

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014**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.
NMSF078884

6. If Indian, Allottee or Tribe Name

RCVD OCT 2 '14
OIL CONS. DIV.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

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

DIST. 3

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
CLU 2506 15 #4H2. Name of Operator
Huntington Energy, L.L.C.9. API Well No.
30-039-312403a. Address
908 N.W. 71st St.
Oklahoma City, OK 731163b. Phone No. (include area code)
405-840-987610. Field and Pool or Exploratory Area
Devil's Fork Gallup4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL: SESE Lot P, 454' FSL & 278' FEL
BHL: SWSW Lot M, 1070' FSL & 330' FWL11. County or Parish, State
Rio Arriba Co., NM

12. CHECK THE 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 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 recompleat 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Huntington Energy, L.L.C. respectfully respects approval to change the Bottom Hole Location for the above referenced well to 1070' FSL & 330' FWL. It will then be a Non-Standard Location. The approval for non-standard location is currently processing with the New Mexico Oil Conservation Division. The revised C-102 Survey Plat, Horizontal Drilling Plan with Wall Plot, Operations Plan, and SUPO are attached.

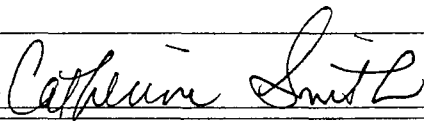
CONDITIONS OF APPROVAL

Adhere to previously issued stipulations

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 LANDS14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Catherine Smith

Title Regulatory

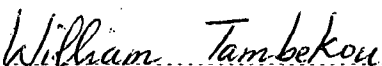
Signature



Date 09/25/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by



Title

Petroleum Engineer

Date

9/30/2014

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

FFO

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.

(Instructions on page 2)

DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-8181 Fax: (575) 393-0720

DISTRICT II

811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III

1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31240	² Pool Code 17610	³ Pool Name DEVILS FORK GALLUP
⁴ Property Code 313617	⁵ Property Name CLU 25-6-15	⁶ Well Number 4H
⁷ OGRID No. 208706	⁸ Operator Name HUNTINGTON ENERGY	⁹ Elevation 6529'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	WEST/West line	County
P	15	25N	6W		454'	SOUTH	278'	EAST	RIO ARRIBA

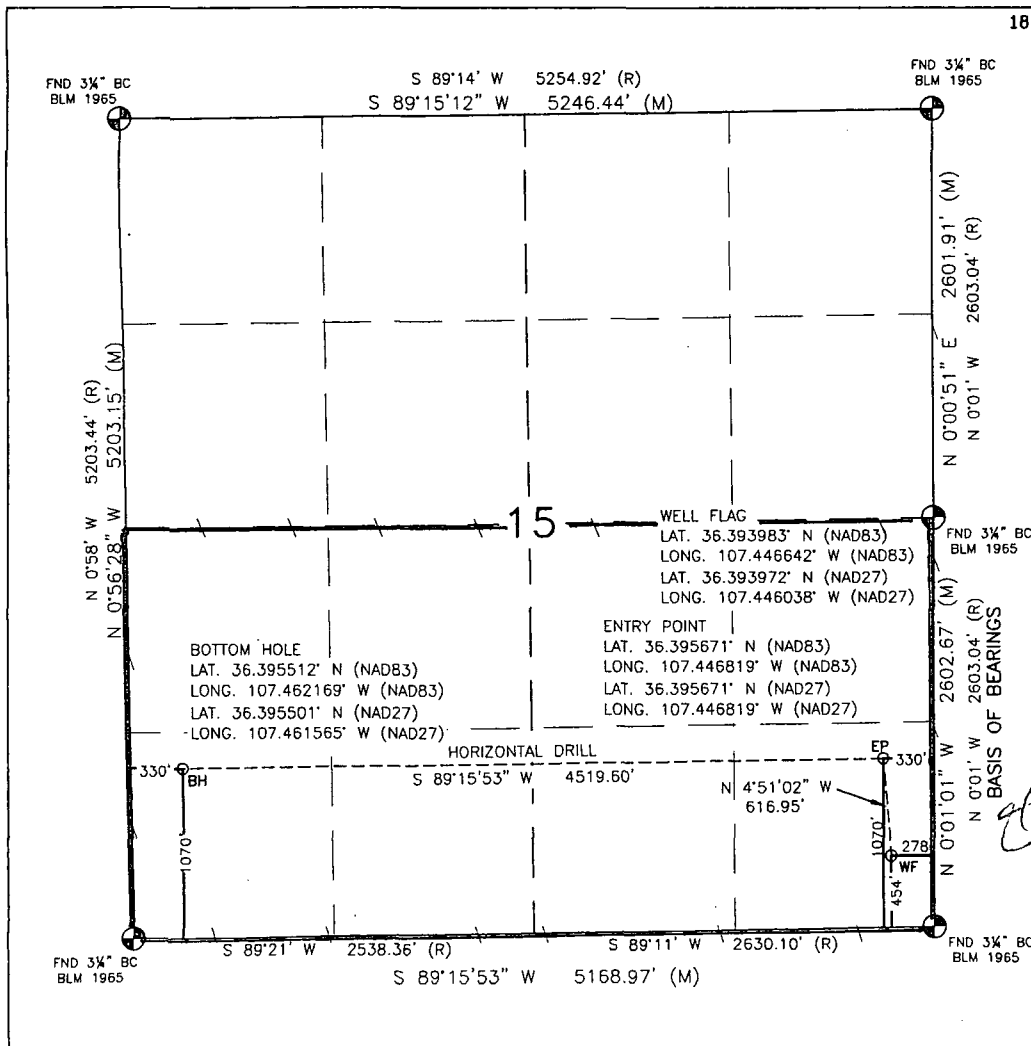
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	WEST/West line	County
M	15	25N	6W		1070'	SOUTH	330'	WEST	RIO ARRIBA

¹² Dedicated Acres S/2 - 320	PROJECT AREA SW 1/4 SE 1/4	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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18 17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a 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.

Catherine Smith 9/25/2014
Signature Date

Catherine Smith
Printed Name

csmith@huntingtonenergy.com
E-mail Address

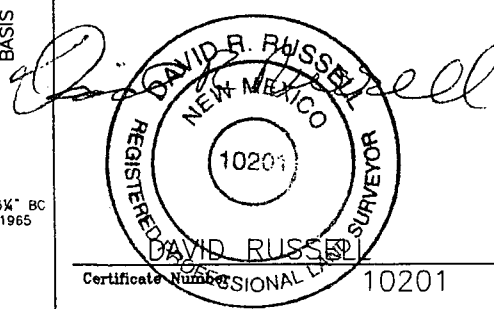
SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat 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.

FEBRUARY 17, 2014

Date of Survey

Signature and Seal of Professional Surveyor:



Operations Plan

WELL NAME: CLU 25-6-15 #4H
LOCATION: SHL: 454' FSL, 278' FEL 25N-6W Sec. 15 Lot P
BHL: 1070' FSL, 330' FWL 25N-6W Sec. 15 Lot M
Rio Arriba County, NM

ELEVATION: 6,529' GL
6,541' KB

GEOLOGICAL MARKERS:

<u>Formation Tops</u>	<u>MD</u>	<u>TVD</u>
San Jose	Surface	
Ojo Alamo	1,979'	Possible Water
Kirtland	2,108'	
Fruitland	2,222'	
Pictured Cliffs	2,519'	
Lewis Shale	2,778'	
Huerfanito Bentonite	2,911'	
Chacra	3,368'	
Cliffhouse	4,102'	
Menefee	4,185'	
Point Lookout	4,759'	
Mancos	5,056'	Oil/Gas
El Vado	5,787'	Oil/Gas
Target	TD 11,018'	6,090'

CASING AND CEMENTING PROGRAM:

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>
12-1/4"	0 - 450'	9-5/8"	36.0#	J-55
8-3/4"	0 - 6,500'	7"	26.0#	N-80
6-1/8"	0 - 11,018'	4-1/2"	11.6#	P-110

CEMENTING:

Surface Casing - 9-5/8"

Cement to surface w/153 sacks Type III neat (37 bbls, 14.6 ppg).
WOC 8 hr. Prior to drilling out surface casing, test casing to 600 psi for 30 minutes.
10 Centralizers to be installed.

Intermediate Casing - 7"

Lead 610 sacks Premium Lite FM + 3% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 5 lbs/sack LCM-1 +0.4% bwoc FL-52A + 8% bwoc Bentonite +0.4% bwoc Sodium Metasilicate (232 bbls, 12.1 ppg)
Tail 235 sacks Type III Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.2% bwoc FL-52A (58 bbls, 14.6 ppg). Cement to surface.
60 Centralizers to be installed. WOC. Test casing to 1500 psi for 30 minutes.

Production Casing -

4-1/2"

Lead w/272 sacks Premium Lite High Strength + 0.7% bwoc R-3 + 3% bwoc Potassium Chloride + 0.5% bwoc CD-32 + 5 lbs/sack LCM-1 + 0.25 lbs/sack Cello Flake + 1.15% bwoc FL-52A (106 bbls, 12.5 ppg)

Tail w/ 85 sacks Premium Lite High Strength + 0.7% bwoc R-3 + 3% bwoc Potassium Chloride + 0.25 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 0.5% bwoc CD-32 + 1.15% bwoc FL-52A (27 bbls, 13.5 ppg). Est TOC @ 4900'. 60

Centralizers to be installed. WOC. Test csg to 1500 psi for 30 mins.

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

During stimulation stages a wellhead isolation sleeve (10,000 psi) will be used

DRILLING FLUIDS:

Mud Program:

<u>Depth Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>Invert Ratio</u>
0 - 450'	Spud	8.4 - 8.6	30 - 35	no control	
0 - 6,500'	LSND	9.0 - 10.5	38 - 42	8 - 12	
0 - 11,018'	LSND	8.5 - 9.5	36 - 40	< 1	

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

PRESSURE AND HAZARDS:

No abnormal or temperatures are anticipated.

No hydrogen sulfide gas is expected on nearby well production.

Maximum bottom hole pressure will be +/- 2,100 psi

Anticipated Pore Pressures

Fruitland Coal	840 psi
Pictured Cliffs	920 psi
Mesaverde	1,580 psi
Gallup	2,100 psi

TESTS, LOGS, CORING:

Mud log - KOP to TD

Logs - GR/CCL during perforating stages

LWD - Gamma Ray, Resistivity

Cores & DST's - None

DIRECTIONAL PLAN:

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

The production hole will be landed and drilled within the 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.

OTHER INFORMATION:

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

Huntington Energy

Project: Rio Arriba (NM83C)
Site: Sec 15-T25N-R6W
Well: CLU 25-6-15 #4H
Wellbore: Wellbore #1
Design: 09-11-14



Azimuths to True North
Magnetic North: 9.37°
Magnetic Field
Strength: 50345.2nT
Dip Angle: 63.16°
Date: 2014/04/24
Model: KGRF2010



WELL DETAILS: CLU 25-6-15 #4H

Ground Level: 0.0
Easting: 1288232.21 Latitude: 36°23'38.339 N Longitude: 107°26'47.911 W
SHL 455' FSL / 278' FEL
BHL 1070' FSL / 330' FWL

Annotations

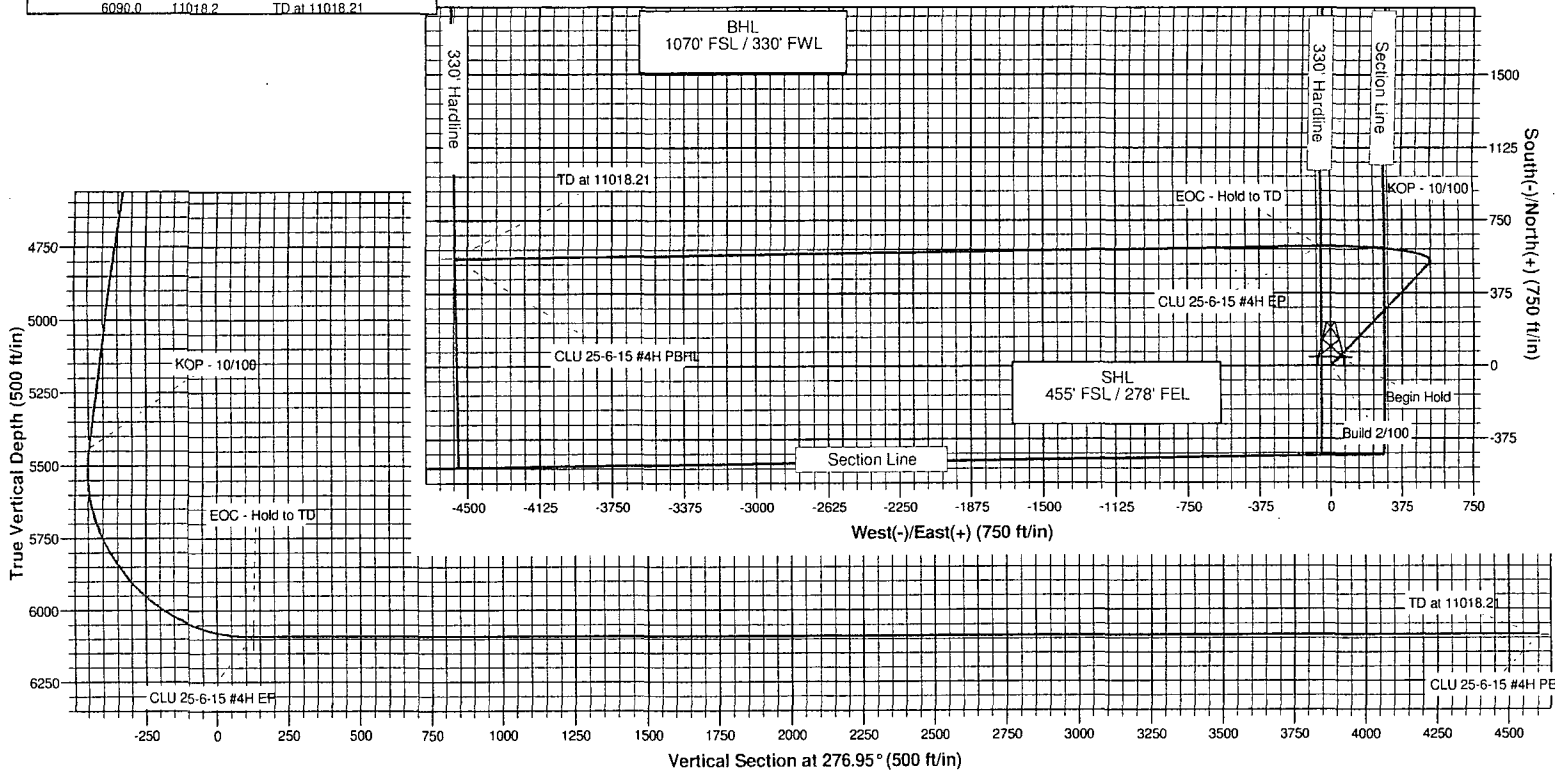
TVD	MD	Annotation
1678.0	1678.0	Build 2/100
2273.6	2278.0	Begin Hold
5439.7	5514.8	KOP - 10/100
6090.0	6499.7	EOC - Hold to TD
6090.0	11018.2	TD at 11018.21

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.0	
2	1678.0	0.00	0.00	1678.0	0.0	0.0	0.00	0.00	0.0	
3	2278.0	12.00	44.52	2273.6	44.6	43.9	2.00	44.52	-38.2	
4	5514.8	12.00	44.52	5439.7	524.5	515.8	0.00	0.00	-448.5	
5	6499.7	90.00	269.27	6090.0	614.6	-52.1	10.00	-134.62	126.1	CLU 25-6-15 #4H EP
6	11018.2	90.00	269.27	6090.0	557.0	-4570.2	0.00	0.00	4604.1	CLU 25-6-15 #4H PBHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
CLU 25-6-15 #4H EP	6090.0	614.6	-52.1	36°23'44.416 N	107°26'48.548 W	Point
CLU 25-6-15 #4H PBHL	6090.0	557.0	-4570.2	36°23'43.843 N	107°27'43.808 W	Point



RCVD OCT 2 '14
OIL CONS. DIV.
DIST. 3

Huntington Energy

Rio Arriba (NM83C)

Sec 15-T25N-R6W

CLU 25-6-15 #4H

Wellbore #1

Plan: 09-11-14

Standard Planning Report

11 September, 2014

Wolverine Directinal, LLC

Planning Report

Database:	EDM 2003.21 Single User Db	Local/Co-ordinate/Reference:	Well CLU,25-6-15 #4H
Company:	Huntington Energy	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Project:	Rio Arriba (NM83C)	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 15-T25N-R6W	North Reference:	True
Well:	CLU 25-6-15 #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	09-11-14		

Project:	Rio Arriba (NM83C)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site:	Sec 15-T25N-R6W		
Site Position:		Northing:	1,964,861.85ft
From:	Lat/Long	Easting:	1,288,232.21ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	36° 23' 38.339 N
		Longitude:	107° 26' 47.911 W
		Grid Convergence:	-0.71 °

Well:	CLU 25-6-15 #4H		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	36° 23' 38.339 N
		Longitude:	107° 26' 47.911 W
		Ground Level:	0.0 ft

Wellbore:	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	2014/04/24	(°)
			9.37
			Dip Angle
			(°)
			63.16
			Field Strength
			(nT)
			50,345

Design:	09-11-14		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			276.95

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,678.0	0.00	0.00	1,678.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,278.0	12.00	44.52	2,273.6	44.6	43.9	2.00	2.00	0.00	44.52	
5,514.8	12.00	44.52	5,439.7	524.5	515.8	0.00	0.00	0.00	0.00	
6,499.7	90.00	269.27	6,090.0	614.6	-52.1	10.00	7.92	-13.73	-134.62	CLU 25-6-15 #4H E
11,018.2	90.00	269.27	6,090.0	557.0	-4,570.2	0.00	0.00	0.00	0.00	CLU 25-6-15 #4H F

Wolverine Directinal, LLC

Planning Report

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well: CLU 25-6-15 #4H
Company:	Huntington Energy	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Project:	Rio Arriba (NM83C)	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 15-T25N-R6W	North Reference:	True
Well:	CLU 25-6-15 #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	09-11-14		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,678.0	0.00	0.00	1,678.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 2/100									
1,700.0	0.44	44.52	1,700.0	0.1	0.1	-0.1	2.00	2.00	0.00
1,800.0	2.44	44.52	1,800.0	1.9	1.8	-1.6	2.00	2.00	0.00
1,900.0	4.44	44.52	1,899.8	6.1	6.0	-5.2	2.00	2.00	0.00
2,000.0	6.44	44.52	1,999.3	12.9	12.7	-11.0	2.00	2.00	0.00
2,100.0	8.44	44.52	2,098.5	22.1	21.8	-18.9	2.00	2.00	0.00
2,200.0	10.44	44.52	2,197.1	33.8	33.3	-28.9	2.00	2.00	0.00
2,278.0	12.00	44.52	2,273.6	44.6	43.9	-38.2	2.00	2.00	0.00
Begin Hold									
2,300.0	12.00	44.52	2,295.1	47.9	47.1	-41.0	0.00	0.00	0.00
2,400.0	12.00	44.52	2,393.0	62.7	61.7	-53.6	0.00	0.00	0.00
2,500.0	12.00	44.52	2,490.8	77.5	76.3	-66.3	0.00	0.00	0.00
2,600.0	12.00	44.52	2,588.6	92.4	90.8	-79.0	0.00	0.00	0.00
2,700.0	12.00	44.52	2,686.4	107.2	105.4	-91.7	0.00	0.00	0.00
2,800.0	12.00	44.52	2,784.2	122.0	120.0	-104.4	0.00	0.00	0.00
2,900.0	12.00	44.52	2,882.0	136.8	134.6	-117.0	0.00	0.00	0.00
3,000.0	12.00	44.52	2,979.8	151.7	149.2	-129.7	0.00	0.00	0.00
3,100.0	12.00	44.52	3,077.7	166.5	163.7	-142.4	0.00	0.00	0.00
3,200.0	12.00	44.52	3,175.5	181.3	178.3	-155.1	0.00	0.00	0.00
3,300.0	12.00	44.52	3,273.3	196.1	192.9	-167.7	0.00	0.00	0.00
3,400.0	12.00	44.52	3,371.1	211.0	207.5	-180.4	0.00	0.00	0.00
3,500.0	12.00	44.52	3,468.9	225.8	222.0	-193.1	0.00	0.00	0.00
3,600.0	12.00	44.52	3,566.7	240.6	236.6	-205.8	0.00	0.00	0.00
3,700.0	12.00	44.52	3,664.5	255.4	251.2	-218.5	0.00	0.00	0.00
3,800.0	12.00	44.52	3,762.4	270.3	265.8	-231.1	0.00	0.00	0.00
3,900.0	12.00	44.52	3,860.2	285.1	280.4	-243.8	0.00	0.00	0.00
4,000.0	12.00	44.52	3,958.0	299.9	294.9	-256.5	0.00	0.00	0.00
4,100.0	12.00	44.52	4,055.8	314.7	309.5	-269.2	0.00	0.00	0.00
4,200.0	12.00	44.52	4,153.6	329.6	324.1	-281.8	0.00	0.00	0.00
4,300.0	12.00	44.52	4,251.4	344.4	338.7	-294.5	0.00	0.00	0.00
4,400.0	12.00	44.52	4,349.2	359.2	353.3	-307.2	0.00	0.00	0.00
4,500.0	12.00	44.52	4,447.1	374.0	367.8	-319.9	0.00	0.00	0.00
4,600.0	12.00	44.52	4,544.9	388.9	382.4	-332.6	0.00	0.00	0.00
4,700.0	12.00	44.52	4,642.7	403.7	397.0	-345.2	0.00	0.00	0.00
4,800.0	12.00	44.52	4,740.5	418.5	411.6	-357.9	0.00	0.00	0.00
4,900.0	12.00	44.52	4,838.3	433.3	426.1	-370.6	0.00	0.00	0.00

Wolverine Directinal, LLC

Planning Report

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well: CLU 25-6-15 #4H
Company:	Huntington Energy	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Project:	Rio Arriba (NM83C)	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 15-T25N-R6W	North Reference:	True
Well:	CLU 25-6-15 #4H	Survey/Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	09-11-14		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,000.0	12.00	44.52	4,936.1	448.2	440.7	-383.3	0.00	0.00	0.00
5,100.0	12.00	44.52	5,034.0	463.0	455.3	-395.9	0.00	0.00	0.00
5,200.0	12.00	44.52	5,131.8	477.8	469.9	-408.6	0.00	0.00	0.00
5,300.0	12.00	44.52	5,229.6	492.6	484.5	-421.3	0.00	0.00	0.00
5,400.0	12.00	44.52	5,327.4	507.5	499.0	-434.0	0.00	0.00	0.00
5,500.0	12.00	44.52	5,425.2	522.3	513.6	-446.7	0.00	0.00	0.00
5,514.8	12.00	44.52	5,439.7	524.5	515.8	-448.5	0.00	0.00	0.00
KOP - 10/100									
5,550.0	9.85	29.71	5,474.3	529.7	519.8	-451.9	10.00	-6.12	-42.06
5,600.0	8.51	359.07	5,523.6	537.1	521.9	-453.1	10.00	-2.67	-61.28
5,650.0	9.88	328.53	5,573.0	544.5	519.6	-449.9	10.00	2.73	-61.08
5,700.0	13.13	309.19	5,622.0	551.7	513.0	-442.4	10.00	6.50	-38.68
5,750.0	17.22	298.13	5,670.3	558.8	502.0	-430.7	10.00	8.20	-22.12
5,800.0	21.69	291.37	5,717.4	565.7	486.9	-414.9	10.00	8.94	-13.54
5,850.0	26.35	286.86	5,763.1	572.3	467.6	-395.0	10.00	9.31	-9.02
5,900.0	31.10	283.63	5,806.9	578.5	444.5	-371.2	10.00	9.51	-6.45
5,950.0	35.92	281.19	5,848.6	584.4	417.5	-343.7	10.00	9.63	-4.88
6,000.0	40.77	279.26	5,887.8	589.9	387.0	-312.8	10.00	9.71	-3.86
6,050.0	45.66	277.68	5,924.2	594.9	353.1	-278.5	10.00	9.76	-3.17
6,100.0	50.56	276.34	5,957.6	599.4	316.2	-241.3	10.00	9.80	-2.68
6,150.0	55.47	275.18	5,987.7	603.4	276.5	-201.4	10.00	9.83	-2.32
6,200.0	60.39	274.15	6,014.2	606.9	234.2	-159.1	10.00	9.85	-2.06
6,250.0	65.32	273.21	6,037.0	609.7	189.9	-114.7	10.00	9.86	-1.87
6,300.0	70.26	272.35	6,055.9	612.0	143.6	-68.5	10.00	9.87	-1.73
6,350.0	75.20	271.54	6,070.8	613.6	95.9	-21.0	10.00	9.88	-1.62
6,400.0	80.14	270.76	6,081.4	614.5	47.1	27.6	10.00	9.88	-1.55
6,450.0	85.08	270.01	6,087.9	614.9	-2.5	76.8	10.00	9.89	-1.51
6,499.7	90.00	269.27	6,090.0	614.6	-52.1	126.1	10.00	9.89	-1.48
EOC - Hold to TD									
6,600.0	90.00	269.27	6,090.0	613.3	-152.4	225.5	0.00	0.00	0.00
6,700.0	90.00	269.27	6,090.0	612.0	-252.4	324.6	0.00	0.00	0.00
6,800.0	90.00	269.27	6,090.0	610.7	-352.4	423.7	0.00	0.00	0.00
6,900.0	90.00	269.27	6,090.0	609.5	-452.4	522.8	0.00	0.00	0.00
7,000.0	90.00	269.27	6,090.0	608.2	-552.4	621.9	0.00	0.00	0.00
7,100.0	90.00	269.27	6,090.0	606.9	-652.3	721.0	0.00	0.00	0.00
7,200.0	90.00	269.27	6,090.0	605.6	-752.3	820.1	0.00	0.00	0.00
7,300.0	90.00	269.27	6,090.0	604.4	-852.3	919.2	0.00	0.00	0.00
7,400.0	90.00	269.27	6,090.0	603.1	-952.3	1,018.3	0.00	0.00	0.00
7,500.0	90.00	269.27	6,090.0	601.8	-1,052.3	1,117.4	0.00	0.00	0.00
7,600.0	90.00	269.27	6,090.0	600.6	-1,152.3	1,216.5	0.00	0.00	0.00
7,700.0	90.00	269.27	6,090.0	599.3	-1,252.3	1,315.6	0.00	0.00	0.00
7,800.0	90.00	269.27	6,090.0	598.0	-1,352.3	1,414.7	0.00	0.00	0.00
7,900.0	90.00	269.27	6,090.0	596.7	-1,452.3	1,513.8	0.00	0.00	0.00
8,000.0	90.00	269.27	6,090.0	595.5	-1,552.3	1,612.9	0.00	0.00	0.00
8,100.0	90.00	269.27	6,090.0	594.2	-1,652.3	1,712.0	0.00	0.00	0.00
8,200.0	90.00	269.27	6,090.0	592.9	-1,752.3	1,811.1	0.00	0.00	0.00
8,300.0	90.00	269.27	6,090.0	591.6	-1,852.2	1,910.2	0.00	0.00	0.00
8,400.0	90.00	269.27	6,090.0	590.4	-1,952.2	2,009.3	0.00	0.00	0.00
8,500.0	90.00	269.27	6,090.0	589.1	-2,052.2	2,108.4	0.00	0.00	0.00
8,600.0	90.00	269.27	6,090.0	587.8	-2,152.2	2,207.5	0.00	0.00	0.00
8,700.0	90.00	269.27	6,090.0	586.6	-2,252.2	2,306.6	0.00	0.00	0.00
8,800.0	90.00	269.27	6,090.0	585.3	-2,352.2	2,405.7	0.00	0.00	0.00
8,900.0	90.00	269.27	6,090.0	584.0	-2,452.2	2,504.8	0.00	0.00	0.00
9,000.0	90.00	269.27	6,090.0	582.7	-2,552.2	2,603.9	0.00	0.00	0.00

Wolverine Directinal, LLC

Planning Report

Database	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well: CLU 25-6-15 #4H
Company	Huntington Energy	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Project:	Rio Arriba (NM83C)	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 15-T25N-R6W	North Reference:	True
Well:	CLU 25-6-15 #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	09-11-14		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,100.0	90.00	269.27	6,090.0	581.5	-2,652.2	2,703.0	0.00	0.00	0.00	
9,200.0	90.00	269.27	6,090.0	580.2	-2,752.2	2,802.2	0.00	0.00	0.00	
9,300.0	90.00	269.27	6,090.0	578.9	-2,852.2	2,901.3	0.00	0.00	0.00	
9,400.0	90.00	269.27	6,090.0	577.6	-2,952.2	3,000.4	0.00	0.00	0.00	
9,500.0	90.00	269.27	6,090.0	576.4	-3,052.1	3,099.5	0.00	0.00	0.00	
9,600.0	90.00	269.27	6,090.0	575.1	-3,152.1	3,198.6	0.00	0.00	0.00	
9,700.0	90.00	269.27	6,090.0	573.8	-3,252.1	3,297.7	0.00	0.00	0.00	
9,800.0	90.00	269.27	6,090.0	572.5	-3,352.1	3,396.8	0.00	0.00	0.00	
9,900.0	90.00	269.27	6,090.0	571.3	-3,452.1	3,495.9	0.00	0.00	0.00	
10,000.0	90.00	269.27	6,090.0	570.0	-3,552.1	3,595.0	0.00	0.00	0.00	
10,100.0	90.00	269.27	6,090.0	568.7	-3,652.1	3,694.1	0.00	0.00	0.00	
10,200.0	90.00	269.27	6,090.0	567.5	-3,752.1	3,793.2	0.00	0.00	0.00	
10,300.0	90.00	269.27	6,090.0	566.2	-3,852.1	3,892.3	0.00	0.00	0.00	
10,400.0	90.00	269.27	6,090.0	564.9	-3,952.1	3,991.4	0.00	0.00	0.00	
10,500.0	90.00	269.27	6,090.0	563.6	-4,052.1	4,090.5	0.00	0.00	0.00	
10,600.0	90.00	269.27	6,090.0	562.4	-4,152.1	4,189.6	0.00	0.00	0.00	
10,700.0	90.00	269.27	6,090.0	561.1	-4,252.1	4,288.7	0.00	0.00	0.00	
10,800.0	90.00	269.27	6,090.0	559.8	-4,352.0	4,387.8	0.00	0.00	0.00	
10,900.0	90.00	269.27	6,090.0	558.5	-4,452.0	4,486.9	0.00	0.00	0.00	
11,000.0	90.00	269.27	6,090.0	557.3	-4,552.0	4,586.0	0.00	0.00	0.00	
11,018.2	90.00	269.27	6,090.0	557.0	-4,570.2	4,604.1	0.00	0.00	0.00	
TD at 11018.21										

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N-S (ft)	+E-W (ft)	
1,678.0	1,678.0	0.0	0.0	Build 2/100
2,278.0	2,273.6	44.6	43.9	Begin Hold
5,514.8	5,439.7	524.5	515.8	KOP - 10/100
6,499.7	6,090.0	614.6	-52.1	EOC - Hold to TD
11,018.2	6,090.0	557.0	-4,570.2	TD at 11018.21

HUNTINGTON ENERGY

CLU 25-6-15 #4H

454' FSL & 278' FEL

LOCATED IN THE SE/4 SE/4 OF SECTION 15,
T25N, R6W, N.M.P.M.,
RIO ARriba COUNTY, NEW MEXICO

DIRECTIONS

- 1) FROM THE BLANCO TRADING POST OFFICE, GO 1.3 MILES EAST ON HWY 64 TO CR 4450.
- 2) TURN RIGHT AND GO 3.6 MILES TO INTERSECTION.
- 3) TURN RIGHT AND CROSS BRIDGE, TRAVEL 21.8 MILES SOUTH ALONG LARGO CANYON TO OLD SCHOOL HOUSE.
- 4) TURN RIGHT AND TRAVEL 2.5 MILES.
- 5) TURN LEFT AND CROSS LARGO WASH AND GO 2.9 MILES.
- 6) TURN RIGHT AND GO 5.0 MILES TO TOP OF GONZALES MESA AND DOWN MAIN ROAD.
- 7) TURN LEFT AND GO 1.7 MILES TO "T" INTERSECTION.
- 8) TURN LEFT AND GO 0.3 MILES TO EXISTING LOCATION WHERE ROAD IS STAKED ON SOUTH SIDE OF PAD.

WELL FLAG LOCATED AT LAT. 36.393983° N, LONG. 107.446642° W (NAD 83).



G. Methods for Handling Waste Disposal:

1. Cuttings - the drill cuttings will be placed in steel bins. After drilling, cuttings will be disposed of at the appropriate waste disposal facility.
2. Drilling Fluids
 - a. Drilling fluids will be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted locations or returned to the vendor for re-use, as practical. Residual fluids will be vacuumed from the storage tanks and disposed of at an appropriate waste disposal facility.
 - b. Drilling fluid storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.
3. Flowback Water
 - a. The water-based solution that flows back to the surface during and after completion operations will be placed in storage tanks on location.
 - b. Flowback water will be confined to a storage tank for a period not to exceed 90 days after initial production and will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities, or recycled.
4. Spills - any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site.
5. Sewage - self-contained, chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped, as needed, and the contents thereof disposed of in an approved sewage disposal facility. The toilets will be onsite during all operations.
6. Garbage and other waste material - garbage, trash, and other waste materials will be collected in a portable, self-contained and fully-enclosed trash container during drilling and completion operations. The accumulated trash will be removed, as needed, and will be disposed of at an authorized sanitary landfill. No trash will be buried or burned on location.

Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash container will be cleaned up and removed from the well location.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced,