Form 3160-3 (August 2007)

FORM APPROVED OMB No 1004-0137 Expires July 31, 2010

OCT 31 2011

Lease Serial No.

DEPARTMENT OF TH BUREAU OF LAND M		Farmington F	Field Offi	NMSF 078879	
APPLICATION FOR PERMIT 1	O DRILL OF	REENTÉRand	Manage	nලു If Indian, Allotee or	Tribe Name
ia. Type of work DRILL REE	7 If Unit or CA Agreement, Name and No. Canyon Largo Unit				
lb. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other	8. Lease Name and Well Canyon Largo Unit #50				
2. Name of Operator Huntington Energy, L.L.C.				9 API Well No. 30-039	-31097
3a. Address 908 N.W. 71st St. Oklahoma City, OK 73116	3b Phone No 405-840-9). (include area code) 876		10 Field and Pool, or Expl Basin Dakota	oratory
4. Location of Well (Report location clearly and in accordance with At surface Lot A, 645' FNL & 199' FEL	h any State requiren	nents *)		11. Sec., T. R. M. or Blk. at Sec 23-T25N-R7W	nd Survey or Area
At proposed prod. zone same as above 14 Distance in miles and direction from nearest town or post office* 35 miles SE from Blanco, NM		3.00 / 11		12 County or Parish Rio Arriba	13. State NM
15 Distance from proposed* 199 location to nearest property or lease line, ft (Also to nearest drig. unit line, if any)	16 No. of a 2560.00	cres in lease	17 Spacin	g Unit dedicated to this well RCVD N	OV 15'11
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19. Proposed 7370'	l Depth	1	BIA Bond No. on file 4SDF02064 OIL CO	NS. DIV.
Elevations (Show whether DF, KDB, RT, GL; etc.)	1	nate date work will sta	rt*	23 Estimated duration	
6839' GLThis action is subject to technical and procedural review pursuant to 43 CFH 3165.3	03/01/201	2			3T.3
and appeal pursuant to 43 CFR 3165.4 The following, completed in accordance with the requirements of One	24. Attac shore Oil and Gas		tached to thi	OND ICOT TO COMO	ONS AUTHORIZED ARE LIANCE WITH ATT ACH EMENTS".
Well plat certified by a registered surveyor. A Drilling Plan.		Item 20 above).	-	ns unless covered by an exist	ing bond on file (see
3 A Surface Use Plan (if the location is on National Forest Syste SUPO must be filed with the appropriate Forest Service Office).	em Lands, the	5 Operator certific 6. Such other site BLM.		ormation and/or plans as may	be required by the
25 Signature Smith	i	(Printed/Typed) rine Smith		. Date 10,	/25/2011
Regulatory	_ N	(Printed/Typed)		Date	
Approved by (Signature)	Office	(Frimea/Typea)		Date	11/9/11
Application approval does not warrant of certify that the applicant h		able title to those right	ts in the sub	ject lease which would entitle	the applicant to
conduct operations thereon. Conditions of approval, if any, are attached.					
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a states any false, fictitious or fraudulent statements or representations	as to any matter w	ithin its jurisdiction.			ncy of the United
(Continued on page 2)		EC OCD ASING & ((Instruct	ions on page 2)

UNITED STATES

DEPARTMENT OF THE INTERIOR

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER **AUTHORIZATION REQUIRED FOR OPERATIONS** ON FEDERAL AND INDIAN LANDS

NOV 2 1 2011

NMOCD

RECEIVED

³Pool Name

DISTRICT I 1625 N French Dr., Hobbs, N.M. 88240

DISTRICT II 1301 W Grand Ave., Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M 87410 State of New Mexico
Energy, Minerals & Natural Resources Performent 2011
OIL CONSERVATION DIVISION

²Pool Code

Form C-102 Revised July, 16, 2010 Submit one copy to appropriate District Office

☐ AMENDED REPORT

DISTRICT IV 1220 South St. Francis Dr., Santa Fe, NM 87505

30-129-31097

E/2 - 320

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-83	39-3	1097		71599 Basin Dakota							
⁴ Property, Co	ie		 		• We	Well Number					
32660 CANYON LARGO UNIT							•	505			
OGRID No.					*Operator N	ame		•	Elevation		
20870	5			HU	NTINGTON EN	TINGTON ENERGY, LLC 6839'					
				-	¹⁰ Surface	Location		-			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
A	23	25-N	7-W		645	NORTH	199	199 EAST			
	11 Bottom Hole Location If Different From Surface										
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
12 Dedicoted Acres		l	¹³ Joint or In	fill	14 Consolidation Cod	e	¹⁵ Order No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STANDARD LINIT HAS BEEN APPROVED BY THE DIVISION

		ARD ONT TIAS E		, <u>, , , , , , , , , , , , , , , , , , </u>
16	LAT: 36.39099° 1 LONG: 107.53555° V LAT: 36°23'27.53' LONG: 107°32'05.81"	N 88°56'17" W 26 N 88°58' W 26 SURFACE: N. (NAD 83) W. (NAD 83)	N 00°01' E 2594.46' (R) (A) 142.80 N 00°01' E 2594.46' (R) (A) 5655.14' (M) (M) 2595.14' (M)	right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division 7/14/11 Signoture Date Catherine Smith Printed Name Csmith@huntingtonenergy. E-mail Address
				Is SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Note of survey Signature and Section (450) Signature and Section (

RECEIVED

OPERATIONS PLAN

Well Name:

Canyon Largo Unit #505

Location:

645' FNL, 199' FEL, NENE, Lot A, Sec 23, T25N, R7W

Rio Arriba County, NM

Formation: Elevation:

Basin Dakota

6839' GL

Bureau of Land Management Farmington Field Office

NOV 0 4 2011

Formation Tops:	Measured Depth (Tops)
San Jose	Surface
San Joes Water Sands	904'
Kirtland Shale	2144'
Fruitland	2334'
Picture Cliffs	2624'
Lewis Shale	2714'
Heurfanito Bentonite	3009'
Chacra	3464'
Cliff House	4174'
Menefee	4254'
Point Lookout	4894'
Mancos	5114'
Greenhorn.	6844'
Graneros	6914'
Dakota	6954'
Encinal/Burro Canyon	7164'
Morrison	7264'
TD	7370'

Logging Program:

Mud log – 4200' to TD

Open hole logs-PEX (interval to be determined)

Cased hole logs –CBL/GR – TD to 5800'

Cores & DST's - none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	Fluid Loss
0 - 320	Spud	8.4-8.9	40-50	no control
320 - 7370	LSND	8.4-9.0	40-60	8-12

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program:

	Hole Size	Depth Interval	Csg. Size	Wt.	<u>Grade</u>	Thread
	12 1/4"	0' - 320'	8 5/8"	24.0#	J-55	ST&C
	7 7/8"	320' – 7370'	4 ½"	11.6#	N-80	LT&C
Tubing	Program:					
		0' – 7370'	2 3/8"	4.7#	J-55	

BOP Specifications, Wellhead and Tests:

Surface to TD -

11" 3000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out, surface casing will be tested to 600 psi for 30 minutes. BOP will be tested Low: 500#/5min. & High: 3000#/10 min. Drilling Spool may or may not be employed.

^{2&}quot; nominal, 3000 psi minimum choke manifold (Reference Figure #2).

Completion Operations:

6" 3000 psi double gate BOP stack (Reference Figure #1). After nipple-up prior to completion, pipe rams and casing top will be tested to 3000 psi for 15 minutes.

Surface to Total Depth:

2" nominal, 3000 psi minimum choke manifold (Reference Figure #2).

Wellhead:

8 5/8" x 4 ½" x 1 ½" x 1 ½" x 3000 psi tree assembly.

General:

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper Kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- A BOP pit level drill will be conducted weekly for each drilling crew.
- All of the BOP tests and drills will be recorded in the daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

8 5/8" surface casing -

Cement to surface w/265 sx Class "B" cement w/3% calcium chloride and ½#/sx cellophane flakes (312 cu. ft. of slurry, 200% excess to circulate to surface). WOC 8 hr. prior to drilling out surface casing. Test casing to 600 psi for 30

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with

Production Casing – 4 ½"

Onshore Order #2.

minutes.

Lead with 700 sx 65/35 Standard Poz w/6% gel, ¼# Flocele, 10# Gilsonite, 3/10% Halad 9, 1/10% HR5 (1.96 yld). Tail w/900 sx 50/50 Standard Poz w/35 Gel, 9/10% Halad9, 2/10% CFR 3, 5# Gilsonite, ¼# Flocele (1.47 yld).

Alternate Two-stage cement job as follows:

First Stage: Cement to circulate to stage tool @ 5066'. Lead with 700 sx Class "G" 50/50 poz (13#, 1.47 yd) w/3% gel, 0.25 pps Celloflake, 5 pps Gilsonite, 0.25 pps Fluid loss, 0.15% dispersant, 0.1% retarder. WOC 4 hours prior to pumping second stage. (Slurry volume: 1029 cu. ft. Excess slurry: 50%). DV Tool at 5000 ft.

Second Stage: Cement to circulate to surface. Cement with 700 sx Class "G" (12#, 2.9yd) TX1 Liteweight cement w/2.5% sodium metasilicate, 2% calcium chloride, 10 pps Gilsonite, 0.5 pps Celloflake, 0.2% antifoam. WOC a minimum of 18 hours prior to cleanout. (Slurry volume: 1914 cu. ft. Excess slurry: 50%). Tail w/50 sx Class "B" w/1/4# Flocele (15.6#, 1.18 yd), (Slurry 59 cu. ft., Excess 50%).

Float shoe on bottom. Three centralizers run every other joint above shoe. Thirty-five centralizers - one every 4th joint to the base of the Ojo Alamo @ 2448'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2448'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

Additional Information:

The Dakota formations will be completed. If Dakota is non-commercial, Devils Fork Gallup will be completed.

- No abnormal temperatures or hazards are anticipated.
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The east half of the Section 23 is dedicated to this well.
- This gas is dedicated.
- Anticipated pore pressure

Fruitland Coal	300 psi
Pictured Cliffs	500 psi
Mesa Verde	700 psi
Dakota	3000 psi



CEMENT TEST REPORT Hallburton Energy Services Farmington District Laboratory 4109 E. Main Farmington, NM 87499

Τo.

Randy Snyder

Halliburton Energy Services

Report: FLMM4D71

Date:

6-Feb-04

Company:

Mud Drilled

Total Depth: 400

BHST: 90 +/- deg F

BHCT: 80 +/- deg F

All tests performed according to modified API RP Spec 10, 1997

Slurry: Surface

Thickening Time: 2:50 to 70 BC

Free Water. 0.00%

Settling:

Fluid Loss:

Standard Cement

2.00%

.25 #/sk

Flocele

0.00%

1158

Design

100%

CaCl2

Density: 15.8 lb/gal

Yield: 1.18 cuft/sk Water: 5.24 gal/sk

Surface Cement

Compressive Strength

UCA @80 deg F (BHCT)- 3000 asi

Rheology

deg F	80	
600	67	
300	42 34	-
200	34	1
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60	21	· [
30	18	·
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Bill Loughridge

Senior Scientist

Note: This report is for information and the content is limited to the sample described. Halfburton Energy Services makes no warrenties. express or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage, regardless of cause, including any act or omission of Hallburton, resulting from the use hereof.

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	TOP PLUC PLUG CONTAINE	S 5 W R YES	_SWADGE _		TD_		350'	BHS OTHE:	₹	
	EQUIPMENT TYP	TATIONEL							TE PERSONAL PROPERTY.	A STATE OF THE
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		SACKS ADDITIVES MIXED A	5	BS/GAL	YIELD_		WATER _		GAL/SK	
=		C / C / S	200	TYPE 50	0/50/Std/F	Poz				
		MIXED AT		BS/GAL	YIELD	1.47	- 5# Gilsor WATER	11te - 1/4 5.37	F Flocele GAL/SK	
		SACKS ADDITIVES MIXED AT		TYPE IS/GAL	YIELD _		WATER		GALISK	
7	HIRD STAGE	SACKS ADDITIVES		TYPE	2051.5					
		MIXED AT		S/GAL TYPE	YIELD		WATER		GAL/SK	
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Ŀ	ASING SIZE: 4-1/2 HREAD:		STAGE TOOL CENTRALIZE	RS	23	TYPE TYPE	4 1/2X7 7/8		PINS	
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	CREW								,	

HUNTINGTON ENERGY, L.L.C. CANYON LARGO UNIT

RIO ARRIBA CO., NM

BOP STACE - 3000 PSI

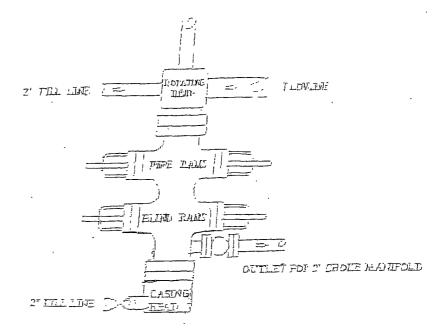


FIGURE 1

CHOKE MANIFOLD - 3000 PSI

