

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

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

Jami Bailey, Division Director
Oil Conservation Division



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 3160-3 APD form.

Operator Signature Date: 9/26/13

Well information;

Operator Encana, Well Name and Number GCU M27-2306 1H

API# 30-043-21179, Section 27, Township 23 N/S, Range 6 E/W

Conditions of Approval:
(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☐ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☐ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils

NMOCD Approved by Signature

11-7-2013 ca

Date

CONFIDENTIAL

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 30 2013

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM 117564 NMNM 118128
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Encana Oil & Gas (USA) Inc.		7. If Unit or CA Agreement, Name and No. PENDING
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202		8. Lease Name and Well No. GCU M27-2306 01H
3b. Phone No. (include area code) 720-876-3989		9. API Well No. 30-043-21179
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 990' FSL and 186' FWL Section 27, T23N, R6W At proposed prod. zone 330' FSL and 335' FWL Section 35, T23N, R6W		10. Field and Pool, or Exploratory Counselors Gallup-Dakota
14. Distance in miles and direction from nearest town or post office* +/- 55.0 miles southeast of the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM		11. Sec., T. R. M. or Blk. and Survey or Area Section 27, T23N, R6W NMMP
15. Distance from proposed* location to nearest property or lease line, ft. Section 35, T23N, R6W (Also to nearest drig. unit line, if any)	16. No. of acres in lease NMNM 117564 - 1,120 ac. NMNM 118128 - 1,920 ac.	17. Spacing Unit dedicated to this well 5,760 acres - Section 22, 26 and 34-36 5,120.00
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Lybrook M27-2306 02H is 60' east of wellbore	19. Proposed Depth 5,558' TVD/13,407' MD	20. BLM/BIA Bond No. on file COB-000235
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7,132' GL, 7,148' KB	22. Approximate date work will start* 11/23/2013	23. Estimated duration 25 days

24. Attachments

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

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

25. Signature <i>Brenda R. Linster</i>	Name (Printed/Typed) Brenda R. Linster	Date 09.26.13
Title Regulatory Lead		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 11/4/13
Title AFM	Office FED	

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.

(Continued on page 2)

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

NMOCDD

FV

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.

Holly Hill 10/20/13
Signature Date
Holly Hill
Printed Name
holly.hill@encana.com
E-mail Address

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.

Date Revised: SEPT 17, 2013
Survey Date: DECEMBER 5, 2012

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15259

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, Artesia, NM 88210
Phone: (505) 748-1203 Fax: (505) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3450 Fax: (505) 476-3452

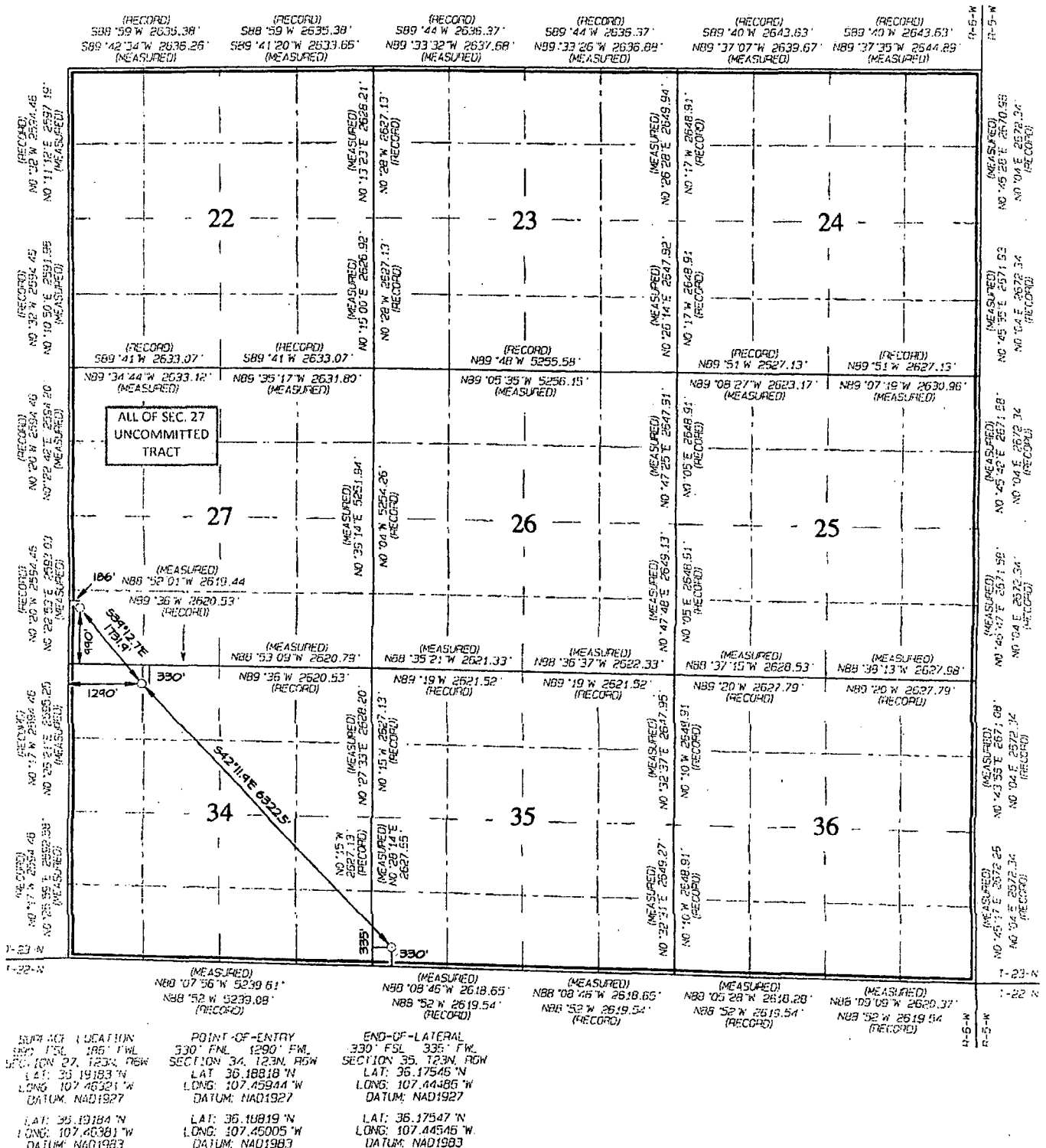
State of New Mexico
Energy, Minerals & Natural Resources Department

Form G-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

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

☒ AMENDED REPORT



Directions from the Intersection of US Hwy 550 & US Hwy 64
in Bloomfield, NM to Encana Oil & Gas (USA) Inc. GCU M27-2306 01H
990' FSL & 186' FWL, Section 27, T23N, R6W, N.M.P.M., Sandoval County, NM

Latitude: 36.19184°N Longitude: 107.46381°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 53.6 miles to Mile Marker 97.7;

Go right (South-easterly) on Indian Service Route #474 for 0.8 miles to an unimproved roadway on right-hand side which continues for 3126' to staked Encana GCU M27-2306 01H location.

GCU M27-2306 01H
 SHL: SWSW Section 27, T23N, R6W
 990 FSL and 186 FWL
 BHL: SWSW Section 35, T23N, R6W
 330 FSL and 335 FWL
 Sandoval, New Mexico
 Lease Number: NMNM 117564 NMNM 118218

Encana Oil & Gas (USA) Inc. Drilling Plan

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS (TVD)

The estimated tops of important geologic markers are as follows:

Formation	Depth (TVD) units = feet
Ojo Alamo Ss.	1,500
Kirtland Shale	1,697
Fruitland Coal	1,871
Pictured Cliffs Ss.	2,110
Lewis Shale	2,216
Cliffhouse Ss.	2,878
Menefee Fn.	3,625
Point Lookout Ss.	4,331
Mancos Shale	4,495
Mancos Silt	5,087
Gallup Fn.	5,355

The referenced surface elevation is 7,132', KB 7,148'

2. ESTIMATED DEPTH OF POTENTIAL WATER, OIL, GAS, & OTHER MINERAL BEARING FORMATIONS

Substance	Formation	Depth (TVD) units = feet
Water/Gas	Fruitland Coal	1,871
Oil/Gas	Pictured Cliffs Ss.	2,110
Oil/Gas	Cliffhouse Ss.	2,878
Gas	Menefee Fn.	3,625
Oil/Gas	Point Lookout Ss.	4,331
Oil/Gas	Mancos Shale	4,495
Oil/Gas	Mancos Silt	5,087
Oil/Gas	Gallup Fn.	5,355

All shows of fresh water and minerals will be reported and protected.

3. PRESSURE CONTROL

- a) Pressure control equipment and configuration will be designed to meet 2M standards.
- b) Working pressure on rams and BOPE will be 3,000 psi
- c) Function test and visual inspection of the BOP will be conducted daily and noted in the IADC Daily Drilling Report.

GCU M27-2306 01H

SHL: SWSW Section 27, T23N, R6W
990 FSL and 186 FWL

BHL: SWSW Section 35, T23N, R6W
330 FSL and 335 FWL

Sandoval, New Mexico

Lease Number: NMNM 117564 NMNM 118218

- d) The Annular BOP will be pressure tested to a minimum of 50 percent of its rated working pressure.
- e) Blind and Pipe Rams/BOP will be tested against a test plug to 100 percent of rated working pressure.
- f) Pressure tests are required before drilling out from under all casing strings set and cemented in place.
- g) BOP controls must be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned.
- h) BOP testing procedures and testing frequency will conform to Onshore Order No. 2.
- i) BOP remote controls shall be located on the rig floor at a location readily accessible to the driller. Master controls shall be on the ground at the accumulator and shall have the capability to function all preventers.
- j) The kill line shall be 2-inch minimum and contain two kill line valves, one of which shall be a check valve.
- k) The choke line shall be a 2-inch minimum and contain two choke line valves (2-inch minimum).
- l) The choke and manifold shall contain two adjustable chokes.
- m) Hand wheels shall be installed on all ram preventers.
- n) Safety valves and wrenches (with subs for drill string connections) shall be available on the rig floor at all times.
- o) Inside BOP or float sub shall also be available on the rig floor at all times.

Proposed BOP and choke manifold arrangements are attached.

4. CASING & CEMENTING PROGRAM

The proposed casing and 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 casing design is as follows:

Casing	Depth	Hole Size	Csg Size	Weight	Grade
Conductor	0-60'	30"	20"	94#	H40, STC New
Surface	0'-500'	12 1/4"	9 5/8"	36#	J55, STC New
Intermediate	0'-6960'MD	8 3/4"	7"	26#	J55, LTC New
Production Liner	6760'-13407'MD	6 1/8"	4 1/2"	11.6#	B80*, LTC New

Casing String				Casing Strength Properties			Minimum Design Factors		
Size	Weight (lb/ft)	Grade	Connection	Collapse (psi)	Burst (psi)	Tensile (1000lb)	Collapse	Burst	Tension
9 5/8"	36	J55	STC	2020	3520	394	1.125	1.1	1.5
7"	26	J55	LTC	4320	4980	367	1.125	1.1	1.5
4 1/2"	11.6	B80	LTC	6350	7780	201	1.125	1.1	1.5

*B80 pipe specifications are attached

Casing design is subject to revision based on geologic conditions encountered.

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 990 FSL and 186 FWL
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All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1,500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.

b) 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.

Casing	Depth	Cement Volume (sacks)	Cement Type&Yield	Designed TOC	Centralizers
Conductor	60'	100sk	Type I Neat 16.0 ppg	Surface	None
Surface	500'	178sk	Type III Cement + 1% CaCl + 0.25lb/sk Cello Flake + 0.2% FL, 14.6ppg, 1.38cuf/sk	Surface	1 per joint on bottom 3 joints
Intermediate	6960'MD	30% open hole excess Stage 1 Lead: 260sks Stage 1 Tail: 178sks Stage 2 Lead: 168sks	Lead (Stages 1 and 2): PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuf/sk Tail (Stage 1): Type III Cmt + 1% CaCl + 0.25lb/sk Cello Flake 14.5ppg 1.38cuf/sk	Surface	1 per joint for bottom 3 joints, 1 every 3 joints for remaining joints
Production Liner*	6760'-13407'	None – External casing packers	N/A	N/A	N/A

*Production liner clarification: Utilizing external swell casing packer system for zonal isolation will not use cement in the production liner.

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed above or equivalent slurries 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.

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 330 FSL and 335 FWL
 Sandoval, New Mexico
 Lease Number: NMNM 117564 NMNM 118218

5. WELL PLAN & DIRECTIONAL DRILLING PROGRAM

The proposed horizontal well will have a kick off point of 5024'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5558'/13407'	Gallup

6. DRILLING FLUIDS PROGRAM

a) Surface through Intermediate Casing Point:

Hole Size (in)	Depth (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
30"	0-60' TVD	Fresh Water	8.3-9.2	38-100	4-28
12 1/4"	0-500' TVD	Fresh Water	8.4-8.6	60-70	NC
8 3/4"	500'TVD- 5592'TVD/6960'MD	Fresh Water LSND	8.5-8.8	40-50	8-10

b) Intermediate Casing Point to TD:

Hole Size (in)	MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6 1/8"	6960'-13407'	Synthetic Oil Based Mud	8.6-9.0	15-25	<15

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals, including fresh water and oil-based operations. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Waste will be disposed of properly at an EPA-approved hazardous waste facility. Fresh water cuttings will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystems, Inc. The location will be lined in accordance with the Surface Use Plan of Operations.

7. TESTING, CORING and LOGGING

- a) Drill Stem Testing – None anticipated
 b) Coring – None anticipated.
 c) Mud Logging – Mud loggers will be on location from kick off point to TD.
 d) Logging – See Below

Cased Hole:
 CBL/CCL/GR/VDL will be run as needed for perforating control

GCU M27-2306 01H

**SHL: SWSW Section 27, T23N, R6W
990 FSL and 186 FWL**

**BHL: SWSW Section 35, T23N, R6W
330 FSL and 335 FWL**

Sandoval, New Mexico

Lease Number: NMNM 117564 NMNM 118218

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

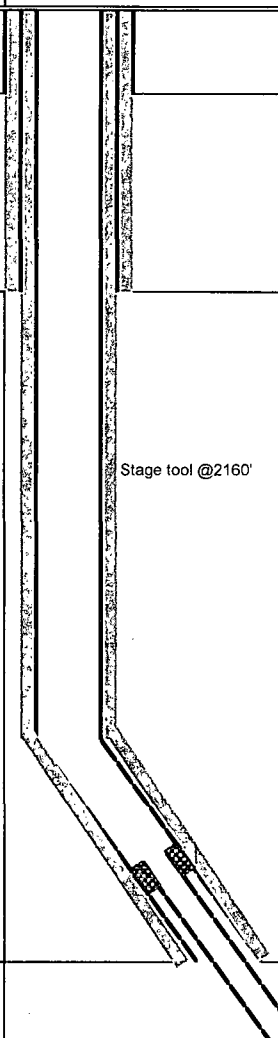
The anticipated bottom hole pressure is +/- 2774 psi based on a 9.0 ppg at 5927' TVD of the landing point of the horizontal lateral. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H₂S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on November 23, 2013. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 25 days.

LOC: Sec 27-T23N-R6W County: Sandoval WELL: GCU M27-2306 01H			Encana Natural Gas WELL SUMMARY					ENG: 9/26/13 RIG: GLE: 7132 RKBE: 7148	
MWD LWD	OPEN HOLE LOGGING	FORM	DEPTH			HOLE SIZE	CASING SPECS	MW MUD TYPE	DEVIATION INFORMATION
			TVD	MD					
			60	60'		30	20" 94# 100sx Type I Neat 14.8ppg cmt	Fresh wtr 8.3-9.2	
Surveys After csg is run	None					12 1/4	9 5/8" 36ppf J55 STC TOC @ surface 178 sks Type III Cmt	Fresh wtr 8.4-8.6	Vertical <1°
Surveys every 500'	No OH logs	Ojo Alamo Kirtland Fruitland Coal Pictured Cliffs Ss Lewis Shale Cliffhouse Ss Menefee Fn	1500 1697 1871 2110 2216 2878 3625	500 500		8 3/4	7" 26ppf J55 LTC TOC @ surface 30% OH excess: 606 sksTotal. Stage 1 Lead: 260sks Stage 1 Tail: 178sks. Stage 2 Lead: 168sks	Fresh Wtr 8.5-8.8	Vertical <1°
	Mud logger onsite	Point Lookout Ss Mancos Sh KICK OFF PT Mancos Silt Gallup Top 7" csg	4331 4495 5024 5087 5355 5592	6960					KOP 5024 10 deg/100'
Surveys every 500' Gyro at CP MWD Gamma Directional	No OH Logs	horz target Base Gallup	5597 5665	5927		6 1/8	200' overlap at liner top 7480' Lateral	8.6-9.0 OBM Switch to OBM 8.6-9.0	.25deg updip 5558'TVD TD = 13407' MD
							4 1/2" 11.6ppf SB80 LTC Running external swellable csg packers for isolation of prod string Plan on setting top packer within 100' of intermediate casing shoe		

NOTES:

- 1) Drill with 30" bit to 60', set 20" 94# conductor pipe
- 2) Drill surface to 500', R&C 9 5/8" casing
- 3) N/U BOP and surface equipment
- 4) Drill to KOP of 5024' , 8 3/4" hole size,
- 5) PU directional tools and start curve at 10deg/100' build rate
- 6) Drill to casing point of 6960' MD
- 7) R&C 7" casing, circ cmt to surface, switch to OBM
- 8) Land at 90deg, drill 7480' lateral to 13407', run 4 1/2" liner with external swellable csg packers



Boomerang Tube LLC

CASING (OR) TUBING DESCRIPTION AND PERFORMANCE PROPERTIES

Pipe Outside Diameter (ins)	_____	4.500
Pipe Wall Thickness (ins)	_____	0.250
Nominal Weight Per Foot (lbs)	_____	11.60
Thread Name	_____	Long Thread CSG
Grade Name	_____	SB-80
Pipe Minimum Yield (psi)	_____	80,000
Pipe Minimum Ultimate (psi)	_____	90,000
Coupling Minimum Yield (psi)	_____	80,000
Coupling Minimum Ultimate (psi)	_____	100,000
Coupling or Joint Outside Diameter (ins)	_____	5.000
Drift Diameter (ins)	_____	3.875
Plain End Weight per Foot (lbs)	_____	11.36
Joint Strength (lbs)	_____	201,000
Internal Yield (psi)	_____	7,780
Collapse Rating (psi)	_____	6,350

MAXIMUM DEPTH/LENGTH BASED ON MUD WTS & SAFETY FACTORS

Drilling Mud Weight (ppg)	_____	9.625
Tension Safety Factor	_____	1.80
Maximum Tension Length (ft)	_____	9,630
Internal Yield Safety Factor	_____	1.10
Maximum Depth for Internal Yield (ft)	_____	14,150
Collapse Safety Factor	_____	1.125
Maximum Collapse Depth (ft)	_____	11,290

API RELATED VALUES and INTERMEDIATE CALCULATION RESULTS

Coupling Thread Fracture Strength	_____	464,000
Pipe Thread Fracture Strength (lbs)	_____	201,000
Pipe Body Plain End Yield (lbs)	_____	267,000
Round Thread Pull-Out (lbs)	_____	219,000
Minimum Make-up Torque (ft-lbs)	_____	1,640
Nominal Make-up Torque (ft-lbs)	_____	2,190
Maximum Make-up Torque (ft-lbs)	_____	2,740
Coupling Internal Yield (psi)	_____	10,660
Pipe Body Internal Yield (psi)	_____	7,780
Leak @ E1 or E7 plane (psi)	_____	17,920
Pipe Hydrostatic Test Pressure @ 80 % SMYS	_____	7,100

encana.

natural gas

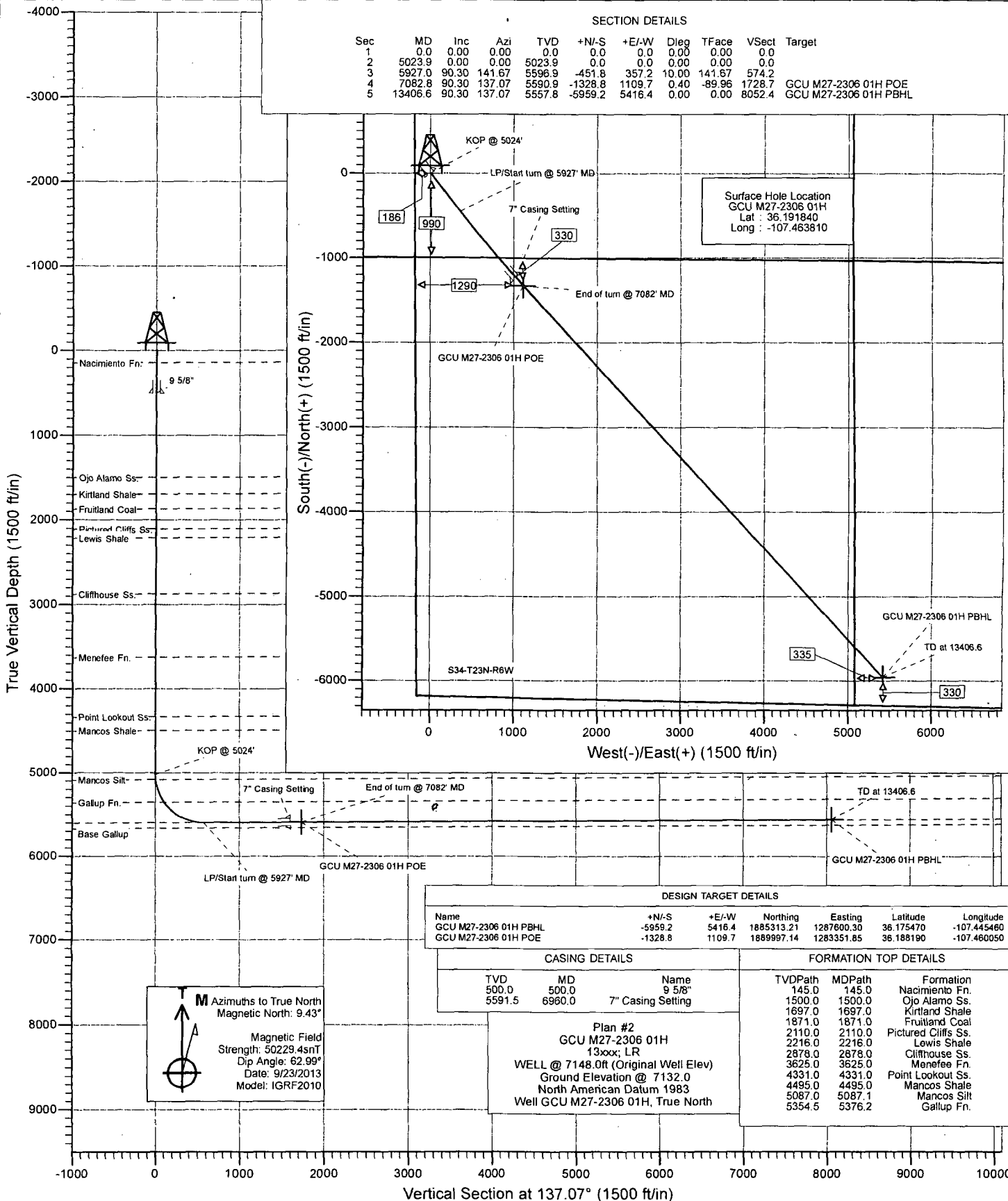
Project: Sandoval County, NM
Site: Lybrook
Well: GCU M27-2306 01H
Wellbore: Hz
Design: Plan #2

S27-T23N-R6W



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5023.9	0.00	0.00	5023.9	0.0	0.0	0.00	0.00	0.0	
3	5927.0	90.30	141.67	5596.9	-451.8	357.2	10.00	141.67	574.2	GCU M27-2306 01H POE
4	7082.8	90.30	137.07	5590.9	-1328.8	1109.7	0.40	-89.96	1728.7	GCU M27-2306 01H PBHL
5	13406.6	90.30	137.07	5557.8	-5959.2	5416.4	0.00	0.00	8052.4	



Surface Hole Location
GCU M27-2306 01H
Lat : 36.191840
Long : -107.463810

DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
GCU M27-2306 01H PBHL	-5959.2	5416.4	1885313.21	1287600.30	36.175470	-107.445460
GCU M27-2306 01H POE	-1328.8	1109.7	1889997.14	1283351.85	36.188190	-107.460050

CASING DETAILS

TVD	MD	Name
500.0	500.0	9 5/8"
5591.5	6960.0	7" Casing Setting

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
145.0	145.0	Nacimiento Fn.
1500.0	1500.0	Ojo Alamo Ss.
1697.0	1697.0	Kirtland Shale
1871.0	1871.0	Fruitland Coal
2110.0	2110.0	Pictured Cliffs Ss.
2216.0	2216.0	Lewis Shale
2878.0	2878.0	Cliffhouse Ss.
3625.0	3625.0	Menefee Fn.
4331.0	4331.0	Point Lookout Ss.
4495.0	4495.0	Mancos Shale
5087.0	5087.0	Mancos Silt
5354.5	5376.2	Gallup Fn.

Plan #2
GCU M27-2306 01H
13xxx; LR
WELL @ 7148.0ft (Original Well Elev)
Ground Elevation @ 7132.0
North American Datum 1983
Well GCU M27-2306 01H, True North

Vertical Section at 137.07° (1500 ft/in)

Planning Report

Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: Sandoval County, NM
 Site: Lybrook
 Well: GCU M27-2306 01H
 Wellbore: Hz
 Design: Plan #2

Local Co-ordinate Reference: Well GCU M27-2306 01H
 TVD Reference: WELL @ 7148.0ft (Original Well Elev)
 MD Reference: WELL @ 7148.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project: Sandoval County, NM
 Map System: US State Plane 1983
 Geo Datum: North American Datum 1983
 Map Zone: New Mexico Central Zone
 System Datum: Mean Sea Level

Site: Lybrook
 Site Position: Northing: 1,882,676.45 ft Latitude: 36.168210
 From: Lat/Long Easting: 1,287,068.90 ft Longitude: -107.447150
 Position Uncertainty: 0.0 ft Slot Radius: 13.200 in Grid Convergence: -0.71 °

Well: GCU M27-2306 01H
 Well Position: +N/-S 0.0 ft Northing: 1,891,339.74 ft Latitude: 36.191840
 +E/-W 0.0 ft Easting: 1,282,258.91 ft Longitude: -107.463810
 Position Uncertainty: 0.0 ft Wellhead Elevation: ft Ground Level: 7,132.0 ft

Wellbore: Hz
 Magnetics: Model Name Sample Date Declination Dip Angle Field Strength
 (°) (°) (nT)
 IGRF2010 9/23/2013 9.42 62.99 50,229

Design: Plan #2
 Audit Notes:
 Version: Phase: PLAN Tie On Depth: 0.0
 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
 (ft) (ft) (ft) (°)
 0.0 0.0 0.0 137.07

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,023.9	0.00	0.00	5,023.9	0.0	0.0	0.00	0.00	0.00	0.00	
5,927.0	90.30	141.67	5,596.9	-451.8	357.2	10.00	10.00	0.00	141.67	
7,082.8	90.30	137.07	5,590.9	-1,328.8	1,109.7	0.40	0.00	-0.40	-89.96	GCU M27-2306 01H I
13,406.6	90.30	137.07	5,557.8	-5,959.2	5,416.4	0.00	0.00	0.00	0.00	GCU M27-2306 01H I

Planning Report

Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: Sandoval County, NM
 Site: Lybrook
 Well: GCU M27-2306 01H
 Wellbore: Hz
 Design: Plan #2

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well GCU M27-2306 01H
 WELL @ 7148.0ft (Original Well Elev)
 WELL @ 7148.0ft (Original Well Elev)
 True
 Minimum Curvature

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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
145.0	0.00	0.00	145.0	0.0	0.0	0.0	0.00	0.00	Nacimiento Fn.
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	9 5/8"
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,697.0	0.00	0.00	1,697.0	0.0	0.0	0.0	0.00	0.00	Kirtland Shale
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,871.0	0.00	0.00	1,871.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	
2,110.0	0.00	0.00	2,110.0	0.0	0.0	0.0	0.00	0.00	Pictured Cliffs Ss.
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,216.0	0.00	0.00	2,216.0	0.0	0.0	0.0	0.00	0.00	Lewis Shale
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,878.0	0.00	0.00	2,878.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	
3,625.0	0.00	0.00	3,625.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn.
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	
4,331.0	0.00	0.00	4,331.0	0.0	0.0	0.0	0.00	0.00	Point Lookout Ss.

Planning Report

Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: Sandoval County, NM
 Site: Lybrook
 Well: GCU M27-2306 01H
 Wellbore: Hz
 Design: Plan #2

Local Co-ordinate Reference: Well GCU M27-2306 01H
 TVD Reference: WELL @ 7148.0ft (Original Well Elev)
 MD Reference: WELL @ 7148.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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)	Comments / Formations
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	
4,495.0	0.00	0.00	4,495.0	0.0	0.0	0.0	0.00	0.00	Mancos Shale
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	
5,023.9	0.00	0.00	5,023.9	0.0	0.0	0.0	0.00	0.00	KOP @ 5024'
5,087.1	6.32	141.67	5,087.0	-2.7	2.2	3.5	10.00	10.00	Mancos Silt
5,100.0	7.61	141.67	5,099.8	-4.0	3.1	5.0	10.00	10.00	
5,200.0	17.61	141.67	5,197.2	-21.1	16.7	26.8	10.00	10.00	
5,300.0	27.61	141.67	5,289.4	-51.2	40.5	65.0	10.00	10.00	
5,376.2	35.23	141.67	5,354.5	-82.3	65.1	104.6	10.00	10.00	Gallup Fn.
5,400.0	37.60	141.67	5,373.6	-93.4	73.8	118.7	10.00	10.00	
5,500.0	47.60	141.67	5,447.1	-146.4	115.8	186.1	10.00	10.00	
5,600.0	57.60	141.67	5,507.7	-208.7	165.0	265.1	10.00	10.00	
5,700.0	67.60	141.67	5,553.7	-278.2	220.0	353.5	10.00	10.00	
5,800.0	77.60	141.67	5,583.6	-353.0	279.1	448.5	10.00	10.00	
5,900.0	87.60	141.67	5,596.4	-430.7	340.5	547.3	10.00	10.00	
5,927.0	90.30	141.67	5,596.9	-451.8	357.2	574.2	10.00	10.00	L.P./Start turn @ 5927' MD
6,000.0	90.30	141.38	5,596.5	-509.0	402.7	646.9	0.40	0.00	
6,100.0	90.30	140.98	5,596.0	-586.9	465.4	746.7	0.40	0.00	
6,200.0	90.30	140.58	5,595.5	-664.4	528.6	846.5	0.40	0.00	
6,300.0	90.30	140.19	5,595.0	-741.4	592.3	946.3	0.40	0.00	
6,400.0	90.30	139.79	5,594.5	-818.0	656.6	1,046.2	0.40	0.00	
6,500.0	90.30	139.39	5,593.9	-894.1	721.5	1,146.1	0.40	0.00	
6,600.0	90.30	138.99	5,593.4	-969.8	786.8	1,246.0	0.40	0.00	
6,700.0	90.30	138.60	5,592.9	-1,045.1	852.7	1,346.0	0.40	0.00	
6,800.0	90.30	138.20	5,592.4	-1,119.8	919.1	1,445.9	0.40	0.00	
6,900.0	90.30	137.80	5,591.9	-1,194.2	986.0	1,545.9	0.40	0.00	
6,960.0	90.30	137.56	5,591.5	-1,238.5	1,026.4	1,605.9	0.40	0.00	7" Casing Setting
7,000.0	90.30	137.40	5,591.3	-1,268.0	1,053.4	1,645.9	0.40	0.00	
7,082.8	90.30	137.07	5,590.9	-1,328.8	1,109.7	1,728.7	0.40	0.00	End of turn @ 7082' MD
7,100.0	90.30	137.07	5,590.8	-1,341.4	1,121.3	1,745.9	0.00	0.00	
7,200.0	90.30	137.07	5,590.3	-1,414.6	1,189.5	1,845.9	0.00	0.00	
7,300.0	90.30	137.07	5,589.8	-1,487.8	1,257.6	1,945.9	0.00	0.00	
7,400.0	90.30	137.07	5,589.2	-1,561.1	1,325.7	2,045.9	0.00	0.00	
7,500.0	90.30	137.07	5,588.7	-1,634.3	1,393.8	2,145.9	0.00	0.00	
7,600.0	90.30	137.07	5,588.2	-1,707.5	1,461.9	2,245.9	0.00	0.00	
7,700.0	90.30	137.07	5,587.7	-1,780.7	1,530.0	2,345.9	0.00	0.00	
7,800.0	90.30	137.07	5,587.1	-1,853.9	1,598.1	2,445.9	0.00	0.00	
7,900.0	90.30	137.07	5,586.6	-1,927.2	1,666.2	2,545.9	0.00	0.00	
8,000.0	90.30	137.07	5,586.1	-2,000.4	1,734.3	2,645.9	0.00	0.00	
8,100.0	90.30	137.07	5,585.6	-2,073.6	1,802.4	2,745.9	0.00	0.00	
8,200.0	90.30	137.07	5,585.1	-2,146.8	1,870.5	2,845.9	0.00	0.00	
8,300.0	90.30	137.07	5,584.5	-2,220.1	1,938.6	2,945.9	0.00	0.00	
8,400.0	90.30	137.07	5,584.0	-2,293.3	2,006.7	3,045.9	0.00	0.00	
8,500.0	90.30	137.07	5,583.5	-2,366.5	2,074.8	3,145.9	0.00	0.00	
8,600.0	90.30	137.07	5,583.0	-2,439.7	2,142.9	3,245.9	0.00	0.00	
8,700.0	90.30	137.07	5,582.4	-2,513.0	2,211.0	3,345.9	0.00	0.00	
8,800.0	90.30	137.07	5,581.9	-2,586.2	2,279.1	3,445.9	0.00	0.00	

Planning Report

Database: USA EDM 5000 Multi Users DB
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Well: GCU M27-2306 01H
Wellbore: Hz
Design: Plan #2

Local Co-ordinate Reference: Well GCU M27-2306 01H
TVD Reference: WELL @ 7148.0ft (Original Well Elev)
MD Reference: WELL @ 7148.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)	Comments / Formations
8,900.0	90.30	137.07	5,581.4	-2,659.4	2,347.2	3,545.9	0.00	0.00	
9,000.0	90.30	137.07	5,580.9	-2,732.6	2,415.3	3,645.9	0.00	0.00	
9,100.0	90.30	137.07	5,580.4	-2,805.8	2,483.4	3,745.9	0.00	0.00	
9,200.0	90.30	137.07	5,579.8	-2,879.1	2,551.5	3,845.9	0.00	0.00	
9,300.0	90.30	137.07	5,579.3	-2,952.3	2,619.6	3,945.9	0.00	0.00	
9,400.0	90.30	137.07	5,578.8	-3,025.5	2,687.7	4,045.9	0.00	0.00	
9,500.0	90.30	137.07	5,578.3	-3,098.7	2,755.8	4,145.9	0.00	0.00	
9,600.0	90.30	137.07	5,577.7	-3,172.0	2,823.9	4,245.9	0.00	0.00	
9,700.0	90.30	137.07	5,577.2	-3,245.2	2,892.1	4,345.9	0.00	0.00	
9,800.0	90.30	137.07	5,576.7	-3,318.4	2,960.2	4,445.9	0.00	0.00	
9,900.0	90.30	137.07	5,576.2	-3,391.6	3,028.3	4,545.9	0.00	0.00	
10,000.0	90.30	137.07	5,575.6	-3,464.8	3,096.4	4,645.9	0.00	0.00	
10,100.0	90.30	137.07	5,575.1	-3,538.1	3,164.5	4,745.9	0.00	0.00	
10,200.0	90.30	137.07	5,574.6	-3,611.3	3,232.6	4,845.9	0.00	0.00	
10,300.0	90.30	137.07	5,574.1	-3,684.5	3,300.7	4,945.9	0.00	0.00	
10,400.0	90.30	137.07	5,573.6	-3,757.7	3,368.8	5,045.9	0.00	0.00	
10,500.0	90.30	137.07	5,573.0	-3,831.0	3,436.9	5,145.9	0.00	0.00	
10,600.0	90.30	137.07	5,572.5	-3,904.2	3,505.0	5,245.9	0.00	0.00	
10,700.0	90.30	137.07	5,572.0	-3,977.4	3,573.1	5,345.9	0.00	0.00	
10,800.0	90.30	137.07	5,571.5	-4,050.6	3,641.2	5,445.9	0.00	0.00	
10,900.0	90.30	137.07	5,570.9	-4,123.9	3,709.3	5,545.8	0.00	0.00	
11,000.0	90.30	137.07	5,570.4	-4,197.1	3,777.4	5,645.8	0.00	0.00	
11,100.0	90.30	137.07	5,569.9	-4,270.3	3,845.5	5,745.8	0.00	0.00	
11,200.0	90.30	137.07	5,569.4	-4,343.5	3,913.6	5,845.8	0.00	0.00	
11,300.0	90.30	137.07	5,568.8	-4,416.7	3,981.7	5,945.8	0.00	0.00	
11,400.0	90.30	137.07	5,568.3	-4,490.0	4,049.8	6,045.8	0.00	0.00	
11,500.0	90.30	137.07	5,567.8	-4,563.2	4,117.9	6,145.8	0.00	0.00	
11,600.0	90.30	137.07	5,567.3	-4,636.4	4,186.0	6,245.8	0.00	0.00	
11,700.0	90.30	137.07	5,566.8	-4,709.6	4,254.1	6,345.8	0.00	0.00	
11,800.0	90.30	137.07	5,566.2	-4,782.9	4,322.2	6,445.8	0.00	0.00	
11,900.0	90.30	137.07	5,565.7	-4,856.1	4,390.3	6,545.8	0.00	0.00	
12,000.0	90.30	137.07	5,565.2	-4,929.3	4,458.4	6,645.8	0.00	0.00	
12,100.0	90.30	137.07	5,564.7	-5,002.5	4,526.5	6,745.8	0.00	0.00	
12,200.0	90.30	137.07	5,564.1	-5,075.7	4,594.7	6,845.8	0.00	0.00	
12,300.0	90.30	137.07	5,563.6	-5,149.0	4,662.8	6,945.8	0.00	0.00	
12,400.0	90.30	137.07	5,563.1	-5,222.2	4,730.9	7,045.8	0.00	0.00	
12,500.0	90.30	137.07	5,562.6	-5,295.4	4,799.0	7,145.8	0.00	0.00	
12,600.0	90.30	137.07	5,562.0	-5,368.6	4,867.1	7,245.8	0.00	0.00	
12,700.0	90.30	137.07	5,561.5	-5,441.9	4,935.2	7,345.8	0.00	0.00	
12,800.0	90.30	137.07	5,561.0	-5,515.1	5,003.3	7,445.8	0.00	0.00	
12,900.0	90.30	137.07	5,560.5	-5,588.3	5,071.4	7,545.8	0.00	0.00	
13,000.0	90.30	137.07	5,560.0	-5,661.5	5,139.5	7,645.8	0.00	0.00	
13,100.0	90.30	137.07	5,559.4	-5,734.8	5,207.6	7,745.8	0.00	0.00	
13,200.0	90.30	137.07	5,558.9	-5,808.0	5,275.7	7,845.8	0.00	0.00	
13,300.0	90.30	137.07	5,558.4	-5,881.2	5,343.8	7,945.8	0.00	0.00	
13,400.0	90.30	137.07	5,557.9	-5,954.4	5,411.9	8,045.8	0.00	0.00	
13,406.6	90.30	137.07	5,557.8	-5,959.2	5,416.4	8,052.4	0.00	0.00	TD at 13406.6

Planning Report

Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: Sandoval County, NM
 Site: Lybrook
 Well: GCU M27-2306 01H
 Wellbore: Hz
 Design: Plan #2

Local Co-ordinate Reference: Well GCU M27-2306 01H
 TVD Reference: WELL @ 7148.0ft (Original Well Elev)
 MD Reference: WELL @ 7148.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Targets									
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	
Shape		(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude Longitude
GCU M27-2306 01H PB	- plan hits target center	0.00	0.00	5,557.8	-5,959.2	5,416.4	1,885,313.21	1,287,600.30	36.175470 -107.445460
	- Point								
GCU M27-2306 01H PO	- plan hits target center	0.00	0.00	5,590.9	-1,328.8	1,109.7	1,889,997.14	1,283,351.85	36.188190 -107.460050
	- Point								

Casing Points					
Measured Depth	Vertical Depth		Name	Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
500.0	500.0	9 5/8"		0.000	0.000
6,960.0	5,591.5	7" Casing Setting		0.000	0.000

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
145.0	145.0	Nacimiento Fn.		-0.30	137.07	
1,500.0	1,500.0	Ojo Alamo Ss.		-0.30	137.07	
1,697.0	1,697.0	Kirtland Shale		-0.30	137.07	
1,871.0	1,871.0	Fruitland Coal		-0.30	137.07	
2,110.0	2,110.0	Pictured Cliffs Ss.		-0.30	137.07	
2,216.0	2,216.0	Lewis Shale		-0.30	137.07	
2,878.0	2,878.0	Cliffhouse Ss.		-0.30	137.07	
3,625.0	3,625.0	Menefee Fn.		-0.30	137.07	
4,331.0	4,331.0	Point Lookout Ss.		-0.30	137.07	
4,495.0	4,495.0	Mancos Shale		-0.30	137.07	
5,087.1	5,087.0	Mancos Silt		-0.30	137.07	
5,376.2	5,355.0	Gallup Fn.		-0.30	137.07	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
5,023.9	5,023.9	0.0	0.0	KOP @ 5024'	
5,927.0	5,596.9	-451.8	357.2	LP/Start turn @ 5927' MD	
7,082.8	5,590.9	-1,328.8	1,109.7	End of turn @ 7082' MD	
13,406.6	5,557.8	-5,959.2	5,416.4	TD at 13406.6	

WELLHEAD BLOWOUT CONTROL SYSTEM



Well name and number:

GCU M27-2306 01H

