State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

David Martin

Cabinet Secretary-Designate

Jami Bailey, Division DirectorOil Conservation Division



Brett F. Woods, Ph.D. Deputy Cabinet Secretary

New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

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Operator Signature Date:
Application Type: P&A Drilling/Casing Change Recomplete/DHC Location Change Other:
Well information:
API-WELL Well Name Well Operator Name Type Stat County Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW Surf_Owner UL Sec Twp N/S Rng W/E Surf_Owner UL Sec Twp N/S Rng W/E Surf_Owner UL Sec Twp N/S Rng Rudowner UL Sec Twp N/S Rng Rudowner UL Sec Twp N/S Rng Rudowner
*Notify NMOCD 24hrs prior to beginning operations. *Hold C104 For Directional Survey and "As Drilled" plat *If cemented, the production casing must be cemented a minimum of 100 feet into the intermediate (next shallower) string
AUG 2 8 2013 NMOCD Approved by Signature Date
NMOCD Approved by Signature Date

Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-013.
Expires: July 31, 201

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.				5. Lease Serial No. NMSF078876	m # ->>	
				6. If Indian, Allottee	or Tribe Name	
SUBMIT IN TRIPLICATE - Other instructions on reverse side.				7. If Unit or CA/Agre	eement, Name and/or No.	
Type of Well Oil Well	her				8. Well Name and No CLU 2507-33-513	
Name of Operator Contact: CATHERINE HUNTINGTON ENERGY LLC E-Mail: csmith@huntingtonenergy			SMITH gy.com		9. API Well No. 30-039-31151-	00-X1
3a. Address 908 NW 71ST ST OKLAHOMA CITY, OK 73116 3b. Phone No Ph: 405-84			o. (include area co 40-9876 Ext: 1 0-2011	ode) 29	10. Field and Pool, or DUFER'S POIN	r Exploratory NT
4. Location of Well (Footage, Sec.; 7	., R., M., or Survey Description	1)			11. County or Parish,	and State
Sec 33 T25N R7W SESE 505 36.351350 N Lat, 107.571950					RIO ARRIBA C	OUNTY, NM
12. CHECK APP	ROPRIATE BOX(ES) TO	O INDICATI	E NATURE O	F NOTICE, R	EPORT, OR OTHE	R DATA
TYPE OF SUBMISSION			ТҮРЕ	OF ACTION		
➤ Notice of Intent	☐ Acidize	Dec	epen	☐ Produc	tion (Start/Resume)	☐ Water Shut-Off
_	☐ Alter Casing`	☐ Fra	cture Treat	☐ Reclam	ation	■ Well Integrity
☐ Subsequent Report	Casing Repair	. □ Ne	w Construction.	☐ Recom	plete	⊠ Other
☐ Final Abandonment Notice	☐ Change Plans	☐ Plu	g and Abandon	☐ Tempor	rarily Abandon	Drilling Operations
•	☐ Convert to Injection	☐ Plu	g Back	■ Water I	Disposal	
If the proposal is to deepen direction. Attach the Bond under which the wo following completion of the involved testing has been completed. Final Aldetermined that the site is ready for for the Huntington Energy, L.L.C. resemproduction Casing on the Opecentralizers to be installed will drilling. The attached Operation Also, the well will be completed Largo Unit #513 permit, which Conditions of Approach to the Policy of Approach to	rk will be performed or provide operations. If the operation re operations in the operation re operation re operation re operation in the inal inspection.) pectfully requests to characteristics Plan that was appose 60, not 113 as stated ons Plan with the changes of in the Dufer's Point Powas approved January 1	the Bond No. c sults in a multip ed only after all age the numb proved Augus on the appro is is attached. bl, Pool Code 2013, was	on file with BLM/I le completion or r requirements, inc per of centralize st 7, 2013. The byed plan for the #19859. The of for Basin Dako	BIA. Required su ecompletion in a luding reclamatio ers on the 5 1/2 number of the horizontal coriginal Canyo ta. As per NM	bsequent reports shall be new interval, a Form 316 n, have been completed, CONDITION Adhere to prev RCUD AI OCD OCD OLI COI	filed within 30 days 50-4 shall be filed once
Conditions of Approval on app to cancel the Basin Dakota Po	roved Sundry dated Aug	ust 15, 2013,	- Auntington Er	BLM'S ALTP ACTION BY OFFERATOR AUTHORIZ	ROVAL OR ACCEPT DIS NOT RELIEVE I REPOM OUTAINING ATTON DISQUIRED	ance of this Thie Lessee and Sany Other For Opteations
14. I hereby certify that the foregoing is	Electronic Submission #	217277 verifie	d by the BLM V	Vell Information	NGAND BNDAN LAI ı System	AUS .
Comm	For HUNTINGT itted to AFMSS for process	ON ENERGY sing by WILLI	LC, sent to th	e Farmington J on 08/19/2013	(13WMT0014SE)	
Name (Printed/Typed) CATHERI	•		i	JLATORY		
Signature (Electronic S	Submission)		Date 08/16	./2013		
	THIS SPACE FO	OR FEDERA	AL OR STAT	E OFFICE U	SE	
Approved By WILLIAM TAMBEKOU Ti				_EUM ENGINI	EER	Date 08/19/2013
				ngton		
Title 18 U.S.C. Section 1001 and Title 43	U.S.C. Section 1212, make it a	crime for any p	erson knowingly a	nd willfully to ma	ake to any department or	agency of the United

OPERATIONS PLAN (REVISED 8/16/13)

Well Name: CLU 2507 33 513 #1H

Location: SHL: 505' FSL, 158' FEL, SESE, Lot P, Sec 33, T25N-R7W

BHL: 2062' FSL & 330' FWL, NWSW, Sec 33, T25N-R7W

Rio Arriba County, NM

Elevation: 6986' GL

Geological Markers:

Formation Tops:	Measured Depth (Tops)
San Jose	Surface
Ojo Alamo	1906' Possible Water
Kirtland	2090'
Fruitland	2419'
Picture Cliffs	2543'
Lewis Shale	2639'
Heurfanito Bentonite	2927'
Chacra	3415'
Cliff House	4117'
Menefee	4143'
Point Lookout	4879'
Mancos	5024' Oil/Gas
Gallup	5961' Oil/Gas
TD	10869' MD, 6075' TVD

Casing and Cementing Program:

Casing Program:

<u>Hole Size</u>	Depth Interval	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
17 ½"	0 - 350	13 3/8"	61.0#	J-55
12 ¼"	0-5238	9 5/8"	40.0#	N-80
*8 3/4"	0 - 10869	5 ½"	17.0#	N-80

^{*}Hole size may be reduced to 7 7/8" after the curve has been achieved.

Cementing:

Surface casing - 13 3/8"

10 bbl Fresh Water Spacer, Cement to surface w/450 sx Premium cement w/2% calcium chloride and .125#/sx Poly E-Flake (92.69 bbls, 15.8 ppg, yld: 1.17 cu ft/sk).

WOC 8 hr. prior to drilling out surface casing. Test casing to 600 psi for 30 minutes.

10 Centralizers to be installed.

Intermediate Casing – 9 5/8"

Lead with 1095 sx Hall. Light Premium w/5#/sk Kol-Seal, .125 lb/sk Poly E-Flake (368.99 bbls, 12.4 ppg, 1.90 cu ft/sk). Tail w/220 sx Premium Cement, .2% Halad (R) (44.76 bbls, 15.8 ppg, 1.15 cut ft/sk). Cmt to Surface.

82 Centralizers to be installed. Test casing to 1500 psi for 30 minutes.

Pilot Hole Plug Back -

Spot 500' cement plug in 8 $\frac{3}{4}$ " hole to facilitate kick-off point at ± 5400 '. Kick off plug from ± 5200 '-5700'. Kick off Plug info:

Tuned Spacer III, 2 lbm/bbl Fe-2, 144.2 lbm/bbl Baroid 41 (11.50 ppg, 25.42 bbls)

Plug Cement: 255 sx cement: 94 lbm/sk Premium Cement, 3% KCL, 0.2% HR-5 (17 ppg, 1.00 cu ft/sk, 45.33 bbls); Tuned Spacer III, 2 lbm/bbl Fe-2, 144.2 lbm (11.50 ppg, 4.58 bbls)

**Production Casing - 5 1/2"

Tuned Spacer: 1 gal/bbl Musol A, 146.5 lbm/bbl Barite, 1 gal/bbl SEM-7 (11.50 lbm/gal, 40 bbls). Lead w/50 sx Premium Cement, 0.15% HALAD-766 (10.22 bbls, 15.8ppg, 1.15 cuft/sk) Foamed Lead Cmt: 525 sx 50/50 Poz Premium, 0.15% HALAD-766, 0.2% Versaset, 1.5% Chem Foamer 760, Totetank (184.99 bbls, 13.0 ppg, 1.44 cu ft/sk). Tail Cement: 105 sx 50/50 Poz Premium 0.15% HALAD-766, 0.2% Versaset (22.99 bbls, 13.5 ppg, 1.29 cu ft/sk). Displacement: Clay Web, 0.5 gal/bbl CLA-Web (8.34 lbm/gal, 235.55 bbl) Est TOC @ ±5500'. 60 Centralizers to be installed. Test casing to 1500 psi for 30 minutes.

**Packers may be used in lieu of 5 ½" cementing. A Notice of Intent Sundry will be filed if change will be made.

Pressure Control Equipment:

See Attached BOPE & Choke Manifold Schematic for a diagram of pressure control equipment.

Pressure control configuration will be designed to meet and exceed 2M standards. All equipment will have 3M pressure ratings.

Drilling Fluids:

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss	Invert Ratio
0 - 350	Spud	8.4-8.9	40-50	no control	
350 - 5238	LSND	8.4-9.0	40-60	8-12	
5238-10869'	OBM	7.0-8.5	4-12	4-12	70/30 - 90/10

Closed Loop equipment will be utilized for solids control. A lined cutting pit will be utilized for water based cuttings from upper hole sections. Cuttings from production hole will be hauled off to approved disposal site.

Pressures and Hazards:

No abnormal pressures or temperatures are anticipated. No hydrogen sulfide gas is expected based on nearby well production. Maximum bottom hole pressure will be ± 1800 psi.

Anticipated pore pressure

Fruitland Coal	300 psi
Pictured Cliffs	500 psi
Gallup	±1800 psi

Tests, Logs, Coring:

Mud log – 2000' to TD LWD (Gamma Ray, Resistivity, Neutron-Density) Cores & DST's – 360' core from 5740' to 6100'

Directional Plan:

The wellbore directional plan and survey plat (C-102) are attached.

The production hole will be landed and drilled within target formation horizontally utilizing LWD equipment to help steer the wellbore. Adjustments will be made to the directional plan as formation and hole indicates during drilling.

The 9 5/8" casing will be set and cemented, a vertical hole will be drilled to 6100'. At Approximately 5900', a core barrel will be picked up and a 200' core will be obtained. The hole will be drilled out and open hole logs will be run from TD to 5238'.

Other Information:

- If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- This gas is dedicated.