State of New Mexico
Energy, Minerals and Natural Resources Department

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: 8-27-14
Well information;
Operator Encana, Well Name and Number Good Times L13 2410 #01H
API# 30-045-35595, Section 13, Township 24 (N)S, Range 10 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
- o Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- o 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
- o 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
- ✓ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ✓ 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. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ✓ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

NMOCD Approved by Signature

11-3-2014
Date

1220 South St. Francis Drive • Santa Fe, New Mexico 87505
Phone (505) 476-3460 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

Form 3160-3
(March 2012)

SEP 18 2014

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONS. DIV DIST. 3

NOV 03 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

OIL CONS. DIV DIST. 3

NOV 03 2014

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NM 16760
	6. If Indian, Allottee or Tribe Name N/A
	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 01H
2. Name of Operator Encana Oil & Gas (USA) Inc.	9. API Well No. 30-045-35595
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 1369' FSL and 457' FWL Section 13, T24N, R10W NWSW; At proposed prod. zone 1690' 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 - ~~1,279.73 acres~~ 1279.83 acres	17. Spacing Unit dedicated to this well 160.0 acres - N/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 02H	19. Proposed Depth 5255' TVD/ 10,231' 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.
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 [signature]	Name (Printed/Typed) Shannon Turk	Date 08/27/2014
Title Regulatory Analyst		
Approved by (Signature) [signature]	Name (Printed/Typed)	Date 10/30/14
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 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)

*(Instructions 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

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

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

NMOCD

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

SEP 18 2014

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-35595	97232 / 5890	BASIN MANCOS GAS / BISTI LOWER-GALLUP

[4] Property Code	[5] Property Name	[6] Well Number
313845	GOOD TIMES L13-2410	01H

OIL CONS. DIV DIST. 3

NOV 03 2014

[7] OGRID No.	[8] Operator Name	[9] Elevation
282327	ENCANA OIL & GAS (USA) INC.	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		1369'	SOUTH	457'	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		1690'	SOUTH	330'	WEST	SAN JUAN

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
PROJECT AREA 160.00 ACRES N/2 S/2 SEC. 14 80 Mancos 80 Gallup			

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)

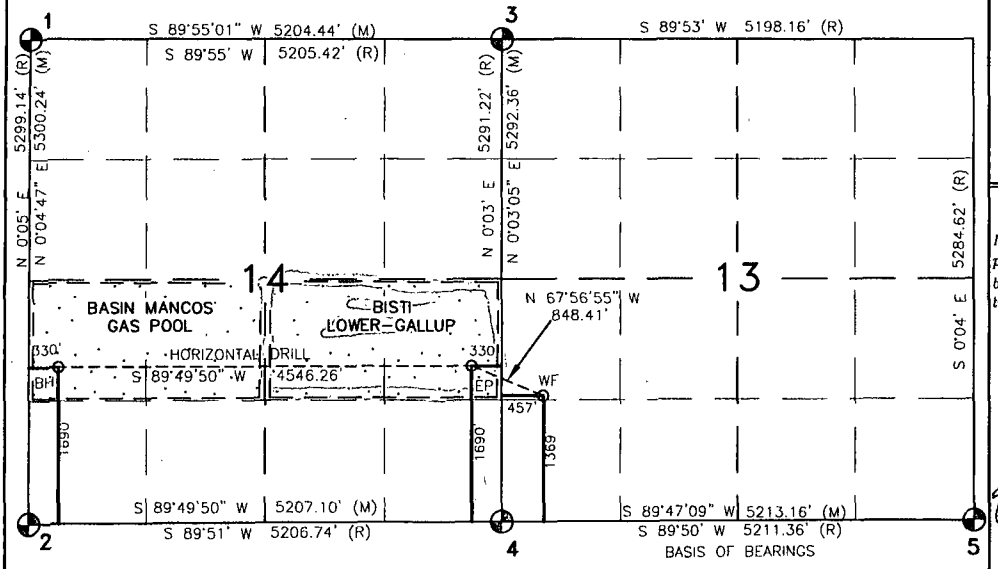
2 LAT. 36.306694° N (NAD83)
LONG. 107.874578° W (NAD83)
LAT. 36.306683° N (NAD27)
LONG. 107.873960° W (NAD27)

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 2½" BC
GLO 1932



BOTTOM HOLE
LAT. 36.311338° N (NAD83)
LONG. 107.873451° W (NAD83)
LAT. 36.311327° N (NAD27)
LONG. 107.872833° W (NAD27)

ENTRY POINT
LAT. 36.311376° N (NAD83)
LONG. 107.858027° W (NAD83)
LAT. 36.311365° N (NAD27)
LONG. 107.857410° W (NAD27)

WELL FLAG
LAT. 36.310501° N (NAD83)
LONG. 107.855359° W (NAD83)
LAT. 36.310490° N (NAD27)
LONG. 107.854742° W (NAD27)

18

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shannon Turk 9/12/14
Signature Date

Shannon Turk
Printed Name

shannon.turk@encana.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APRIL 17, 2013
Date of Survey

Signature and Seal of Professional Surveyor:

DAVID R. RUSSELL NEW MEXICO 10201 REGISTERED PROFESSIONAL LAND SURVEYOR

DAVID RUSSELL
Certificate Number 10201

Exhibit A

Good Times L13-2410 01H
SHL: 1369' FSL & 457' FWL Sec 13 T24N R10W
BHL: 1690' 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.	767
Kirtland Shale	918
Fruitland Coal	1,230
Pictured Cliffs Ss.	1,577
Lewis Shale	1,766
Cliffhouse Ss.	2,317
Menefee Fn.	3,088
Point Lookout Ss.	3,946
Mancos Shale	4,208
Mancos Silt	4,798
Gallup Fn.	5,067
Base Gallup	5,389

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	1,230
Oil/Gas	Pictured Cliffs Ss.	1,577
Oil/Gas	Cliffhouse Ss.	2,317
Gas	Menefee Fn.	3,088
Oil/Gas	Point Lookout Ss.	3,946
Oil/Gas	Mancos Shale	4,208
Oil/Gas	Mancos Silt	4,798
Oil/Gas	Gallup Fn.	5,067

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

Good Times L13-2410 01H
SHL: 1369' FSL & 457' FWL Sec 13 T24N R10W
BHL: 1690' FSL & 330' FWL Sec 13 T24N R10W
San Juan, New Mexico

3. PRESSURE CONTROL

a) Pressure contol 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'-5319'	8 3/4"	7"	26#	J55, LTC New
Production Liner	5219'-10231'	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 01H
SHL: 1369' FSL & 457' FWL Sec 13 T24N R10W
BHL: 1690' 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'-5319'	100% open hole excess Stage 1 Lead: 705 sks Stage 1 Tail: 536 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	5219'-10231'	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 3700'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5255'/10231'	Gallup

Good Times L13-2410 01H
SHL: 1369' FSL & 457' FWL Sec 13 T24N R10W
BHL: 1690' 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'-5186'/5319'	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"	5186'/5319'-5255'/10231'	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 +/- 2481 psi based on a 9.0 ppg at 5301' TVD of the horizontal lateral target. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S 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: 1369' FSL & 457' FWL Sec 13 T24N R10 County: San Juan WELL: Good Times L13-2410 01H	**Encana Natural Gas** **WELL SUMMARY**		ENG: Michael Sanch 9/16/14 RIG: Unassigned GLE: 6856.5 RKBE: 6872.5

MWD LWD	OPEN HOLE LOGGING	FORM	DEPTH TVD	DEPTH MD	HOLE SIZE	CASING SPECS	MW MUD TYPE	DEVIATION INFORMATION
			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°
		Nacimiento Fn.	surface					
		9 5/8" Csg	**500**	**500.00**				
Survey Every 60'-120', updating anticollision report after surveys. Stop operations and contact drilling engineer if separation factor approaches 1.5	No OH logs	Ojo Alamo Ss.	767		8 3/4	**7" 26ppf J55 LTC** TOC @ surface (100% OH excess - 70% Lead 30% Tail) Stage 1 Total: 1241sks Stage 1 Lead: 705 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: 536 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°
		Kirtland Shale	918					
		Fruitland Coal	1,230					
		Pictured Cliffs Ss.	1,577					
		Lewis Shale	1,766					
		Cliffhouse Ss.	2,317					
		Menefee Fn.	3,088					
		Point Lookout Ss.	3,946					
		Mancos Shale	4,208					
	Mud logger onsite	**KOP**	**3,700**	**3,700**				
Surveys every 30' through the curve		Mancos Silt	4,798					
		Gallup Fn.	5,067					
		7" Csg	**5,186**	**5,319'**				
Surveys every stand to TD unless directed otherwise by Geologist MWD Gamma Directional	No OH Logs	Horizontal Target	5,301		6 1/8	100' overlap at liner top		Horz Inc/TVD 90.5deg/5300.5ft
		TD	**5,255**	**10,231**		4913' Drilled Lateral		TD = 10231.2 MD
		Base Gallup	5,389			**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 3700', 8 3/4 inch holesize
5) Start curve at 10deg/100' build rate
6) Drill to csg point of 5319' MD
7) R&C 7" csg, circ cmt to surface
8) Land at ~90 deg, drill lateral to 10231' run 4 1/2 inch cemented liner

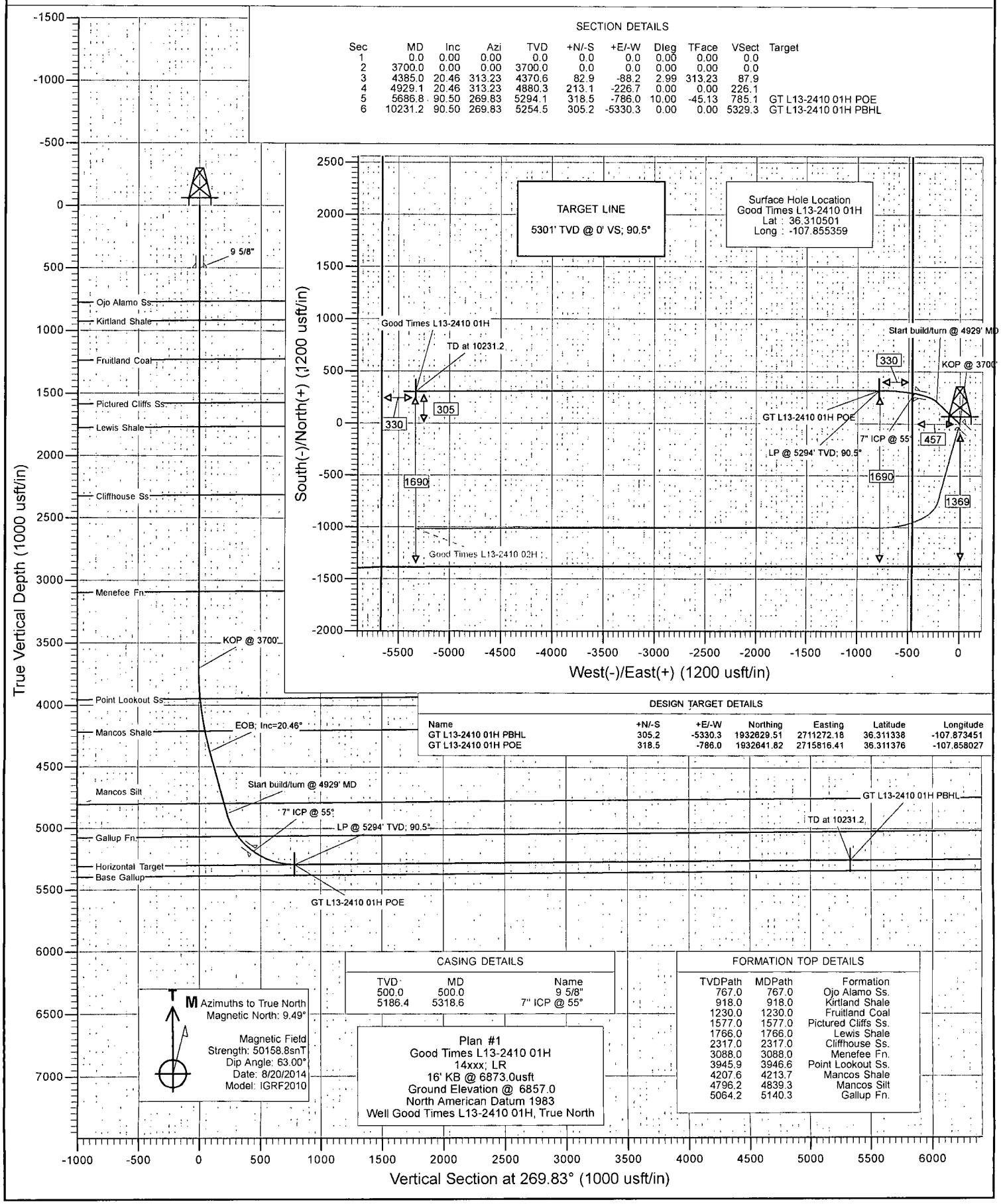
encana

Project: San Juan County, NM
Site: S13-T24N-R10W
Well: Good Times L13-2410 01H
Wellbore: HZ
Design: Plan #1

CATHEDRAL

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	3700.0	0.00	0.00	3700.0	0.0	0.0	0.00	0.00	0.0	
3	4385.0	20.46	313.23	4370.6	82.9	-88.2	2.99	313.23	87.9	
4	4929.1	20.46	313.23	4880.3	213.1	-226.7	0.00	0.00	226.1	
5	5686.8	90.50	269.83	5294.1	318.5	-786.0	10.00	-45.13	785.1	GT L13-2410 01H POE
6	10231.2	90.50	269.83	5254.5	305.2	-5330.3	0.00	0.00	5329.3	GT L13-2410 01H PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
GT L13-2410 01H PBHL	305.2	-5330.3	1932629.51	2711272.18	36.311338	-107.873451
GT L13-2410 01H POE	318.5	-786.0	1932641.82	2715816.41	36.311376	-107.858027

CASING DETAILS

TVD	MD	Name
500.0	500.0	9 5/8"
5186.4	5318.6	7" ICP @ 55°

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
767.0	767.0	Ojo Alamo Ss.
918.0	918.0	Kirtland Shale
1230.0	1230.0	Fruitland Coal
1577.0	1577.0	Pictured Cliffs Ss.
1766.0	1766.0	Lewis Shale
2317.0	2317.0	Cliffhouse Ss.
3088.0	3088.0	Menefee Fn.
3945.9	3946.6	Point Lookout Ss.
4207.6	4213.7	Mancos Shale
4796.2	4839.3	Mancos Silt
5064.2	5140.3	Gallup Fn.

T M Azimuths to True North
Magnetic North: 9.49°

Magnetic Field
Strength: 50158.8snT
Dip Angle: 63.00°
Date: 8/20/2014
Model: IGRF2010

Plan #1
Good Times L13-2410 01H
14xxx; LR
16' KB @ 6873.0usft
Ground Elevation @ 6857.0
North American Datum 1983
Well Good Times L13-2410 01H, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Good Times L13-2410 01H
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 01H	**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 01H				
Well Position	**+N/-S**	0.0 usft	**Northing:**	1,932,323.11 usft	**Latitude:** 36.310501
	+E/-W	0.0 usft	**Easting:**	2,716,602.39 usft	**Longitude:** -107.855359
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	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,385.0	20.46	313.23	4,370.6	82.9	-88.2	2.99	2.99	0.00	313.23	
4,929.1	20.46	313.23	4,880.3	213.1	-226.7	0.00	0.00	0.00	0.00	
5,686.8	90.50	269.83	5,294.1	318.5	-786.0	10.00	9.24	-5.73	-45.13	GT L13-2410 01H PO
10,231.2	90.50	269.83	5,254.5	305.2	-5,330.3	0.00	0.00	0.00	0.00	GT L13-2410 01H PB

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Good Times L13-2410 01H
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 01H	**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	
767.0	0.00	0.00	767.0	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	
918.0	0.00	0.00	918.0	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	
1,230.0	0.00	0.00	1,230.0	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	
1,577.0	0.00	0.00	1,577.0	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	
1,766.0	0.00	0.00	1,766.0	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	
2,317.0	0.00	0.00	2,317.0	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	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
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	
3,088.0	0.00	0.00	3,088.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn.
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	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	KOP @ 3700'
3,800.0	2.99	313.23	3,799.9	1.8	-1.9	1.9	2.99	2.99	
3,900.0	5.97	313.23	3,899.6	7.1	-7.6	7.6	2.99	2.99	
3,946.6	7.36	313.23	3,945.9	10.8	-11.5	11.5	2.99	2.99	Point Lookout Ss.
4,000.0	8.96	313.23	3,998.8	16.0	-17.1	17.0	2.99	2.99	
4,100.0	11.95	313.23	4,097.1	28.5	-30.3	30.2	2.99	2.99	
4,200.0	14.93	313.23	4,194.4	44.4	-47.2	47.1	2.99	2.99	
4,213.7	15.34	313.23	4,207.6	46.8	-49.8	49.7	2.99	2.99	Mancos Shale

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Good Times L13-2410 01H
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 01H	**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
4,300.0	17.92	313.23	4,290.3	63.7	-67.8	67.6	2.99	2.99	
4,385.0	20.46	313.23	4,370.6	82.9	-88.2	87.9	2.99	2.99	EOB; Inc=20.46°
4,400.0	20.46	313.23	4,384.6	86.5	-92.0	91.7	0.00	0.00	
4,500.0	20.46	313.23	4,478.3	110.4	-117.4	117.1	0.00	0.00	
4,600.0	20.46	313.23	4,572.0	134.3	-142.9	142.5	0.00	0.00	
4,700.0	20.46	313.23	4,665.7	158.3	-168.4	167.9	0.00	0.00	
4,800.0	20.46	313.23	4,759.4	182.2	-193.9	193.3	0.00	0.00	
4,839.3	20.46	313.23	4,796.2	191.6	-203.9	203.3	0.00	0.00	Mancos Silt
4,900.0	20.46	313.23	4,853.0	206.2	-219.3	218.7	0.00	0.00	
4,929.1	20.46	313.23	4,880.3	213.1	-226.7	226.1	0.00	0.00	Start build/turn @ 4929' MD
5,000.0	25.93	301.69	4,945.5	229.8	-249.0	248.3	10.00	7.72	
5,100.0	34.61	291.71	5,031.8	251.8	-294.1	293.3	10.00	8.67	
5,140.3	38.27	288.87	5,064.2	260.1	-316.5	315.8	10.00	9.09	Gallup Fn.
5,200.0	43.79	285.43	5,109.3	271.6	-354.0	353.2	10.00	9.26	
5,300.0	53.23	280.98	5,175.5	288.5	-426.8	426.0	10.00	9.43	
5,318.6	55.00	280.27	5,186.4	291.2	-441.6	440.8	10.00	9.52	7" ICP @ 55°
5,400.0	62.79	277.51	5,228.4	301.9	-510.4	509.5	10.00	9.57	
5,500.0	72.42	274.61	5,266.5	311.6	-602.3	601.3	10.00	9.63	
5,600.0	82.09	272.00	5,288.5	317.2	-699.5	698.6	10.00	9.67	
5,686.8	90.50	269.83	5,294.1	318.5	-786.0	785.1	10.00	9.69	LP @ 5294' TVD; 90.5° - GT L13-2410 01H PO
5,700.0	90.50	269.83	5,294.0	318.5	-799.2	798.3	0.00	0.00	
5,800.0	90.50	269.83	5,293.1	318.2	-899.2	898.3	0.00	0.00	
5,900.0	90.50	269.83	5,292.2	317.9	-999.2	998.3	0.00	0.00	
6,000.0	90.50	269.83	5,291.4	317.6	-1,099.2	1,098.3	0.00	0.00	
6,100.0	90.50	269.83	5,290.5	317.3	-1,199.2	1,198.3	0.00	0.00	
6,200.0	90.50	269.83	5,289.6	317.0	-1,299.2	1,298.3	0.00	0.00	
6,300.0	90.50	269.83	5,288.8	316.7	-1,399.2	1,398.3	0.00	0.00	
6,400.0	90.50	269.83	5,287.9	316.4	-1,499.2	1,498.3	0.00	0.00	
6,500.0	90.50	269.83	5,287.0	316.1	-1,599.2	1,598.3	0.00	0.00	
6,600.0	90.50	269.83	5,286.1	315.9	-1,699.2	1,698.3	0.00	0.00	
6,700.0	90.50	269.83	5,285.3	315.6	-1,799.2	1,798.3	0.00	0.00	
6,800.0	90.50	269.83	5,284.4	315.3	-1,899.2	1,898.3	0.00	0.00	
6,900.0	90.50	269.83	5,283.5	315.0	-1,999.2	1,998.2	0.00	0.00	
7,000.0	90.50	269.83	5,282.7	314.7	-2,099.2	2,098.2	0.00	0.00	
7,100.0	90.50	269.83	5,281.8	314.4	-2,199.2	2,198.2	0.00	0.00	
7,200.0	90.50	269.83	5,280.9	314.1	-2,299.2	2,298.2	0.00	0.00	
7,300.0	90.50	269.83	5,280.0	313.8	-2,399.2	2,398.2	0.00	0.00	
7,400.0	90.50	269.83	5,279.2	313.5	-2,499.2	2,498.2	0.00	0.00	
7,500.0	90.50	269.83	5,278.3	313.2	-2,599.2	2,598.2	0.00	0.00	
7,600.0	90.50	269.83	5,277.4	312.9	-2,699.2	2,698.2	0.00	0.00	
7,700.0	90.50	269.83	5,276.6	312.6	-2,799.2	2,798.2	0.00	0.00	
7,800.0	90.50	269.83	5,275.7	312.3	-2,899.2	2,898.2	0.00	0.00	
7,900.0	90.50	269.83	5,274.8	312.0	-2,999.1	2,998.2	0.00	0.00	
8,000.0	90.50	269.83	5,273.9	311.7	-3,099.1	3,098.2	0.00	0.00	
8,100.0	90.50	269.83	5,273.1	311.4	-3,199.1	3,198.2	0.00	0.00	
8,200.0	90.50	269.83	5,272.2	311.2	-3,299.1	3,298.2	0.00	0.00	
8,300.0	90.50	269.83	5,271.3	310.9	-3,399.1	3,398.2	0.00	0.00	
8,400.0	90.50	269.83	5,270.5	310.6	-3,499.1	3,498.2	0.00	0.00	
8,500.0	90.50	269.83	5,269.6	310.3	-3,599.1	3,598.2	0.00	0.00	
8,600.0	90.50	269.83	5,268.7	310.0	-3,699.1	3,698.2	0.00	0.00	
8,700.0	90.50	269.83	5,267.8	309.7	-3,799.1	3,798.2	0.00	0.00	
8,800.0	90.50	269.83	5,267.0	309.4	-3,899.1	3,898.2	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Good Times L13-2410 01H
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 01H	**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
8,900.0	90.50	269.83	5,266.1	309.1	-3,999.1	3,998.2	0.00	0.00	
9,000.0	90.50	269.83	5,265.2	308.8	-4,099.1	4,098.2	0.00	0.00	
9,100.0	90.50	269.83	5,264.3	308.5	-4,199.1	4,198.2	0.00	0.00	
9,200.0	90.50	269.83	5,263.5	308.2	-4,299.1	4,298.2	0.00	0.00	
9,300.0	90.50	269.83	5,262.6	307.9	-4,399.1	4,398.2	0.00	0.00	
9,400.0	90.50	269.83	5,261.7	307.6	-4,499.1	4,498.1	0.00	0.00	
9,500.0	90.50	269.83	5,260.9	307.3	-4,599.1	4,598.1	0.00	0.00	
9,600.0	90.50	269.83	5,260.0	307.0	-4,699.1	4,698.1	0.00	0.00	
9,700.0	90.50	269.83	5,259.1	306.7	-4,799.1	4,798.1	0.00	0.00	
9,800.0	90.50	269.83	5,258.2	306.5	-4,899.1	4,898.1	0.00	0.00	
9,900.0	90.50	269.83	5,257.4	306.2	-4,999.1	4,998.1	0.00	0.00	
10,000.0	90.50	269.83	5,256.5	305.9	-5,099.1	5,098.1	0.00	0.00	
10,100.0	90.50	269.83	5,255.6	305.6	-5,199.0	5,198.1	0.00	0.00	
10,200.0	90.50	269.83	5,254.8	305.3	-5,299.0	5,298.1	0.00	0.00	
10,231.2	90.50	269.83	5,254.5	305.2	-5,330.3	5,329.3	0.00	0.00	TD at 10231.2 - GT L13-2410 01H PBHL

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
GT L13-2410 01H POE - plan hits target center - Point	0.00	0.00	5,294.1	318.5	-786.0	1,932,641.82	2,715,816.41	36.311376	-107.858027
GT L13-2410 01H PBHL - plan hits target center - Point	0.00	0.00	5,254.5	305.2	-5,330.3	1,932,629.51	2,711,272.18	36.311338	-107.873451

500.0	500.0	9 5/8"	0	0
5,318.6	5,186.4	7" ICP @ 55°	0	0

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
767.0	767.0	Ojo Alamo Ss.		-0.50	269.83
918.0	918.0	Kirtland Shale		-0.50	269.83
1,230.0	1,230.0	Fruitland Coal		-0.50	269.83
1,577.0	1,577.0	Pictured Cliffs Ss.		-0.50	269.83
1,766.0	1,766.0	Lewis Shale		-0.50	269.83
2,317.0	2,317.0	Cliffhouse Ss.		-0.50	269.83
3,088.0	3,088.0	Menefee Fn.		-0.50	269.83
3,946.6	3,946.0	Point Lookout Ss.		-0.50	269.83
4,213.7	4,208.0	Mancos Shale		-0.50	269.83
4,839.3	4,798.0	Mancos Silt		-0.50	269.83
5,140.3	5,067.0	Gallup Fn.		-0.50	269.83

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Good Times L13-2410 01H
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 01H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
3,700.0	3,700.0	0.0	0.0	KOP @ 3700'
4,385.0	4,370.6	82.9	-88.2	EOB; Inc=20.46°
4,929.1	4,880.3	213.1	-226.7	Start build/turn @ 4929' MD
5,686.8	5,294.1	318.5	-786.0	LP @ 5294' TVD; 90.5°
10,231.2	5,254.5	305.2	-5,330.3	TD at 10231.2

EnCana Oil & Gas (USA) Inc

San Juan County, NM
S13-T24N-R10W
Good Times L13-2410 01H
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 01H
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 01H	**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	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,236.6usft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 8/20/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	10,231.2	Plan #1 (HZ)	Geolink MWD	Geolink MWD

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S13-T24N-R10W						
Good Times L13-2410 02H - HZ - Plan #1	2,733.3	2,733.3	29.8	20.3	3.138	CC, ES
Good Times L13-2410 02H - HZ - Plan #1	2,800.0	2,799.5	30.2	20.5	3.108	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Good Times L13-2410 01H
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 01H	**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 02H - HZ - Plan #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Geolink MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-160.33	-28.0	-10.0	29.8				
100.0	100.0	100.0	100.0	0.1	0.1	-160.33	-28.0	-10.0	29.8	29.5	0.29	101.516	
200.0	200.0	200.0	200.0	0.3	0.3	-160.33	-28.0	-10.0	29.8	29.1	0.64	46.345	
300.0	300.0	300.0	300.0	0.5	0.5	-160.33	-28.0	-10.0	29.8	28.8	0.99	30.026	
400.0	400.0	400.0	400.0	0.7	0.7	-160.33	-28.0	-10.0	29.8	28.4	1.34	22.207	
500.0	500.0	500.0	500.0	0.8	0.8	-160.33	-28.0	-10.0	29.8	28.1	1.69	17.619	
600.0	600.0	600.0	600.0	1.0	1.0	-160.33	-28.0	-10.0	29.8	27.7	2.04	14.602	
700.0	700.0	700.0	700.0	1.2	1.2	-160.33	-28.0	-10.0	29.8	27.4	2.39	12.467	
800.0	800.0	800.0	800.0	1.4	1.4	-160.33	-28.0	-10.0	29.8	27.0	2.74	10.877	
900.0	900.0	900.0	900.0	1.5	1.5	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-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	-160.33	-28.0	-10.0	29.8	20.4	9.37	3.177	
2,733.3	2,733.3	2,733.3	2,733.3	4.7	4.7	-160.33	-28.0	-10.0	29.8	20.3	9.49	3.138	CC, ES
2,800.0	2,800.0	2,799.5	2,799.5	4.9	4.9	-160.39	-28.4	-10.1	30.2	20.5	9.72	3.108	SF
2,900.0	2,900.0	2,898.3	2,898.3	5.0	5.0	-160.78	-31.7	-11.1	33.6	23.6	10.06	3.343	
3,000.0	3,000.0	2,996.8	2,996.5	5.2	5.2	-161.36	-38.3	-12.9	40.5	30.1	10.41	3.891	
3,100.0	3,100.0	3,094.7	3,093.9	5.4	5.4	-161.93	-48.0	-15.7	50.8	40.1	10.77	4.720	
3,200.0	3,200.0	3,191.8	3,190.1	5.6	5.6	-162.40	-60.8	-19.3	64.5	53.4	11.13	5.797	
3,300.0	3,300.0	3,287.9	3,284.8	5.7	5.8	-162.77	-76.5	-23.7	81.5	70.0	11.50	7.091	
3,400.0	3,400.0	3,382.8	3,377.7	5.9	6.0	-163.05	-95.0	-29.0	101.8	89.9	11.88	8.573	
3,500.0	3,500.0	3,476.3	3,468.6	6.1	6.3	-163.26	-116.2	-34.9	125.3	113.0	12.27	10.213	
3,600.0	3,600.0	3,568.3	3,557.2	6.3	6.6	-163.42	-139.7	-41.6	151.9	139.3	12.68	11.982	
3,700.0	3,700.0	3,658.5	3,643.4	6.4	6.9	-163.55	-165.5	-48.9	181.6	168.5	13.11	13.855	
3,800.0	3,800.0	3,746.5	3,726.5	6.6	7.3	-116.53	-193.1	-56.7	215.4	202.3	13.11	16.431	
3,900.0	3,899.6	3,831.5	3,806.0	6.8	7.7	-116.95	-222.1	-64.9	254.2	240.8	13.42	18.943	
4,000.0	3,998.8	3,913.0	3,881.3	7.0	8.1	-117.66	-252.1	-73.4	298.1	284.4	13.73	21.718	
4,100.0	4,097.1	3,990.7	3,952.2	7.2	8.5	-118.38	-282.5	-82.0	346.9	332.9	14.03	24.725	
4,200.0	4,194.4	4,064.3	4,018.6	7.4	9.0	-118.98	-313.1	-90.6	400.7	386.3	14.35	27.925	
4,300.0	4,290.3	4,133.6	4,080.4	7.7	9.5	-119.37	-343.3	-99.1	459.1	444.4	14.68	31.267	
4,400.0	4,384.6	4,200.0	4,138.9	8.1	9.9	-119.86	-373.7	-107.7	521.9	506.8	15.05	34.678	
4,500.0	4,478.3	4,261.5	4,192.3	8.4	10.4	-121.71	-402.9	-116.0	587.6	572.1	15.45	38.025	
4,600.0	4,572.0	4,334.5	4,255.5	8.9	10.9	-123.49	-438.1	-125.9	654.3	638.4	15.90	41.163	
4,700.0	4,665.7	4,407.5	4,318.7	9.3	11.5	-124.96	-473.3	-135.9	721.4	705.0	16.36	44.091	
4,800.0	4,759.4	4,480.5	4,381.8	9.8	12.0	-126.18	-508.5	-145.8	788.7	771.8	16.85	46.815	
4,900.0	4,853.1	4,553.5	4,445.0	10.2	12.6	-127.22	-543.8	-155.8	856.1	838.8	17.35	49.349	
5,000.0	4,945.5	4,626.1	4,507.8	10.8	13.2	-111.54	-578.8	-165.7	923.2	905.1	18.11	50.972	

CC - Min centre to center distance or covergent 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 01H
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 01H	**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 02H - HZ - Plan #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Geolink MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,031.8	4,696.3	4,568.6	11.5	13.8	-96.83	-612.7	-175.3	988.0	968.7	19.22	51.401	
5,200.0	5,109.3	4,762.0	4,625.4	12.5	14.3	-87.20	-644.3	-184.2	1,049.7	1,029.3	20.44	51.358	
5,300.0	5,175.5	4,821.0	4,676.5	13.7	14.8	-80.39	-672.8	-192.3	1,108.2	1,086.5	21.69	51.092	
5,400.0	5,228.4	4,871.7	4,720.4	15.1	15.2	-75.20	-697.3	-199.2	1,163.4	1,140.4	22.97	50.646	
5,500.0	5,266.5	4,912.5	4,755.7	16.8	15.6	-70.98	-717.0	-204.8	1,215.3	1,191.0	24.30	50.019	

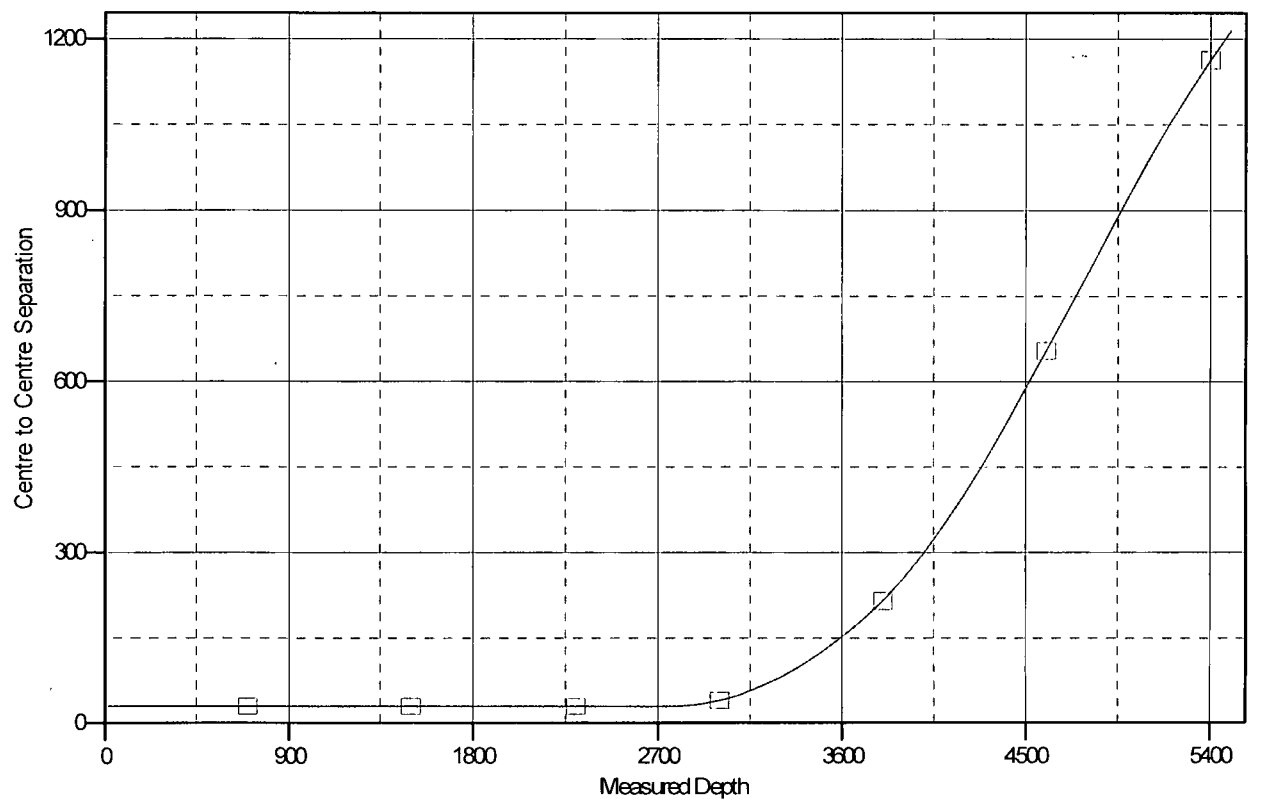
Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Good Times L13-2410 01H
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 01H	**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 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 01H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: -0.01°

Ladder Plot



LEGEND

Good Times L13-2410 02H, HZ, Plan #1 V0

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

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.

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 #01H
1369' FSL & 457' 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. 36.310501° N, LONG.107.855359° W (NAD 83).

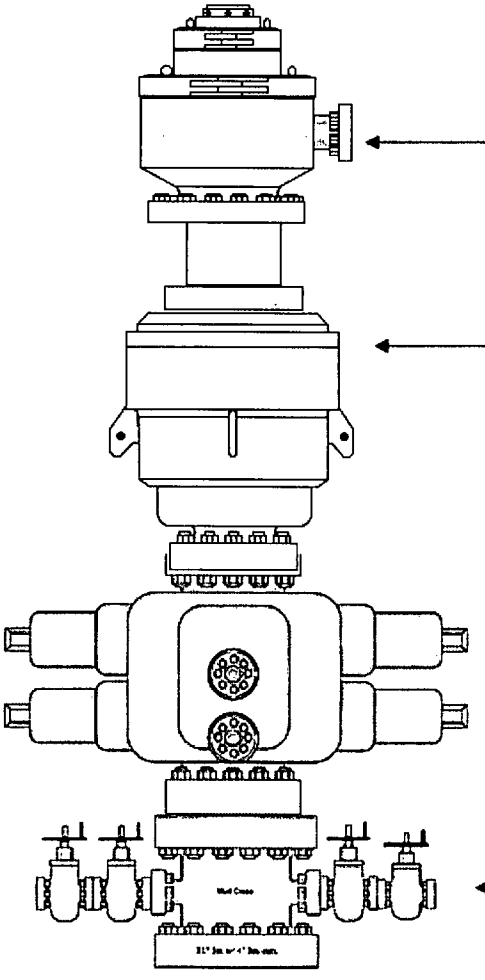
JOB No.: ENC060
DATE: 06/24/13

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 01H



11" 3K Rotating Head

11" 3K Annular

3K Double Ram
Top: Pipe Ram
Bottom: Blind Ram
3" Outlets Below Ram

3K Mud Cross 3" gate valves