02/05/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By — Title Mgr — Date 2/5/2015

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office TRES RIOS FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

NMOCD

REVISED 2/5/15

Attachment to Application for Permit to Drill.
Drilling program Revised February 2015

Bridgecreek Resources (Colorado), LLC

Harris Hawk No. 20-1

Surface Location: 1980' FSL & 1980' FEL
Section 20, T31N, R14W
Ungraded GL Elev = 5671'

Drilling program written in compliance with onshore Oil and Gas Order No. 1 (001 III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18, 1988

1. Geological Name of Surface Formation / Estimate Formation Top

The following table identifies the expected geologic markers and estimated formation tops (in feet from surface) based on seismic data. The well will be drilled to approximately 50 feet above the Dakota formation.

FORMATION	ESTIMATED FORMATION TOP FEET TVD	ESTIMATED FORMATION THICKNESS, FT	EXPECTED PRODUCTION
Lewis	Surface	480	Water
Cliff House	480	160	Water
Menefee	640	735	Water
Point Lookout	1375	405	Water
Upper Mancos	1780	955	Water
Gallup	2735	220	Oil and Water
Tocito	2955	129	Oil and Gas
Greenhorn	3084	381	Oil and Gas
Graneros	3465	135	Water
Total Well Depth	3600		

2. Estimated Depth of all Zones Anticipated to Have Fluid Occurrences (Oil, Gas, Water)

The expected moveable fluids in each zone are shown in the table above. ~~Historically the Tocito interval did not produce any water, and we do not expect water production from the Gallup at this time.~~

3. Pressure Control Equipment

a. Pressure control will be performed using a Blowout Preventer (BOP) similar to the one shown on Exhibit #1. The table below shows the intervals where the BOP will be used.

DEPTH INTERVAL	BOP EQUIPMENT
0-225'	No pressure control required
225' – 3600'	11" 2000 psi double ram BOP
~~1800' – 3600'~~	~~11" 2000 psi double ram BOP~~

b. BOP Testing Procedure

i. Initial 11" 2M BOP stack will be installed in casing head after setting 9-5/8" surface casing.

ii. The BLM (Durango Office) and State of NM will be notified 24 hours in advance of all BOP pressure tests. BLM to provide contact name and phone number.

iii. Pressure tests will be conducted on the BOP stack using a test plug and independent test company after nipple up.

iv. Subsequent BOP tests will be conducted a minimum of every 30 days. A new test will be conducted each time the stack is altered.

v. All BOP and manifold tests will be in accordance with the requirements of Onshore Order No. 2.

c. BOP Test Pressures

11" BOP			
Pressure Test	Ram Test	Hydrill Test	Manifold Test
High Pressure	2000 psi	NA	2500 psi
Low Pressure	200 psi	NA	250 psi

d. Ancillary Equipment

i. Upper Kelly cock and lower Kelley cock will be installed while drilling.

ii. Inside BOP or stab in valve will be available in open position on rig floor at all times.

iii. Safety valves and subs to fit all string connections in use.

iv. Choke Manifold will be installed and tested before drilling out of surface casing shoe.

v. Drilling spool to accommodate choke and kill lines with choke manifold rated at 2000 psi.

4. Proposed Bit and Casing Program

a. Casing Program – all casing strings are new casing

Hole Size	Casing Size	Weight	Grade	Coupling	Casing Setting Depth (MD)	Comments
12 1/4"	9 5/8 "	36 ppf	J-55	ST&C	0' - 225'	New casing. Cement to surface.
7-7/8"	5-1/2 "	17 ppf	N80	LT&C	0' - 3600' MD	New Casing. Cement to surface.
~~8 ¾"~~	~~7"~~	~~20ppf~~	~~J-55~~	~~LT&C~~	~~0' - >1800'MD~~	~~New Casing. Cement to surface.~~
~~6 ¼"~~	~~4 ½"~~	~~11.6ppf~~	~~N-80~~		~~Surface to 3600~~	~~New Casing Foamed Cement200 Feet Into previous casing~~

If the 5-1/2" N80 is not available we will use J-55 as the 17ppf is way over designed.

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 -	1.125
Burst -	1.0
Jt. Strength -	1.80

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 then every other joint to surface.

The production casing will be centralized using 1 centralizer on the first 10 jts and then every 4th joint to the surface.

~~It is proposed to set the 7" casing string at the top of the oil bearing rock. This depth which will be picked during drilling by the mud logger and may be deeper than 1800 feet. This is to maximize dipole sonic data acquisition which must be acquired in liquid, not air.~~

5. Proposed Cementing Program

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported.

a. The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Surface Casing Single Stage Job (0-225'):
Excess – 200% ~~(125%)~~ over gauge hole – 12-1/4" hole and 9-5/8" casing
Top of Cement - Surface

Main Slurry: 185 sx ~~(130sx)~~ Premium, with LCM adds, - 15.8 ppg, yield 1.16 cf/sx

ACTUAL HOLE/TOOL DEPTHS TBD ON SITE

~~Intermediate Casing - Single Stage Job (0-1800'MD):~~
~~Excess - 50% over gauge hole - 8-3/4" hole and 7" casing~~
~~Top of Cement - Surface.~~

~~Lead - 215 sx Premium - 12.7 ppg, yield 1.81 cf/sx~~
~~Tail -100 sx Premium - 15.8 ppg, yield 1.15 cf/sx~~

Production Casing – Two Stage Cement Job (0' - 3600' MD):
1st Stage: (1800'-3600')
Excess – 75% ~~(50%)~~ over gauge hole – 7-7/8" hole
Top of Cement – to Stage Tool @ 1800'

Lead Cement -

ELASTISEAL (TM) SYSTEM	Fluid Weight	13 lbm/gal
0.2 % Versaset (Thixotropic Additive)	Slurry Yield:	1.43 ft3/sk
0.15 % HALAD-766 (Low Fluid Loss Control)	Total Mixing Fluid:	6.75 Gal/sk
0.2 % Halad(R)-344 (Low Fluid Loss Control)	Volume:	7.15 bbl
	Calculated Sacks:	225 sx

Tail Cement

ELASTISEAL (TM) SYSTEM	Fluid Weight	13.50 lbm/gal
0.2 % Versaset (Thixotropic Additive)	Slurry Yield:	1.28 ft3/sk
0.15 % HALAD-766 (Low Fluid Loss Control)	Total Mixing Fluid:	5.64 Gal/sk
0.05 % SA-1015 (Suspension Agent)	Volume:	128 cf
	Calculated Sacks:	175 sx

2nd Stage: (0'-1800')
Excess – 50% over gauge hole – 7-7/8" hole
Top of Cement – Surface

Lead – 215 sx Premium Lite, w/ LCM adds – 12.7 ppg, yield 1.85 cf/sx
Tail -50 sx Premium HS, w/ LCM adds – 15.8 ppg, yield 1.38 cf/sx

Total sacks of cement pumped on production csg = ~670 sx ~~(585sx)~~
Cement volumes will be adjusted based on caliper log results.

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum State of New Mexico Oil & Gas Division requirements. Slurries used may vary from listed above and depending on service provider selected. Cement yields may change depending on slurries selected.

All waiting on cement times shall be a minimum of 8 hours or adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

6. Proposed Drilling Fluid Program

a. Mud type and properties

Hole Size (in)	Drilled Hole TVD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
12 1/4"	0-225'	Fresh Mud	8.4 - 8.6	70-100	NC
7-7/8"	225' - 3600'	FW Mud	8.5 – 8.8	40-50	6 – 8
~~8 ¾"~~	~~225' 1800'~~	~~Fresh Mud~~	~~8.5 – 8.8~~	~~40-50~~	~~6-8~~
~~6 ¼"~~	~~1800' 3600'~~	~~Air/Mist~~	N/A	N/A	N/A

i. The reserve pit will be approximately 30' x 70'x 14' ~~with a flare pit in the far corner~~, measurements at top of pit. The pit will be lined with two approximately 20 mil thick (2x-Double Lined) plastic impervious membrane material to make up the 32 mil thickness required by the BLM office. In regards to the pit and disposal of cuttings within the pit, all applicable rules from the NMOCD 19.15.17 will apply. Enough barite will be kept onsite to weight mud sufficiently to contain any unexpected pressures.

~~ii. Air drilling will use an anchored 6-inch blooie line with an igniter and dust suppression at the end of the blooie line where it enters the flare pit. The end of the blooie line will be at least 100 feet from the wellhead. Air compression equipment will be on the opposite side of the wellbore from the flare pit and be a safe distance from the wellhead. The compression equipment will be equipped with an emergency kill switch, a pressure relief valve, and spark arresters on the motors, and be capable of 2400 +/- CFM at 800 psi.~~

b. Monitoring

i. Mud volume and flow will be monitored visually.

7. Formation Evaluation Program

Cores	Conventional, Depth TBD ~~Possible Sidewall (percussion or rotary)~~
Testing	None anticipated
Sampling	30' samples from 250' to TD
Surveys	Single shot surveys as needed, or at a minimum every 500' to TD.
Log program	DIL-GR-SP, FDC-CNL-GR-Caliper in zones of interest

8. Drilling Conditions

a. Anticipated abnormal pressures or temperatures.

i. No abnormal pressures or temperatures or other hazards are anticipated.

ii. Maximum bottom hole pressure equals approximately 1685 psig (pounds per square inch gauge)*

* Max mud wt x 0.052 x TD = A (bottom hole pressure)
9 x 0.052 x 3600 = 1685 psig

** Maximum surface pressure = A – (0.22 x TD)
1685 – (0.22 x 3600) = 893 psig

b. Hydrogen Sulfide (H2S)

H2S is not expected. ~~but standard monitoring and personal monitors will be in place on the rig and drilling crew.~~ The mud loggers monitor for H2S.

9. Other Information

This is a vertical well and no directional drilling equipment should be used. The anticipated completion zone will be the Tocito reservoir. The well will be cased, perforated to allow the fluids to flow thru the casing, stimulated with N2 and sand proppant in up to four stages.

a. Drilling and Completion Schedule

Activity	Date
Location Construction	February 2015
Spud	February 2015
Total Drilling Duration	~10 ~~(12)~~ days drilling time
Clean up and site prep	~15-30 days
Total Completion Duration	~10 days completion time

Bridgecreek Resources 3160
Tribal Lease: 751-14-1038
Well: Harris Hawk #20-1
Location: 1980 FSL & 1980' FEL
Sec. 20, T. 31 N., R. 20 W.
San Juan County, New Mexico

Conditions of Approval – Change to Original APD:

1) All the COAs from the original APD are still in effect.