

RCUD APR18'07

OIL CONS. DIV.

DIST. 3

Form 3160-3
(February 2005)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

2007 MAR 12 PM 2:15

RECEIVED

BLM
210 FARMINGTON NM5. Lease Serial No.
NMSF 078882

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.
Canyon Largo Unit8. Lease Name and Well No.
Canyon Largo Unit #4899. API Well No.
30-039-3003910. Field and Pool, or Exploratory
Basin Dakota

11. Sec., T. R. M. or Blk. and Survey or Area

6 Sec 18-25N-6W

12. County or Parish
Rio Arriba13. State
NM1a. Type of work: ☒ DRILL ☐ REENTER1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone2. Name of Operator
Huntington Energy, L.L.C.3a. Address 6301 Waterford Blvd., Suite 400
Oklahoma City, OK 731183b. Phone No. (include area code)
(405) 840-9876

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface SWNE 2280' FNL & 1920' FEL

At proposed prod. zone NWSE 1700' FSL & 1380' FEL

14. Distance in miles and direction from nearest town or post office*
35 miles SE from Blanco, NM15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drg. unit line, if any)16. No. of acres in lease
1921.2017. Spacing Unit dedicated to this well
320 E/A18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.19. Proposed Depth
7587' TMD20. BLM/BIA Bond No. on file
NMB00007621. Elevations (Show whether DF, KDB, RT, GL, etc.)
6725' GR

22. Approximate date work will start*

23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature *Catherine Smith*
Title Land AssociateName (Printed/Typed)
Catherine SmithDate
03/09/2007Approved by (Signature) *[Signature]*
Title AFM

Name (Printed/Typed)

Office

Date 4/17/07

Application approval 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.
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 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)

Submit application for pit permit on
OCID form C-1103 prior to construction
DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENTThis action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4HOLD CIVILIAN directional survey
& bottom hole dev.

NMOCD

4/19/07

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87504-2088

Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

2007 MAR 12 PM 2:16

☐ AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-30039		2 Pool Code 71599		3 Pool Name Basin Dakota	
4 Property Code 32660		5 Property Name CANYON LARGO UNIT			6 Well Number 489
7 OGRID No. 208706		8 Operator Name HUNTINGTON ENERGY, LLC			9 Elevation 6725'

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
G	18	25-N	6-W		2280	NORTH	1920	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	East/West line	County
J	18	25-N	6-W		1700	SOUTH	1380	EAST	RIO ARRIBA

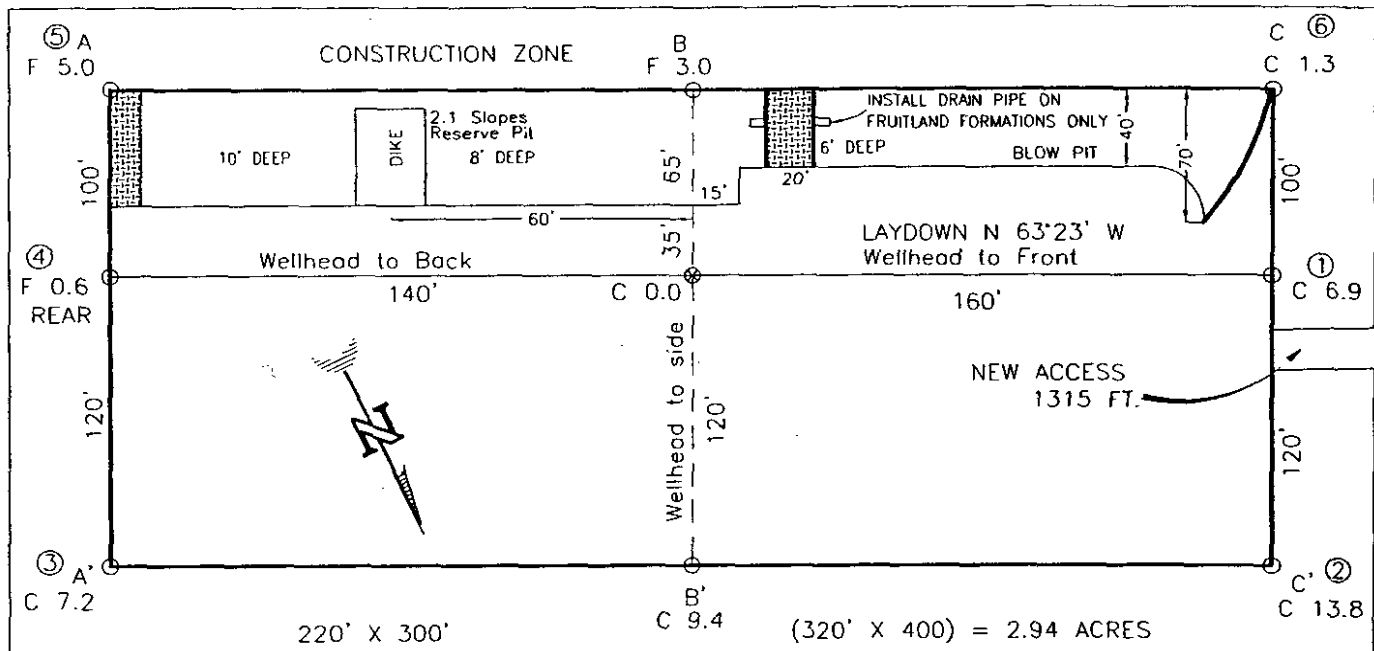
12 Dedicated Acres E/2 - 320		13 Joint or Infill		14 Consolidation Code		15 Order No.	
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RCVD APR 18 07
OIL CONS. DIV.
DIST. 3

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

16		FD 3 1/4" B.L.M. BC 1965		S 89-42-03 W 2649.51' (M)		FD 3 1/4" B.L.M. BC 1965		17	
LOT 1								OPERATOR CERTIFICATION	
				2280'		S 0-21-18 E 2585.86' (M)		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.	
LOT 2		SURFACE LOCATION LAT: 36.40027° N. (NAD 83) LONG: 107.50582° W. (NAD 83)				1920'		Signature <u>Catherine Smith</u> Date <u>11/07</u>	
								Printed Name <u>Catherine Smith</u>	
LOT 3				18		FD 3 1/4" B.L.M. BC 1965		18 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.	
LOT 4		BOTTOM HOLE LOCATION LAT: 36.39698° N. (NAD 83) LONG: 107.50395° W. (NAD 83)		B.H.L.		1380'		OCTOBER 26, 2006 Date of Survey	
				1700'		N 0-21-32 W 2585.40' (M)		Signature and Seal of Registered Professional Land Surveyor: <u>Roy A. Rush</u> 18894	
		FD 3 1/4" B.L.M. BC 1965		S 89-23-58 W 2643.70' (M)		FD 3 1/4" B.L.M. BC 1965		Certificate Number	

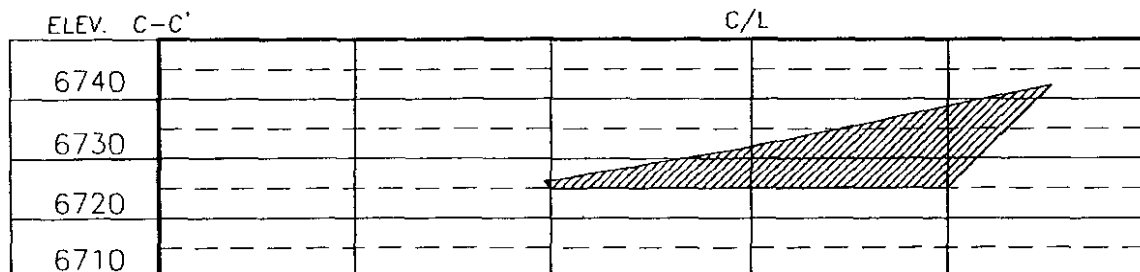
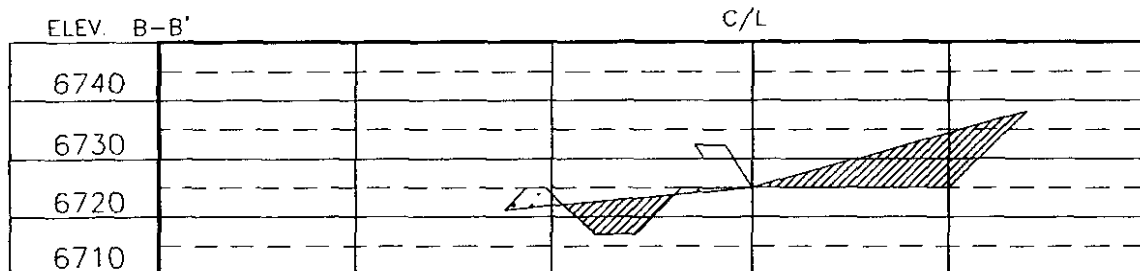
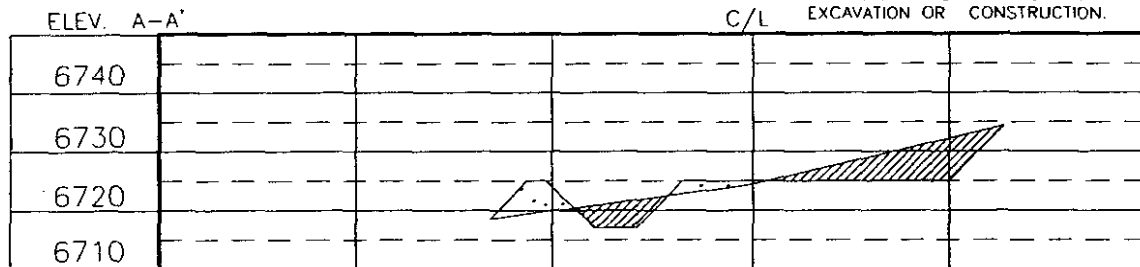
HUNTINGTON ENERGY LLC
 CANYON LARGO UNIT NO. 489, 2280 FNL 1920 FEL
 SEC. 18, T-25-N, R-6-W, N.M.P.M., RIO ARriba COUNTY, NEW MEXICO
 GROUND ELEVATION: 6725, DATE: OCTOBER 25, 2006



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR
 UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO
 ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO
 EXCAVATION OR CONSTRUCTION.



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR
 CABLESON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

REVISION:	DATE:	REVISION BY:	DATE:
LOC. RESTAKE D/L.S. NO. CHG.	12/07/06	C.V.	

Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 15068 - Farmington, NM 87401
 Phone (505) 326-1772 • Fax (505) 326-6019
 NEW MEXICO L.S. No. 8894
 CAPFILE: HIG059-CFB
 DATE: 4/20/06

DRAWN BY: A.G.
 ROWF: HIG059

OPERATIONS PLAN

Well Name: Canyon Largo Unit #489
Location: Surface: 2280' FNL, 1920' FEL, SWNE Sec 18, T-25-N, R-6-W NMPM
Bottom Hole: 1700' FSL, 1380' FEL, NWSE Sec 18, T-25-N-R-6-W NMPM
Rio Arriba County, NM
Formation: Basin Dakota
Elevation: 6725' GL

<u>Formation Tops:</u>	<u>MD</u>	<u>TVDSS</u>
Ojo Alamo	1954'	4819'
Kirkland	2212'	4572'
Fruitland	2432'	4362'
Pictured Cliffs	2705'	4101'
Lewis Shale	2801'	4009'
Huerfano	3106'	3718'
Chacra	3591'	3254'
Cliff House	4350'	2529'
Menefee	4427'	2455'
Point Lookout	5055'	1855'
Mancos	5292'	1626'
Niobrara	6226'	695'
Greenhorn	7022'	-101'
Graneros	7087'	-166'
Dakota	7132'	-211'
Morrison	7447'	-526'
TD	7587' ✓	

Logging Program:

Mud log – 2500' to TD
Open hole logs – none
Cased hole logs – RST – TD to 5900'; CBL/GR – TD to 5800'
Cores & DST's – none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0 – 320'	Spud	8.4-8.9	40-50	no control
320 – 7400'	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:

<u>Hole Size</u>	<u>Depth Interval</u> TMD	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' – 320'	9 5/8"	36.0#	J-55
7 7/8"	0' – 7587'	4 1/2"	11.6#	N-80

Tubing Program:

0' – 7587' 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, rams and casing will be tested to 600 psi for 30 minutes.

2" nominal, 3000 psi minimum choke manifold (Reference Figure #3).

Directional Plan:

Well will be drilled vertically to a depth of 500' then KOP (kick-off point) and drill 2°/100ft. End of build @ 1356' MD. Hold inclination angle of 17° to a measured depth of 5117'. Begin our drop from 17° to 0° at our BHL @ 5500' TVD (5688' MD). Hold 0° to our projected TD of 7400' TVD (7587' MD). ✓

Completion Operations:

6" 3000 psi double gate BOP stack (Reference Figure #2). 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 #3).

Wellhead:

9 5/8" x 4 1/2" x 2 3/8" 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:

9 5/8" surface casing –

Cement to surface w/190 sx Class "B" cement w/3% calcium chloride and 1/4#/sx cellophane flakes (200 cu. ft. of slurry, 100% excess to circulate to surface).
WOC 8 hr. prior to drilling out surface casing. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

Production Casing – 4 1/2"

Lead with 700 sx 65/35 Standard Poz w/6% gel, 1/4# 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, 1/4# 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) TXI 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 @ 1915'. Two turbolizing type centralizers – one below and one into the base of the Ojo Alamo @ 2160'. 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 formation will be completed. If Dakota is non-commercial, an attempt will be made to complete in the Gallup. If successful, it will be in the Basin Mancos.
- 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 18 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 ✓

Huntington Energy

Location: New Mexico
Field: Sec 18 - 25N- 6W

Installation: Rio Arriba County
Well: Canyon Largo Unit #489

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	156.07	0.00	0.00	0.00	0.00	0.00
KOP	500.00	0.00	156.07	500.00	0.00	0.00	0.00	0.00
End of Build	1355.58	17.11	156.07	1342.92	-115.91	51.45	2.00	128.81
End of Hold	5117.23	17.11	156.07	4938.05	-1127.55	500.46	0.00	1233.62
Target EOD	5687.82	0.00	156.07	5500.00	-1204.82	534.78	3.00	1318.16
T.D. & Target BHL	7587.62	0.00	0.00	7400.00	-1204.82	534.78	0.00	1318.16

Scale 1 inch = 250 ft

East (feet) ->

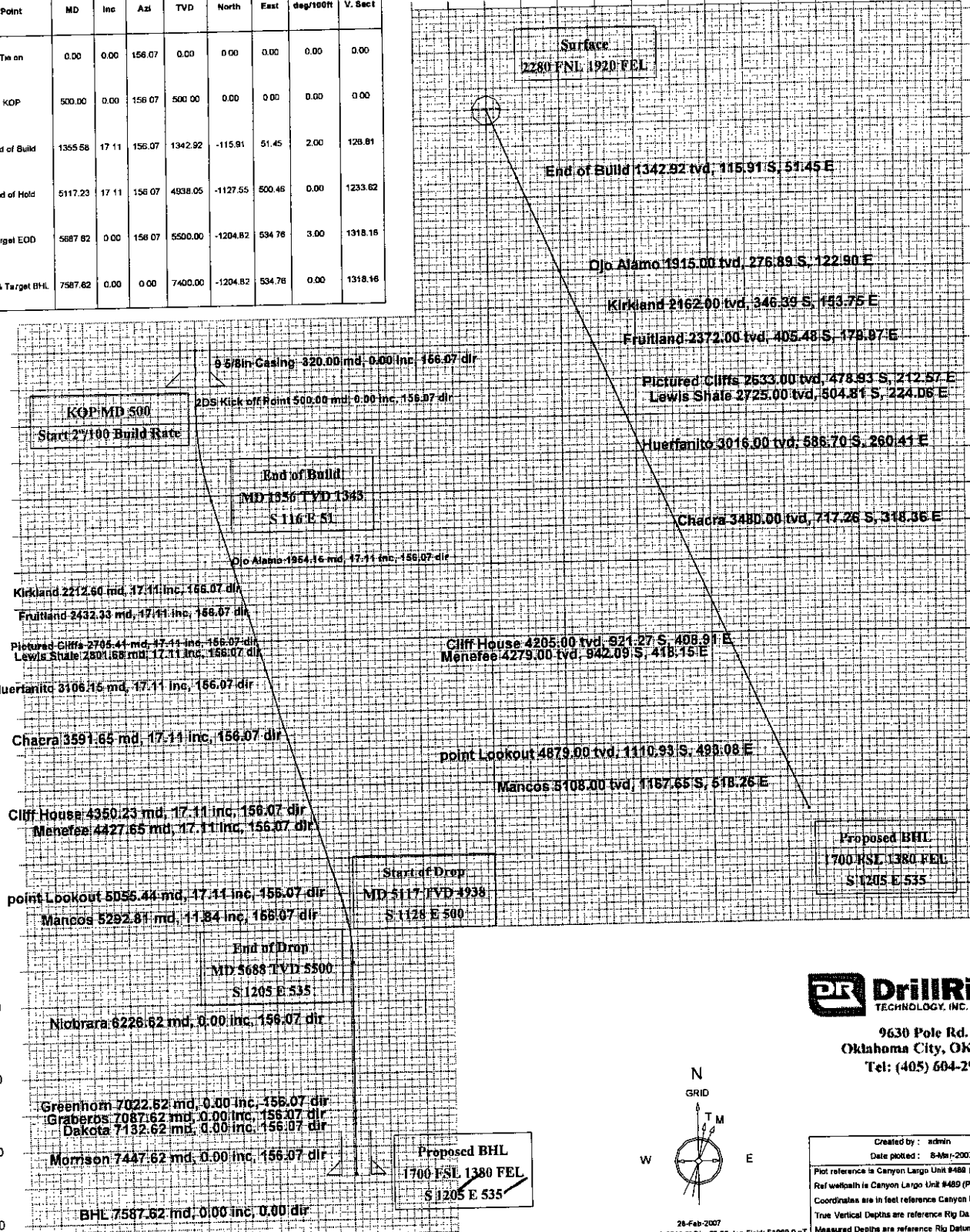
-125 0 125 250 375 500 625 750

Scale 1 inch = 1300 ft

<- True Vertical Depth (feet)

<- North(feet)

Scale 1 inch = 250 ft



Scale 1 inch = 1300 ft

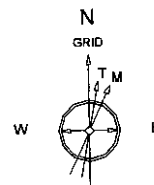
-1300 0 650 1300 1950

Vertical Section (feet) ->

Azimuth 156.07 with reference 0.00 N, 0.00 E from Canyon Largo Unit #489

DrillRight
TECHNOLOGY, INC.

9630 Pole Rd.
Oklahoma City, OK 73160
Tel: (405) 604-2969



26-Feb-2007
IGRF Model [1900.0-2010.0] Dip: 83.32 deg Field: 51069.0 nT
Magnetic North is 10.25 degrees East of True North
GRID North is 0.75 degrees West of True North
To correct azimuth from True to GRID add 0.75 deg
To correct azimuth from Magnetic to GRID add 11.00 deg

Created by: admin
Date plotted: 8-Mar-2007
Plot reference is Canyon Largo Unit #489 (Planned).
Ref wellpath is Canyon Largo Unit #489 (Planned).
Coordinates are in feet reference Canyon Largo Unit #489.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum
Rig Datum: Datum #1
Rig Datum to Mean Sea Level: 0.00 ft.
Plot North is aligned to GRID North.

**Huntington Energy, Canyon Largo Unit
#489**
Rio Arriba County, Rio Arriba County
Sec 18 - 25N- 6W, New Mexico

(Planned)
Wellpath: Canyon Largo Unit #489
(Planned)
Date Printed: 8-Mar-2007

Comments				
MD(m)	TVD(m)	North(m)	East(m)	Comments
0.00	0.00	0.00N	0.00E	
1954.16	1915.00	276.89S	122.90E	Ojo Alamo
2212.60	2162.00	346.39S	153.75E	Kirkland
2432.33	2372.00	405.48S	179.97E	Fruitland
2705.41	2633.00	478.93S	212.57E	Pictured Cliffs
2801.68	2725.00	504.81S	224.06E	Lewis Shale
3106.15	3016.00	586.70S	260.41E	Huerfano
3591.65	3480.00	717.26S	318.36E	Chacra
4350.23	4205.00	921.27S	408.90E	Cliff House
4427.65	4279.00	942.10S	418.15E	Menefee
5055.44	4879.00	1110.93S	493.08E	point Lookout
5292.81	5108.00	1167.65S	518.26E	Mancos
6226.62	6039.00	1204.82S	534.76E	Niobrara
7022.62	6835.00	1204.82S	534.76E	Greenhorn
7087.62	6900.00	1204.82S	534.76E	Graberos
7132.62	6945.00	1204.82S	534.76E	Dakota
7447.62	7260.00	1204.82S	534.76E	Morrison

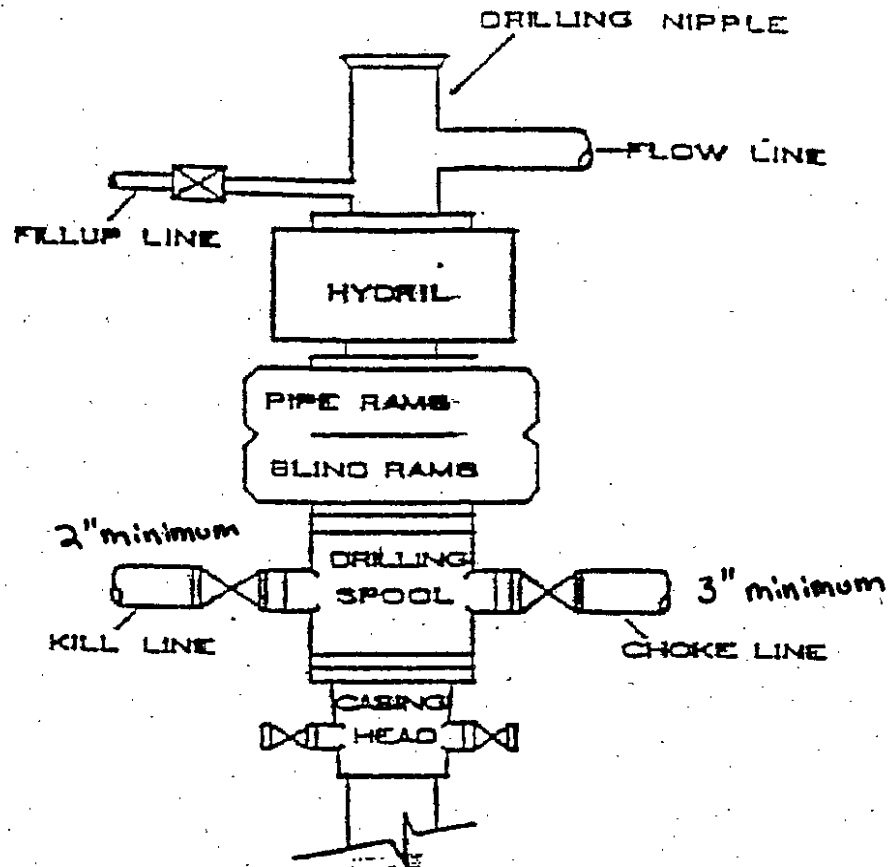
Hole Sections									
Diameter (in)	Start MD(m)	Start TVD(m)	Start North(m)	Start East(m)	End MD(m)	End TVD(m)	End North(m)	End East(m)	Wellbore
12 1/4	0.00	0.00	0.00N	0.00E	320.00	320.00	0.00N	0.00E	Canyon Largo Unit #489 (Planned)
7 7/8	0.00	0.00	0.00N	0.00E	7587.62	7400.00	1204.82S	534.76E	Canyon Largo Unit #489 (Planned)

Casings									
Name	Top MD(m)	Top TVD(m)	Top North(m)	Top East(m)	Shoe MD(m)	Shoe TVD(m)	Shoe North(m)	Shoe East(m)	Wellbore
9 5/8in Casing	0.00	0.00	0.00N	0.00E	320.00	320.00	0.00N	0.00E	Canyon Largo Unit #489 (Planned)
4 1/2in Casing	0.00	0.00	0.00N	0.00E	7587.62	7400.00	1204.82S	534.76E	Canyon Largo Unit #489 (Planned)

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 156.07 degrees
Bottom hole distance is 1318.16 Feet on azimuth 156.07 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by DrillRight

HUNTINGTON ENERGY, L.L.C.

BOP STACK 3000 PSI ✓



CHOKE MANIFOLD

