

SEP 18 2014

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

OIL CONS. DIV. DIST. 3

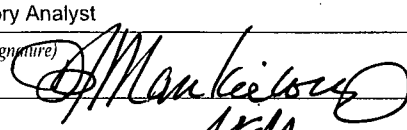
1a. Type of work: ☒ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No. N/A	
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		8. Lease Name and Well No. Good Times L13-2410 02H	
2. Name of Operator Encana Oil & Gas (USA) Inc.		9. API Well No. 30-045-35593	
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202	3b. Phone No. (include area code) 720-876-5994	10. Field and Pool, or Exploratory Basin Mancos Gas/Bisti Lower-Gallup	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1341' FSL and 446' FWL Section 13, T24N, R10W NWSW At proposed prod. zone 370' FSL and 330' FWL Section 14, T24N, R10W NWSW		11. Sec., T. R. M. or Blk. and Survey or Area Section 14, T24N, R10W NMPM	
14. Distance in miles and direction from nearest town or post office* +/- 32.5 miles south from intersection of US Hwy 550 and US Hwy 64 in Bloomfield, NM		12. County or Parish San Juan	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) BHL is 330' FWL Section 11, T24N, R10W	16. No. of acres in lease NM 16760 - 4,279.73 acres 1279.83 acres	17. Spacing Unit dedicated to this well 160.0 acres - S/2S/2 Section 14, T24N, R10W	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SHL is +/- 30' S of Good Times L13-2410 01H	19. Proposed Depth 5219' TVD/ 10,366' MD	20. BLM/BIA Bond No. on file COB-000235	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6857' GL; 6873' KB	22. Approximate date work will start* 04/01/2015	23. Estimated duration 20 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) Shannon Turk	Date 09/16/2014
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Title Regulatory Analyst	
Approved by (Signature) 	Name (Printed/Typed) A. Mankiewicz
Title AFM	Office FFO

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 125. Application for approval of drilling or reentry operations on any federal or Indian land shall be made to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

ACTION DOES NOT RELIEVE THE LESSEE AND

This communication is for technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

*DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

NMOCDV

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-8161 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) 834-6178 Fax: (505) 834-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 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 30-045-35593	² Pool Code 97232 / 5890	³ Pool Name BASIN MANCOS GAS / BISTI LOWER-GALLUP
⁴ Property Code 313845	⁵ Property Name GOOD TIMES L13-2410	⁶ Well Number 02H
⁷ OGRID No. 282327	⁸ Operator Name ENCANA OIL & GAS (USA) INC.	⁹ Elevation 6856.5'

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
L	13	24N	10W		1341'	SOUTH	446'	WEST	SAN JUAN

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
L	14	24N	10W		370'	SOUTH	330'	WEST	SAN JUAN

¹² Dedicated Acres 160.00 ACRES S/2 S/2 SEC. 14 80 mancos 80 Gallup	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

16

1 LAT. 36.321248" N (NAD83) LONG. 107.874556" W (NAD83) LAT. 36.321237" N (NAD27) LONG. 107.873938" W (NAD27) 2 LAT. 36.306694" N (NAD83) LONG. 107.874578" W (NAD83) LAT. 36.306683" N (NAD27) LONG. 107.873960" W (NAD27)	3 LAT. 36.321270" N (NAD83) LONG. 107.856897" W (NAD83) LAT. 36.321259" N (NAD27) LONG. 107.856280" W (NAD27) 4 LAT. 36.306738" N (NAD83) LONG. 107.856912" W (NAD83) LAT. 36.306727" N (NAD27) LONG. 107.856295" W (NAD27)	5 LAT. 36.306791" N (NAD83) LONG. 107.839226" W (NAD83) LAT. 36.306780" N (NAD27) LONG. 107.838609" W (NAD27) ALL CORNERS FND 2 1/2" BC GLO 1932	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. Shannon Turk 9/12/14 Signature Date Shannon Turk Printed Name shannon.turk@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. APRIL 17, 2013 Date of Survey Signature and Seal of Professional Surveyor: DAVID R. RUSSELL REGISTERED PROFESSIONAL LAND SURVEYOR NEW MEXICO 1020 DAVID RUSSELL Certificate Number 10201			

Good Times L13-2410 02H
 SHL: 1341' FSL & 446' FWL Sec 13 T24N R10W
 BHL: 370' FSL & 330' FWL Sec 13 T24N R10W
 San Juan, New Mexico

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
San Jose Fn.	n/a
Nacimiento Fn.	surface
Ojo Alamo Ss.	766
Kirtland Shale	917
Fruitland Coal	1,229
Pictured Cliffs Ss.	1,576
Lewis Shale	1,765
Cliffhouse Ss.	2,316
Menefee Fn.	3,087
Point Lookout Ss.	3,945
Mancos Shale	4,207
Mancos Silt	4,762
Gallup Fn.	5,031
Base Gallup	5,353

The referenced surface elevation is 6857', KB 6873'

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

Substance	Formation	Depth (TVD) units = feet
Water/Gas	Fruitland Coal	1,229
Oil/Gas	Pictured Cliffs Ss.	1,576
Oil/Gas	Cliffhouse Ss.	2,316
Gas	Menefee Fn.	3,087
Oil/Gas	Point Lookout Ss.	3,945
Oil/Gas	Mancos Shale	4,207
Oil/Gas	Mancos Silt	4,762
Oil/Gas	Gallup Fn.	5,031

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

Good Times L13-2410 02H

SHL: 1341' FSL & 446' FWL Sec 13 T24N R10W

BHL: 370' FSL & 330' FWL Sec 13 T24N R10W

San Juan, New Mexico

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.
- 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 (MD)	Hole Size	Csg Size	Weight	Grade
Conductor	0'-60'	26"	16"	42.09#	
Surface	0'-500'	12 1/4"	9 5/8"	36#	J55, STC New
Intermediate	0'-5405'	8 3/4"	7"	26#	J55, LTC New
Production Liner	5305'-10366'	6 1/8"	4 1/2"	11.6#	B80*, LTC New

Casing String				Casing Strength Properties			Minimum Design Factors		
Size	Weight (ppf)	Grade	Connection	Collapse (psi)	Burst (psi)	Tensile (1000lbs)	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
4.5"	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

Good Times L13-2410 02H

SHL: 1341' FSL & 446' FWL Sec 13 T24N R10W

BHL: 370' FSL & 330' FWL Sec 13 T24N R10W

San Juan, New Mexico

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

Casing	Depth (MD)	Cement Volume (sacks)	Cement Type & Yield	Designed TOC	Centralizers
Conductor	0'-60'	100 sks	Type I Neat 16 ppg	Surface	None
Surface	0'-500'	276 sks	Type III Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.2% bwoc FL-52A + 58.9% Fresh Water	Surface	1 per joint on bottom 3 joints
Intermediate	0'-5405'	100% open hole excess Stage 1 Lead: 717 sks Stage 1 Tail: 544 sks	Lead: PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuft/sk Tail: Type III Cmt + 1% CaCl + 0.25lb/sk Cello Flake 14.5ppg 1.38cuft/sk	Surface	1 every 3 joints through water bearing zones
Production Liner	5305'-10366'	50% OH excess Stage 1 Blend Total: 279sks	Blend: Premium Lite High Strength FM + 0.7% bwoc R-3 + 3% bwow Potassium Chloride + 0.25lbs/sack Cello Flake + 0.5% bwoc CD-32 + 1.15% bwoc FL- 52A + 60 lbs/sack Calcium Carbonate + 124.4% Fresh Water. Yield 2.63 cuft/sk	Liner Hanger	N/A

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 minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. WELL PLAN & DIRECTIONAL DRILLING PROGRAM

The proposed horizontal well will have a kick off point of 2750'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5219'/10366'	Gallup

Good Times L13-2410 02H
SHL: 1341' FSL & 446' FWL Sec 13 T24N R10W
BHL: 370' FSL & 330' FWL Sec 13 T24N R10W
San Juan, New Mexico

6. DRILLING FLUIDS PROGRAM

a) Surface through Intermediate Casing Point:

Hole Size (in)	Depth (TVD/MD)	Mud Type	Density (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
30"	0-60'/60'	Fresh Water	8.3-9.2	38-100	4-28
12 1/4"	0'-500'/500'	Fresh Water	8.3-10	60-70	NC
8 3/4"	500'/500'-5135'/5405'	Fresh Water LSND	8.3-10	40-50	8-10

b) Intermediate Casing Point to TD:

Hole Size (in)	Depth (TVD/MD)	Mud Type	Density (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
6 1/8"	5135'/5405'- 5219'/10366'	Fresh Water LSND	8.3-10	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. 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, & LOGGING

- a) Drill Stem Testing - None anticipated.
- b) Coring - None anticipated.
- c) Mudd 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

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The anticipated bottom hole pressure is +/- 2464 psi based on a 9.0 ppg at 5265' TVD of the horizontal lateral target. 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

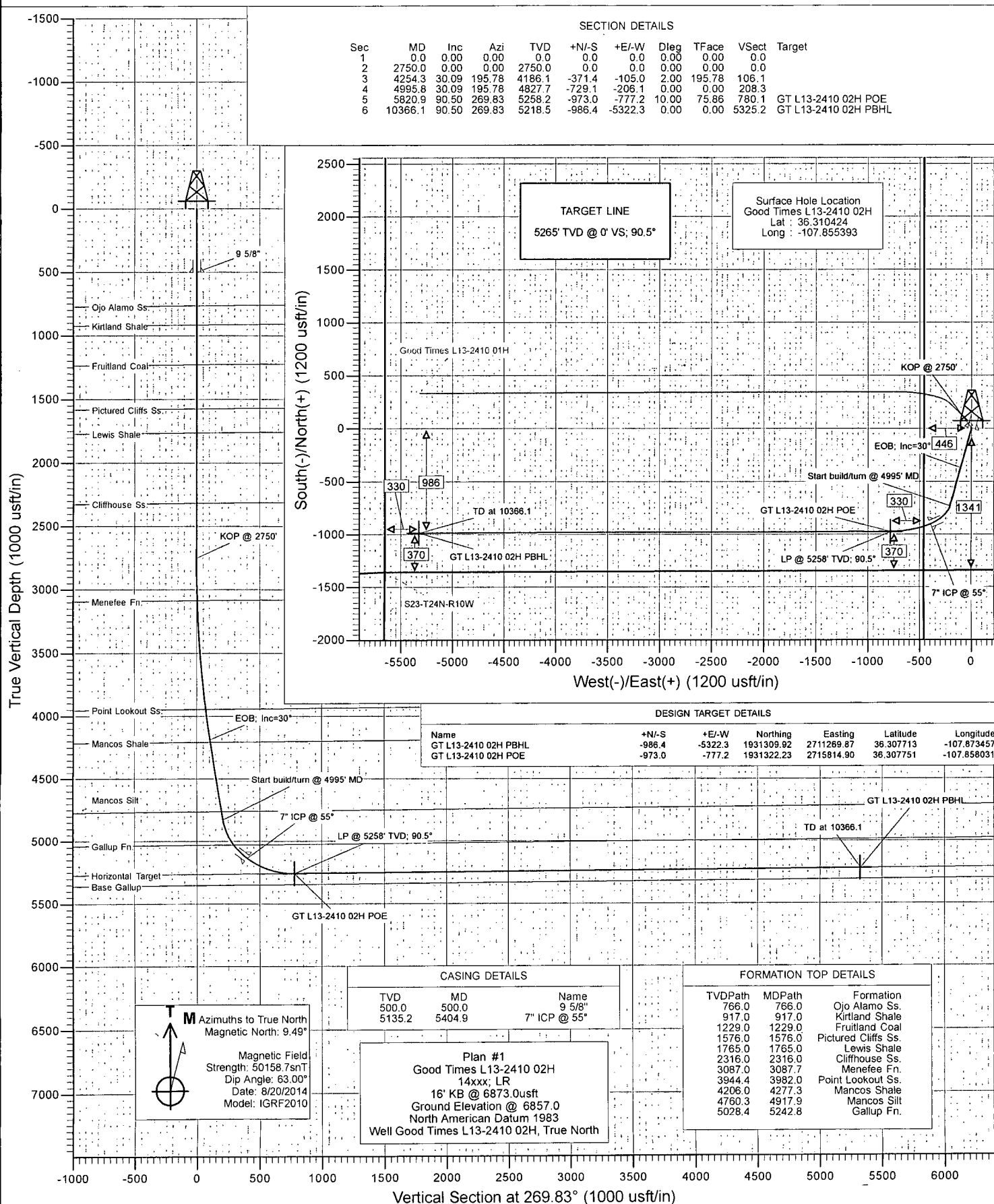
Drilling is estimated to commence on April 1, 2015. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 20 days.

LOC: 1341' FSL & 446' FWL Sec 13 T24N R10			Encana Natural Gas				ENG: Michael Sanch RIG: Unassigned GLE: 6856.5 RKBE: 6872.5		9/16/14	
County: San Juan			WELL SUMMARY							
MWD	OPEN HOLE	FORM	DEPTH			HOLE	CASING	MW	DEVIATION	
LWD	LOGGING		TVD	MD						SIZE
			60	60'		26	16" 42.09# 100sx Type I Neat 16.0ppg cmt	Fresh wtr 8.3-9.2		
Multi-Well pad take survey every stand and run anti-collision report prior to spud	None	San Jose Fn.	0			12 1/4	9 5/8" 36ppf J55 STC TOC Surface with 100% OH Excess: 276 sks Type III Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.2% bwoc FL-52A + 58.9% Fresh Water.	Fresh wtr 8.3-10	Vertical <1°	
Survey Every 60'-120', updating anticollision report after surveys. Stop operations and contact drilling engineer if separation factor approaches 1.5	No OH logs	Nacimiento Fn.	surface			8 3/4	7" 26ppf J55 LTC TOC @ surface (100% OH excess - 70% Lead 30% Tail) Stage 1 Total: 1261sks Stage 1 Lead: 717 sks Premium Lite FM + 3% CaCl2 + 0.25/sk Cello Flake + 5#/sk LCM-1 + 8% Bentonite + 0.4% FL-52A + 0.4% Sodium Metasilicate. Mixed at 12.1 ppg. Yield 2.13 cuft/sk. Stage 1 Tail: 544 sks Type III Cement + 1% CaCl2 + 0.25#/sk Cello Flake + 0.2% FL-52A. Mixed at 14.6 ppg. Yield 1.38 cuft/sk.	Fresh Wtr 8.3-10	Vertical <1°	
		9 5/8" Csg	500	500.00						
		Ojo Alamo Ss.	766							
		Kirtland Shale	917							
		Fruitland Coal	1,229							
	Surveys every 30' through the curve	Mud logger onsite	Pictured Cliffs Ss.	1,576						
			Lewis Shale	1,765						
			Cliffhouse Ss.	2,316						
			Menefee Fn.	3,087						
			Point Lookout Ss.	3,945						
		Mancos Shale	4,207							
		KOP	2,750	2,750						
		Mancos Silt	4,762							
		Gallup Fn.	5,031							
		7" Csg	5,135	5,405'						
Surveys every stand to TD unless directed otherwise by Geologist	No OH Logs	Horizontal Target	5,265			6 1/8	100' overlap at liner top		Horz Inc/TVD 90.5deg/5264.5ft	
TD		5,219	10,366			4961' Drilled Lateral		TD = 10366.1 MD		
MWD Gamma Directional		Base Gallup	5,353				4 1/2" 11.6ppf SB80 LTC TOC @ hanger (50% OH excess) Stage 1 Total: 279sks Stage 1 Blend: 279 sks Premium Lite High Strength FM + 0.7% bwoc R-3 + 3% bwow Potassium Chloride + 0.25lbs/sack Cello Flake + 0.5% bwoc CD-32 + 1.15% bwoc FL-52A + 60 lbs/sack Calcium Carbonate + 124.4% Fresh Water. Yield 2.63 cuft/sk.	WBM 8.3-10		

NOTES:

- 1) Drill with 26" bit to 60', set 16" 42.09ppf 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 2750', 8 3/4 inch holesize
- 5) Start curve at 10deg/100' build rate
- 6) Drill to csg point of 5405' MD
- 7) R&C 7" csg, circ cmt to surface
- 8) Land at ~90 deg, drill lateral to 10366' run 4 1/2 inch cemented liner



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times L13-2410 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	16' KB @ 6873.0usft
Project:	San Juan County, NM	MD Reference:	16' KB @ 6873.0usft
Site:	S13-T24N-R10W	North Reference:	True
Well:	Good Times L13-2410 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

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

Site		S13-T24N-R10W				
Site Position:		Northing:	1,932,323.11 usft	Latitude:	36.310501	
From:	Lat/Long	Easting:	2,716,602.39 usft	Longitude:	-107.855359	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-0.01 °

Well	Good Times L13-2410 02H					
Well Position	+N/-S	0.0 usft	Northing:	1,932,295.08 usft	Latitude:	36.310424
	+E/-W	0.0 usft	Easting:	2,716,592.36 usft	Longitude:	-107.855393
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	6,857.0 usft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/20/2014	9.50	63.00	50,159

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	269.83

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,750.0	0.00	0.00	2,750.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,254.3	30.09	195.78	4,186.1	-371.4	-105.0	2.00	2.00	0.00	195.78	
4,995.8	30.09	195.78	4,827.7	-729.1	-206.1	0.00	0.00	0.00	0.00	
5,820.9	90.50	269.83	5,258.2	-973.0	-777.2	10.00	7.32	8.97	75.86	GT L13-2410 02H PO
10,366.1	90.50	269.83	5,218.5	-986.4	-5,322.3	0.00	0.00	0.00	0.00	GT L13-2410 02H PB

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times L13-2410 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	16' KB @ 6873.0usft
Project:	San Juan County, NM	MD Reference:	16' KB @ 6873.0usft
Site:	S13-T24N-R10W	North Reference:	True
Well:	Good Times L13-2410 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	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	
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	
766.0	0.00	0.00	766.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
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	
917.0	0.00	0.00	917.0	0.0	0.0	0.0	0.00	0.00	Kirtland Shale
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	
1,229.0	0.00	0.00	1,229.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
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	
1,576.0	0.00	0.00	1,576.0	0.0	0.0	0.0	0.00	0.00	Pictured Cliffs Ss.
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,765.0	0.00	0.00	1,765.0	0.0	0.0	0.0	0.00	0.00	Lewis Shale
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
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	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,316.0	0.00	0.00	2,316.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
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	
2,750.0	0.00	0.00	2,750.0	0.0	0.0	0.0	0.00	0.00	KOP @ 2750'
2,800.0	1.00	195.78	2,800.0	-0.4	-0.1	0.1	2.00	2.00	
2,900.0	3.00	195.78	2,899.9	-3.8	-1.1	1.1	2.00	2.00	
3,000.0	5.00	195.78	2,999.7	-10.5	-3.0	3.0	2.00	2.00	
3,087.7	6.75	195.78	3,087.0	-19.1	-5.4	5.5	2.00	2.00	Menefee Fn.
3,100.0	7.00	195.78	3,099.1	-20.5	-5.8	5.9	2.00	2.00	
3,200.0	9.00	195.78	3,198.1	-33.9	-9.6	9.7	2.00	2.00	
3,300.0	11.00	195.78	3,296.6	-50.6	-14.3	14.5	2.00	2.00	
3,400.0	13.00	195.78	3,394.4	-70.7	-20.0	20.2	2.00	2.00	
3,500.0	15.00	195.78	3,491.5	-93.9	-26.6	26.8	2.00	2.00	
3,600.0	17.00	195.78	3,587.6	-120.5	-34.1	34.4	2.00	2.00	
3,700.0	19.00	195.78	3,682.7	-150.2	-42.5	42.9	2.00	2.00	
3,800.0	21.00	195.78	3,776.6	-183.1	-51.8	52.3	2.00	2.00	
3,900.0	23.00	195.78	3,869.4	-219.1	-61.9	62.6	2.00	2.00	
3,982.0	24.64	195.78	3,944.4	-251.0	-71.0	71.7	2.00	2.00	Point Lookout Ss.
4,000.0	25.00	195.78	3,960.7	-258.3	-73.0	73.8	2.00	2.00	
4,100.0	27.00	195.78	4,050.6	-300.5	-84.9	85.8	2.00	2.00	
4,200.0	29.00	195.78	4,138.9	-345.6	-97.7	98.7	2.00	2.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times L13-2410 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	16' KB @ 6873.0usft
Project:	San Juan County, NM	MD Reference:	16' KB @ 6873.0usft
Site:	S13-T24N-R10W	North Reference:	True
Well:	Good Times L13-2410 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
4,254.3	30.09	195.78	4,186.1	-371.4	-105.0	106.1	2.00	2.00	EOB; Inc=30°
4,277.3	30.09	195.78	4,206.0	-382.5	-108.1	109.3	0.00	0.00	Mancos Shale
4,300.0	30.09	195.78	4,225.7	-393.4	-111.2	112.4	0.00	0.00	
4,400.0	30.09	195.78	4,312.2	-441.7	-124.9	126.2	0.00	0.00	
4,500.0	30.09	195.78	4,398.7	-489.9	-138.5	139.9	0.00	0.00	
4,600.0	30.09	195.78	4,485.2	-538.2	-152.1	153.7	0.00	0.00	
4,700.0	30.09	195.78	4,571.8	-586.4	-165.8	167.5	0.00	0.00	
4,800.0	30.09	195.78	4,658.3	-634.7	-179.4	181.3	0.00	0.00	
4,900.0	30.09	195.78	4,744.8	-682.9	-193.0	195.1	0.00	0.00	
4,917.9	30.09	195.78	4,760.3	-691.5	-195.5	197.5	0.00	0.00	Mancos Silt
4,995.8	30.09	195.78	4,827.7	-729.1	-206.1	208.3	0.00	0.00	Start build/turn @ 4995' MD
5,000.0	30.19	196.60	4,831.3	-731.1	-206.7	208.9	10.00	2.50	
5,100.0	34.02	214.06	4,916.2	-778.5	-229.6	231.9	10.00	3.83	
5,200.0	39.81	227.69	4,996.3	-823.4	-269.0	271.5	10.00	5.79	
5,242.8	42.70	232.48	5,028.4	-841.4	-290.7	293.2	10.00	6.75	Gallup Fn.
5,300.0	46.83	238.10	5,069.1	-864.3	-323.8	326.4	10.00	7.23	
5,400.0	54.60	246.27	5,132.4	-900.1	-392.3	394.9	10.00	7.76	
5,404.9	54.99	246.62	5,135.2	-901.7	-395.9	398.6	10.00	8.04	7" ICP @ 55°
5,500.0	62.81	252.95	5,184.3	-929.6	-472.3	475.1	10.00	8.22	
5,600.0	71.30	258.70	5,223.3	-951.9	-561.5	564.3	10.00	8.49	
5,700.0	79.95	263.89	5,248.1	-966.5	-657.1	660.0	10.00	8.65	
5,800.0	88.67	268.81	5,258.0	-972.8	-756.3	759.2	10.00	8.72	
5,820.9	90.50	269.83	5,258.2	-973.0	-777.2	780.1	10.00	8.74	LP @ 5258' TVD; 90.5° - GT L13-2410 02H PO
5,900.0	90.50	269.83	5,257.5	-973.3	-856.3	859.2	0.00	0.00	
6,000.0	90.50	269.83	5,256.6	-973.6	-956.3	959.2	0.00	0.00	
6,100.0	90.50	269.83	5,255.8	-973.9	-1,056.3	1,059.2	0.00	0.00	
6,200.0	90.50	269.83	5,254.9	-974.1	-1,156.3	1,159.2	0.00	0.00	
6,300.0	90.50	269.83	5,254.0	-974.4	-1,256.3	1,259.2	0.00	0.00	
6,400.0	90.50	269.83	5,253.1	-974.7	-1,356.3	1,359.2	0.00	0.00	
6,500.0	90.50	269.83	5,252.3	-975.0	-1,456.3	1,459.2	0.00	0.00	
6,600.0	90.50	269.83	5,251.4	-975.3	-1,556.3	1,559.2	0.00	0.00	
6,700.0	90.50	269.83	5,250.5	-975.6	-1,656.3	1,659.2	0.00	0.00	
6,800.0	90.50	269.83	5,249.6	-975.9	-1,756.3	1,759.2	0.00	0.00	
6,900.0	90.50	269.83	5,248.8	-976.2	-1,856.3	1,859.1	0.00	0.00	
7,000.0	90.50	269.83	5,247.9	-976.5	-1,956.3	1,959.1	0.00	0.00	
7,100.0	90.50	269.83	5,247.0	-976.8	-2,056.2	2,059.1	0.00	0.00	
7,200.0	90.50	269.83	5,246.2	-977.1	-2,156.2	2,159.1	0.00	0.00	
7,300.0	90.50	269.83	5,245.3	-977.4	-2,256.2	2,259.1	0.00	0.00	
7,400.0	90.50	269.83	5,244.4	-977.7	-2,356.2	2,359.1	0.00	0.00	
7,500.0	90.50	269.83	5,243.5	-978.0	-2,456.2	2,459.1	0.00	0.00	
7,600.0	90.50	269.83	5,242.7	-978.3	-2,556.2	2,559.1	0.00	0.00	
7,700.0	90.50	269.83	5,241.8	-978.6	-2,656.2	2,659.1	0.00	0.00	
7,800.0	90.50	269.83	5,240.9	-978.8	-2,756.2	2,759.1	0.00	0.00	
7,900.0	90.50	269.83	5,240.0	-979.1	-2,856.2	2,859.1	0.00	0.00	
8,000.0	90.50	269.83	5,239.2	-979.4	-2,956.2	2,959.1	0.00	0.00	
8,100.0	90.50	269.83	5,238.3	-979.7	-3,056.2	3,059.1	0.00	0.00	
8,200.0	90.50	269.83	5,237.4	-980.0	-3,156.2	3,159.1	0.00	0.00	
8,300.0	90.50	269.83	5,236.6	-980.3	-3,256.2	3,259.1	0.00	0.00	
8,400.0	90.50	269.83	5,235.7	-980.6	-3,356.2	3,359.1	0.00	0.00	
8,500.0	90.50	269.83	5,234.8	-980.9	-3,456.2	3,459.1	0.00	0.00	
8,600.0	90.50	269.83	5,233.9	-981.2	-3,556.2	3,559.1	0.00	0.00	
8,700.0	90.50	269.83	5,233.1	-981.5	-3,656.2	3,659.1	0.00	0.00	

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S13-T24N-R10W
Well: Good Times L13-2410 02H
Wellbore: HZ
Design: Plan #1

Local Co-ordinate Reference: Well Good Times L13-2410 02H
TVD Reference: 16' KB @ 6873.0usft
MD Reference: 16' KB @ 6873.0usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
8,800.0	90.50	269.83	5,232.2	-981.8	-3,756.2	3,759.1	0.00	0.00	
8,900.0	90.50	269.83	5,231.3	-982.1	-3,856.2	3,859.1	0.00	0.00	
9,000.0	90.50	269.83	5,230.4	-982.4	-3,956.2	3,959.1	0.00	0.00	
9,100.0	90.50	269.83	5,229.6	-982.7	-4,056.2	4,059.1	0.00	0.00	
9,200.0	90.50	269.83	5,228.7	-983.0	-4,156.2	4,159.1	0.00	0.00	
9,300.0	90.50	269.83	5,227.8	-983.2	-4,256.2	4,259.1	0.00	0.00	
9,400.0	90.50	269.83	5,227.0	-983.5	-4,356.1	4,359.0	0.00	0.00	
9,500.0	90.50	269.83	5,226.1	-983.8	-4,456.1	4,459.0	0.00	0.00	
9,600.0	90.50	269.83	5,225.2	-984.1	-4,556.1	4,559.0	0.00	0.00	
9,700.0	90.50	269.83	5,224.3	-984.4	-4,656.1	4,659.0	0.00	0.00	
9,800.0	90.50	269.83	5,223.5	-984.7	-4,756.1	4,759.0	0.00	0.00	
9,900.0	90.50	269.83	5,222.6	-985.0	-4,856.1	4,859.0	0.00	0.00	
10,000.0	90.50	269.83	5,221.7	-985.3	-4,956.1	4,959.0	0.00	0.00	
10,100.0	90.50	269.83	5,220.8	-985.6	-5,056.1	5,059.0	0.00	0.00	
10,200.0	90.50	269.83	5,220.0	-985.9	-5,156.1	5,159.0	0.00	0.00	
10,300.0	90.50	269.83	5,219.1	-986.2	-5,256.1	5,259.0	0.00	0.00	
10,366.1	90.50	269.83	5,218.5	-986.4	-5,322.3	5,325.2	0.00	0.00	TD at 10366.1 - GT L13-2410 02H PBHL

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
GT L13-2410 02H POE	0.00	0.00	5,258.2	-973.0	-777.2	1,931,322.23	2,715,814.90	36.307751	-107.858031
- plan hits target center									
- Point									
GT L13-2410 02H PBHL	0.00	0.00	5,218.5	-986.4	-5,322.3	1,931,309.92	2,711,269.87	36.307713	-107.873457
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
500.0	500.0	9 5/8"	0	0
5,404.9	5,135.2	7" ICP @ 55°	0	0

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times L13-2410 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	16' KB @ 6873.0usft
Project:	San Juan County, NM	MD Reference:	16' KB @ 6873.0usft
Site:	S13-T24N-R10W	North Reference:	True
Well:	Good Times L13-2410 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
766.0	766.0	Ojo Alamo Ss.		-0.50	269.83
917.0	917.0	Kirtland Shale		-0.50	269.83
1,229.0	1,229.0	Fruitland Coal		-0.50	269.83
1,576.0	1,576.0	Pictured Cliffs Ss.		-0.50	269.83
1,765.0	1,765.0	Lewis Shale		-0.50	269.83
2,316.0	2,316.0	Cliffhouse Ss.		-0.50	269.83
3,087.7	3,087.0	Menefee Fn.		-0.50	269.83
3,982.0	3,945.0	Point Lookout Ss.		-0.50	269.83
4,277.3	4,207.0	Mancos Shale		-0.50	269.83
4,917.9	4,762.0	Mancos Silt		-0.50	269.83
5,242.8	5,031.0	Gallup Fn.		-0.50	269.83

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,750.0	2,750.0	0.0	0.0	KOP @ 2750'	
4,254.3	4,186.1	-371.4	-105.0	EOB; Inc=30°	
4,995.8	4,827.7	-729.1	-206.1	Start build/turn @ 4995' MD	
5,820.9	5,258.2	-973.0	-777.2	LP @ 5258' TVD; 90.5°	
10,366.1	5,218.5	-986.4	-5,322.3	TD at 10366.1	

EnCana Oil & Gas (USA) Inc

San Juan County, NM

S13-T24N-R10W

Good Times L13-2410 02H

HZ

Plan #1

Anticollision Report

20 August, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Good Times L13-2410 02H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6873.0usft
Reference Site:	S13-T24N-R10W	MD Reference:	16' KB @ 6873.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Good Times L13-2410 02H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.0usft
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 1,236.6usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	Systematic Ellipse
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic

Survey Tool Program	Date	8/20/2014
From (usft)	To (usft)	Survey (Wellbore)
0.0	10,366.1	Plan #1 (HZ)
		Tool Name
		Geolink MWD
		Description
		Geolink MWD

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S13-T24N-R10W						
Good Times L13-2410 01H - HZ - Plan #1	2,700.0	2,700.0	29.8	20.4	3.177	CC
Good Times L13-2410 01H - HZ - Plan #1	2,727.8	2,727.8	29.8	20.4	3.152	ES
Good Times L13-2410 01H - HZ - Plan #1	2,800.0	2,800.0	30.2	20.5	3.108	SF
S18-T24N-R9W (Escrito)						
Escrito L18-2409 02H - Hz - Plan #1	5,100.0	10,737.2	554.9	446.3	5.112	SF
Escrito L18-2409 02H - Hz - Plan #1	5,200.0	10,737.2	541.8	437.6	5.202	ES
Escrito L18-2409 02H - Hz - Plan #1	5,204.8	10,737.2	541.7	437.7	5.209	CC

Anticollision Report

Company: EnCana Oil & Gas (USA) Inc
 Project: San Juan County, NM
 Reference Site: S13-T24N-R10W
 Site Error: 0.0usft
 Reference Well: Good Times L13-2410 02H
 Well Error: 0.0usft
 Reference Wellbore: HZ
 Reference Design: Plan #1

Local Co-ordinate Reference: Well Good Times L13-2410 02H
 TVD Reference: 16' KB @ 6873.0usft
 MD Reference: 16' KB @ 6873.0usft
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: USA EDM 5000 Multi Users DB
 Offset TVD Reference: Offset Datum

Offset Design S13-T24N-R10W - Good Times L13-2410 01H - HZ - Plan #1													Offset Site Error: 0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 usft
Reference	Offset	Semi Major Axis		Distance		Total		Separation		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Factor	
0.0	0.0	0.0	0.0	0.0	0.0	19.67	28.0	10.0	29.8				
100.0	100.0	100.0	100.0	0.1	0.1	19.67	28.0	10.0	29.8	29.5	0.29	101.516	
200.0	200.0	200.0	200.0	0.3	0.3	19.67	28.0	10.0	29.8	29.1	0.64	46.345	
300.0	300.0	300.0	300.0	0.5	0.5	19.67	28.0	10.0	29.8	28.8	0.99	30.026	
400.0	400.0	400.0	400.0	0.7	0.7	19.67	28.0	10.0	29.8	28.4	1.34	22.207	
500.0	500.0	500.0	500.0	0.8	0.8	19.67	28.0	10.0	29.8	28.1	1.69	17.619	
600.0	600.0	600.0	600.0	1.0	1.0	19.67	28.0	10.0	29.8	27.7	2.04	14.602	
700.0	700.0	700.0	700.0	1.2	1.2	19.67	28.0	10.0	29.8	27.4	2.39	12.467	
800.0	800.0	800.0	800.0	1.4	1.4	19.67	28.0	10.0	29.8	27.0	2.74	10.877	
900.0	900.0	900.0	900.0	1.5	1.5	19.67	28.0	10.0	29.8	26.7	3.09	9.646	
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	19.67	28.0	10.0	29.8	26.3	3.43	8.666	
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	19.67	28.0	10.0	29.8	26.0	3.78	7.867	
1,200.0	1,200.0	1,200.0	1,200.0	2.1	2.1	19.67	28.0	10.0	29.8	25.6	4.13	7.202	
1,300.0	1,300.0	1,300.0	1,300.0	2.2	2.2	19.67	28.0	10.0	29.8	25.3	4.48	6.641	
1,400.0	1,400.0	1,400.0	1,400.0	2.4	2.4	19.67	28.0	10.0	29.8	24.9	4.83	6.161	
1,500.0	1,500.0	1,500.0	1,500.0	2.6	2.6	19.67	28.0	10.0	29.8	24.6	5.18	5.746	
1,600.0	1,600.0	1,600.0	1,600.0	2.8	2.8	19.67	28.0	10.0	29.8	24.2	5.53	5.383	
1,700.0	1,700.0	1,700.0	1,700.0	2.9	2.9	19.67	28.0	10.0	29.8	23.9	5.88	5.064	
1,800.0	1,800.0	1,800.0	1,800.0	3.1	3.1	19.67	28.0	10.0	29.8	23.5	6.23	4.780	
1,900.0	1,900.0	1,900.0	1,900.0	3.3	3.3	19.67	28.0	10.0	29.8	23.2	6.58	4.526	
2,000.0	2,000.0	2,000.0	2,000.0	3.5	3.5	19.67	28.0	10.0	29.8	22.8	6.93	4.298	
2,100.0	2,100.0	2,100.0	2,100.0	3.6	3.6	19.67	28.0	10.0	29.8	22.5	7.27	4.092	
2,200.0	2,200.0	2,200.0	2,200.0	3.8	3.8	19.67	28.0	10.0	29.8	22.1	7.62	3.904	
2,300.0	2,300.0	2,300.0	2,300.0	4.0	4.0	19.67	28.0	10.0	29.8	21.8	7.97	3.734	
2,400.0	2,400.0	2,400.0	2,400.0	4.2	4.2	19.67	28.0	10.0	29.8	21.4	8.32	3.577	
2,500.0	2,500.0	2,500.0	2,500.0	4.3	4.3	19.67	28.0	10.0	29.8	21.1	8.67	3.433	
2,600.0	2,600.0	2,600.0	2,600.0	4.5	4.5	19.67	28.0	10.0	29.8	20.7	9.02	3.300	
2,700.0	2,700.0	2,700.0	2,700.0	4.7	4.7	19.67	28.0	10.0	29.8	20.4	9.37	3.177 CC	
2,727.8	2,727.8	2,727.8	2,727.8	4.7	4.7	-176.13	28.0	10.0	29.8	20.4	9.47	3.152 ES	
2,800.0	2,800.0	2,800.0	2,800.0	4.9	4.9	-176.17	28.0	10.0	30.2	20.5	9.72	3.108 SF	
2,900.0	2,899.9	2,899.9	2,899.9	5.0	5.0	-176.57	28.0	10.0	33.7	23.6	10.06	3.349	
3,000.0	2,999.7	2,999.7	2,999.7	5.2	5.2	-177.15	28.0	10.0	40.6	30.3	10.39	3.912	
3,100.0	3,099.1	3,099.1	3,099.1	5.4	5.4	-177.72	28.0	10.0	51.1	40.4	10.71	4.769	
3,200.0	3,198.2	3,198.2	3,198.2	5.6	5.6	-178.20	28.0	10.0	65.0	54.0	11.03	5.896	
3,300.0	3,296.6	3,296.6	3,296.6	5.8	5.7	-178.57	28.0	10.0	82.4	71.0	11.33	7.271	
3,400.0	3,394.4	3,394.4	3,394.4	6.1	5.9	-178.85	28.0	10.0	103.1	91.5	11.62	8.878	
3,500.0	3,491.5	3,491.5	3,491.5	6.4	6.1	-179.06	28.0	10.0	127.3	115.4	11.90	10.702	
3,600.0	3,587.6	3,587.6	3,587.6	6.7	6.2	-179.22	28.0	10.0	154.9	142.7	12.17	12.732	
3,700.0	3,682.7	3,682.7	3,682.7	7.1	6.4	-179.34	28.0	10.0	185.8	173.4	12.42	14.959	
3,800.0	3,776.6	3,772.8	3,772.8	7.5	6.6	-179.78	29.0	9.0	220.6	208.0	12.66	17.434	
3,900.0	3,869.4	3,859.3	3,859.1	8.0	6.7	179.06	32.6	5.2	260.7	247.8	12.88	20.247	
4,000.0	3,960.7	3,942.2	3,941.6	8.6	6.9	177.54	38.5	-1.1	306.0	292.9	13.09	23.379	
4,100.0	4,050.6	4,021.2	4,019.7	9.2	7.0	175.87	46.4	-9.5	356.3	343.0	13.29	26.807	
4,200.0	4,138.9	4,100.0	4,097.1	9.9	7.2	174.09	56.5	-20.3	411.6	398.1	13.50	30.481	
4,300.0	4,225.7	4,166.5	4,162.0	10.7	7.3	172.60	66.7	-31.1	471.4	457.6	13.78	34.215	
4,400.0	4,312.2	4,234.1	4,227.2	11.4	7.5	171.19	78.6	-43.8	533.4	519.2	14.15	37.690	
4,500.0	4,398.7	4,300.0	4,290.3	12.2	7.7	169.83	91.8	-57.8	597.2	582.7	14.55	41.052	
4,600.0	4,485.2	4,361.0	4,348.0	13.0	7.9	168.59	105.3	-72.1	662.7	647.8	14.96	44.297	
4,700.0	4,571.8	4,428.9	4,411.7	13.8	8.2	167.28	121.4	-89.3	729.7	714.3	15.42	47.318	
4,800.0	4,658.3	4,501.9	4,480.1	14.6	8.5	166.08	138.9	-107.9	797.0	781.1	15.92	50.079	
4,900.0	4,744.8	4,574.9	4,548.5	15.5	8.8	165.07	156.4	-126.5	864.5	848.1	16.43	52.624	
5,000.0	4,831.3	4,647.9	4,616.9	16.3	9.1	163.10	173.8	-145.1	932.1	915.1	16.99	54.866	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Good Times L13-2410 02H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6873.0usft
Reference Site:	S13-T24N-R10W	MD Reference:	16' KB @ 6873.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Good Times L13-2410 02H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S13-T24N-R10W- Good Times L13-2410 01H - HZ - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,100.0	4,916.2	4,721.9	4,686.2	17.2	9.4	139.27	191.6	-163.9	999.1	980.4	18.74	53.306		
5,200.0	4,996.3	4,796.2	4,755.8	18.1	9.7	121.29	209.3	-182.9	1,063.8	1,043.1	20.77	51.217		
5,300.0	5,069.1	4,868.6	4,823.6	19.2	10.1	108.39	226.7	-201.3	1,124.9	1,102.2	22.69	49.588		
5,400.0	5,132.4	4,940.3	4,890.8	20.3	10.5	99.37	243.8	-219.7	1,181.8	1,157.4	24.36	48.510		
5,500.0	5,184.3	5,049.7	4,989.4	21.5	11.1	94.23	269.0	-259.4	1,232.9	1,206.9	25.96	47.483		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Good Times L13-2410 02H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6873.0usft
Reference Site:	S13-T24N-R10W	MD Reference:	16' KB @ 6873.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Good Times L13-2410 02H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore:	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T24N-R9W (Escrito) - Escrito L18-2409 02H - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
4,200.0	4,138.9	10,728.0	5,444.6	9.9	131.0	-178.81	-420.0	-107.8	1,188.1	1,074.4	113.65	10.454		
4,300.0	4,225.7	10,737.2	5,444.5	10.7	131.2	-179.81	-420.1	-117.0	1,099.2	985.5	113.68	9.669		
4,400.0	4,312.2	10,737.2	5,444.5	11.4	131.2	-179.81	-420.1	-117.0	1,012.6	898.7	113.87	8.892		
4,500.0	4,398.7	10,737.2	5,444.5	12.2	131.2	-179.81	-420.1	-117.0	928.7	814.6	114.06	8.142		
4,600.0	4,485.2	10,737.2	5,444.5	13.0	131.2	-179.81	-420.1	-117.0	848.3	734.0	114.24	7.425		
4,700.0	4,571.8	10,737.2	5,444.5	13.8	131.2	-179.81	-420.1	-117.0	772.4	658.0	114.43	6.750		
4,800.0	4,658.3	10,737.2	5,444.5	14.6	131.2	-179.81	-420.1	-117.0	702.7	588.1	114.62	6.131		
4,900.0	4,744.8	10,737.2	5,444.5	15.5	131.2	-179.81	-420.1	-117.0	641.0	526.2	114.80	5.584		
5,000.0	4,831.3	10,737.2	5,444.5	16.3	131.2	-179.69	-420.1	-117.0	589.9	475.2	114.71	5.143		
5,100.0	4,916.2	10,737.2	5,444.5	17.2	131.2	168.47	-420.1	-117.0	554.9	446.3	108.55	5.112 SF		
5,200.0	4,996.3	10,737.2	5,444.5	18.1	131.2	158.80	-420.1	-117.0	541.8	437.6	104.14	5.202 ES		
5,204.8	4,999.9	10,737.2	5,444.5	18.2	131.2	158.37	-420.1	-117.0	541.7	437.7	104.00	5.209 CC		
5,300.0	5,069.1	10,737.2	5,444.5	19.2	131.2	150.17	-420.1	-117.0	552.6	449.6	103.01	5.365		
5,400.0	5,132.4	10,737.2	5,444.5	20.3	131.2	141.60	-420.1	-117.0	585.7	479.3	106.43	5.503		
5,500.0	5,184.3	10,737.2	5,444.5	21.5	131.2	132.28	-420.1	-117.0	636.8	521.8	114.98	5.538		
5,600.0	5,223.3	10,737.2	5,444.5	22.8	131.2	121.76	-420.1	-117.0	700.5	573.1	127.42	5.498		
5,700.0	5,248.1	10,737.2	5,444.5	24.2	131.2	110.23	-420.1	-117.0	772.1	632.0	140.18	5.508		
5,800.0	5,258.0	10,737.2	5,444.5	25.6	131.2	98.60	-420.1	-117.0	847.7	699.2	148.56	5.706		
5,900.0	5,257.5	10,737.2	5,444.5	27.1	131.2	96.27	-420.1	-117.0	925.8	774.7	151.14	6.126		
6,000.0	5,256.6	10,737.2	5,444.5	28.8	131.2	96.27	-420.1	-117.0	1,007.7	854.3	153.35	6.571		
6,100.0	5,255.8	10,737.2	5,444.5	30.6	131.2	96.27	-420.1	-117.0	1,092.6	937.0	155.60	7.022		
6,200.0	5,254.9	10,737.2	5,444.5	32.5	131.2	96.27	-420.1	-117.0	1,179.8	1,022.0	157.89	7.473		

Anticollision Report

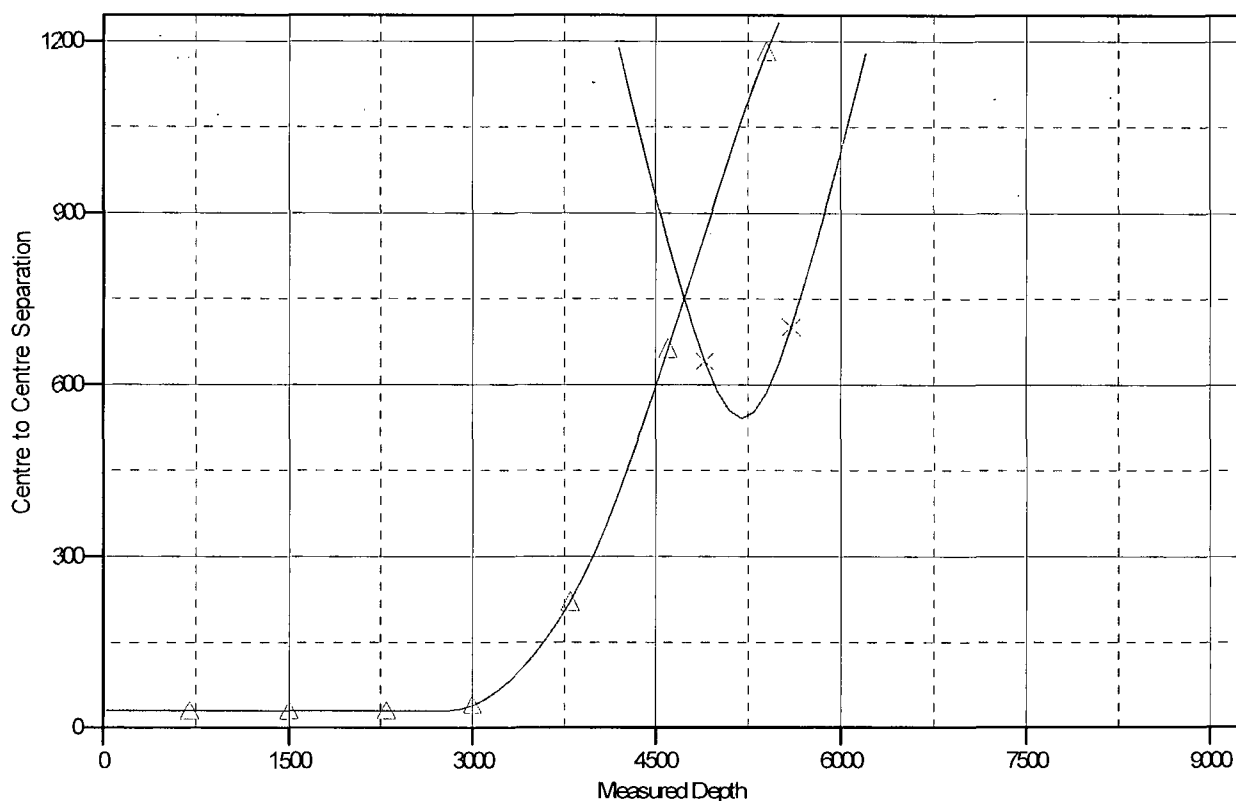
Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Reference Site: S13-T24N-R10W
Site Error: 0.0usft
Reference Well: Good Times L13-2410 02H
Well Error: 0.0usft
Reference Wellbore: HZ
Reference Design: Plan #1

Local Co-ordinate Reference: Well Good Times L13-2410 02H
TVD Reference: 16' KB @ 6873.0usft
MD Reference: 16' KB @ 6873.0usft
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to 16' KB @ 6873.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.833333 °

Coordinates are relative to: Good Times L13-2410 02H
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: -0.01°

Ladder Plot



LEGEND

✕ Escrito L18-2409 02H, HZ, Plan #1 V0

△ Good Times L13-2410 01H, HZ, Plan #1 V0

Good Times L13-2410 02H

**SHL: NWSW Section 13, T24N, R10W
1341 FSL and 446 FWL**

**BHL: SWSW Section 14, T24N, R10W
370 FSL and 330 FWL**

San Juan County, New Mexico

Lease Number: NM 16760

3. All construction materials for the well pad will consist of native borrow and subsoil accumulated during well pad construction. If additional fill or surfacing material is required, it will be obtained from existing permitted or private sources and will be hauled in by trucks over existing access roads.

The maximum cut will be approximately 8.7 feet in between corner #3 and corner #2. The maximum fill will be approximately 8.5 feet on corner 6.

4. As determined during the onsite on July 08, 2014, the following best management practices will be implemented:
 - a. Water will be diverted around the well pad above the cut from center right toward corner #2 and center right toward corner #3.
 - b. 2 silt traps will be constructed in the EOD near corner #5 and also in the EOD near corner #6.
 - c. 24-inch culverts will be installed where needed along the new well pad access.
5. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and dozer. Construction for the access road and well pad will take approximately 3 weeks.

C. Pipeline

The Surface Owner Agreement is required and will cover any details about pipeline ROW on private surface.

See the Final Standard SF-299 Application for authorization to construct, operate, maintain and terminate a 35 foot, up to 6-inch outside diameter, buried steel well connect pipeline that was submitted to the Bureau of Land Management concurrently with the APD.

7. METHODS FOR HANDLING WASTE

A. Cuttings

1. A closed-loop system will be used. Cuttings will be moved through a shaker system on the drill rig that separates drilling fluids from the cuttings. Cuttings will be stored onsite in above-ground storage tanks. Cuttings will be pulled from the storage tanks, mixed with saw dust or similar absorbent material, and disposed of at the Envirotech, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.
2. The closed-loop system storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.
3. A 20-mil liner will be installed under tanks, pumps, ancillary facilities, and truck loading/unloading areas associated with the closed-loop system.

B. Drilling Fluids

1. A closed-loop system will be used. 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 closed-loop systems or returned to the vendor for reuse, as practical. Residual fluids will be vacuumed from the storage tanks and disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.
2. The closed-loop system storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.

Good Times L13-2410 02H

**SHL: NWSW Section 13, T24N, R10W
1341 FSL and 446 FWL**

**BHL: SWSW Section 14, T24N, R10W
370 FSL and 330 FWL**

San Juan County, New Mexico

Lease Number: NM 16760

3. The closed-loop system storage tanks will be placed in bermed secondary containment sized to accommodate a minimum of 110 percent of the volume of the largest storage tank.
 4. A 20-mil liner will be installed under tanks, pumps, ancillary facilities, and truck loading/unloading areas associated with the closed-loop system.
 - C. Flowback Water
 1. The water-based solution that flows back to the surface during and after completion operations will be placed in storage tanks on the location.
 2. 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.
 - D. Spills – any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site.
 - E. 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.
 - F. 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.
 - G. 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.
 - H. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing or completing of this well.
 - I. No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.
- 8. ANCILLARY FACILITIES**
- A. Standard drilling operation equipment that will be on location includes: drilling rig with associated equipment, temporary office trailers equipped with sleeping quarters for essential company personnel, toilet facilities, and trash containers.
- 9. WELL SITE LAYOUT**
- A. The proposed well pad layout is shown on Sheets F-1, F-2, G-1, and G-2. Cross sections have been drafted to visualize the planned cuts and fills across the location. Refer to Item 6 for construction materials and methods.
 - B. No permanent living facilities are planned. Office trailers equipped with living quarters will be provided on location during drilling and completions operations.

ENCANA OIL & GAS (USA) INC.

GOOD TIMES L13-2410 #02H
1341' FSL & 446' FWL
LOCATED IN THE NW/4 SW/4 OF SECTION 13,
T24N, R10W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

DIRECTIONS

- 1) FROM THE INTERSECTION OF US HWY 550 AND US HWY 64, TRAVEL SOUTH ON US HWY 550 FOR 28.2 MILES TO HWY 57, MP 123.4.
- 2) TURN RIGHT ON HWY 57 AND GO 4.3 MILES WHERE ACCESS IS STAKED ON LEFT SIDE OF ROAD.

WELL FLAG LOCATED AT LAT. 36.310424° N, LONG. 107.855393° W (NAD 83).

JOB No.: ENC061
DATE: 06/24/13



**Scorpion Survey &
Consulting, L.L.C.**
Aztec, New Mexico 87410
(505) 334-4007

WELLHEAD BLOWOUT CONTROL SYSTEM

encana

Well Name and Number:
Good Times L13-2410 02H

