

NOS: 10/2/12
APDP: N/A
MP: N/A
SMA: BLM
BOND: COB000235
CA/PA: N/A

CONFIDENTIAL

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 02 2013

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM 42059
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Encana Oil & Gas (USA) Inc.		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202	3b. Phone No. (include area code) 720-876-3989	8. Lease Name and Well No. Good Times P36A-2410 03H
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202		9. API Well No. 30-045-35450
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 341' FSL and 837' FEL Sec 36 T24N R10W At proposed prod. zone 330' FSL and 730' FEL Sec 1 T23N R10W		10. Field and Pool, or Exploratory South Bisti-Gallup
14. Distance in miles and direction from nearest town or post office* +/- 36.3 miles south of the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM		11. Sec., T. R. M. or Blk. and Survey or Area Sec 36 T24N R10W NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) BHL is 330' North of lease line	16. No. of acres in lease NM 42059-2118.04	17. Spacing Unit dedicated to this well 319.72 acres (E2 Section 1)
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Good Times D06-2309 01H is ~1300' SE of SHL	19. Proposed Depth 4876' TVD/10007' MD	20. BLM/BIA Bond No. on file COB-000235
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6866' GL, 6879' KB	22. Approximate date work will start* 06/28/2013	23. Estimated duration 25 days

24. Attachments

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

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

25. Signature <i>Brenda R. Linster</i>	Name (Printed/Typed) Brenda R. Linster	Date 12/28/2012
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Title
Regulatory Lead

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 1/28/13
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Title
AFM

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.

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

*(Instructions on page 2)

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

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

Hold C104

for Directional Survey
and "As Drilled" plat

**NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT**

NMOCD
FEB 25 2013 ca

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

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

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT
RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

JAN 02 2013

*API Number 30-045-35480		*Pool Code 5860	*Pool Name SOUTH BISTI - GALLUP		*Well Name Horton Field Office	
*Property Code 39725	*Property Name GOOD TIMES P36A-2410			*Bureau of Land Management 03H		
*OGRID No. 282327	*Operator Name ENCANA OIL & GAS (USA) INC.			*Elevation 6866'		

¹⁰ Surface Location

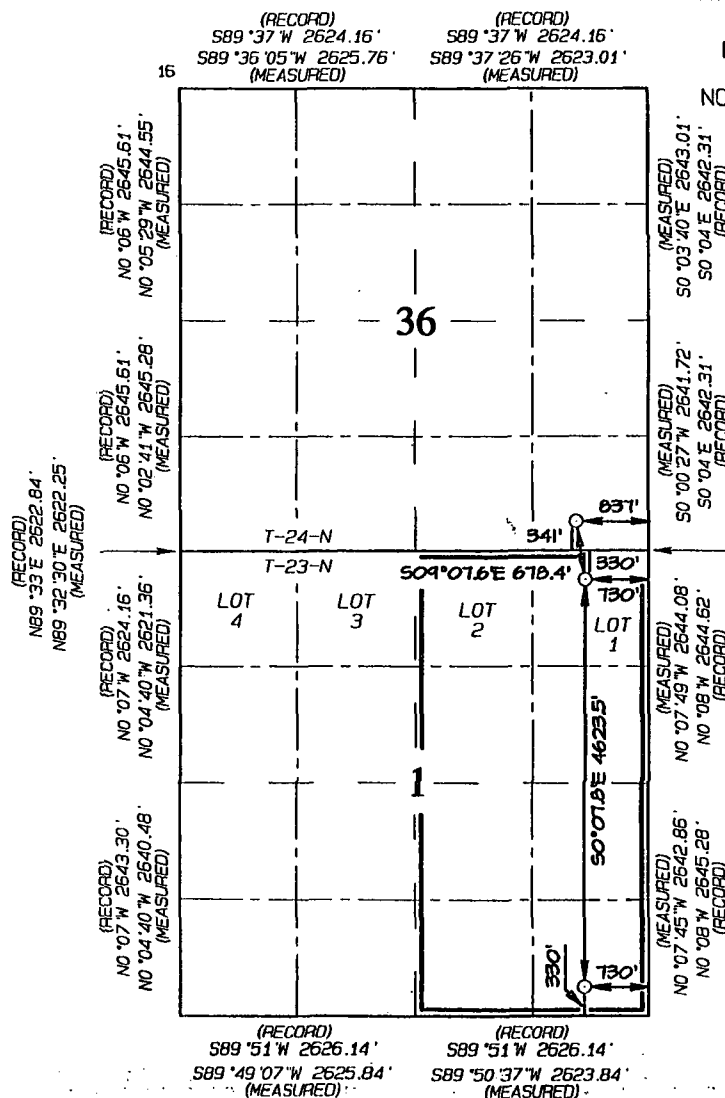
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	36	24N	10W		341	SOUTH	837	EAST	SAN JUAN

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
P	1	23N	10W		330	SOUTH	730	EAST	SAN JUAN

12 Dedicated Acres	319.72 Acres E/2 - Section 1	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



SURFACE LOCATION
341' FSL 837' FEL
SECTION 36, T24N, R10W
LAT: 36.26416°N
LONG: 107.84139°W
DATUM: NAD1927

LAT: 36.26417°N
LONG: 107.84200°W
DATUM: NAD1983

4'19"E 2622.75'
*33'E 2622.84'
(RECORD)

POINT-OF-ENTRY
330' FNL 730' FEL
SECTION 1, T23N, R10W
LAT: 36.26232° N
LONG: 107.84102° W
DATUM: NAD1927

LAT: 36.26233°N
LONG: 107.84164°W
DATUM: NAD1983

END-OF-LATERAL
330' FSL 730' FEL
SECTION 1, T23N, R10W
LAT: 36.24962°N
LONG: 107.84099°W
DATUM: NAD1927

LAT: 36.24963°N
LONG: 107.84160°W
DATUM: NAD1983

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.

4/28/2012

Signature
Brenda R. Linster

Printed Name
brenda.linster@encana.com

E-mail Address

18 SURVEYOR CERTIFICATION

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

Date of Survey: AUGUST 13, 2012

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

Directions from the Intersection of US Hwy 550 & US Hwy 64

in Bloomfield, NM to Encana Oil & Gas (USA) Inc. Good Times P36A-2410 03H

341' FSL & 837' FEL, Section 36, T24N, R10W, N.M.P.M., San Juan County, NM

Latitude: 36.26417°N Longitude: 107.84200°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 27.9 miles to State Hwy #57 @ Mile Marker 123.4;

Go right (South-westerly) on State Hwy #57 for 3.1 miles to fork in road;

Go left (South-westerly) remaining on State Hwy #57 for 4.0 miles to fork in road;

Go left (North-easterly) for 0.4 miles to fork in road;

Go right (South-easterly) for 0.6 miles to fork in road;

Go left which is straight (South-easterly) for 0.1 miles to 4-way intersection;

Go straight (South-easterly) @ 4-way intersection for 0.2 miles to new access on right-hand side of existing roadway which continues for 310' to Encana Good Times P36A-2410 03H location.

Good Times P36A-2410 03H
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BHL: SESE Section 1, T23N, R10W
330 FSL and 730 FEL
San Juan County, New Mexico
Lease Number: NM 42059

**Encana Oil & Gas (USA) Inc.
Drilling Plan**

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS (TVD)

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth (TVD)</u>
Ojo Alamo Ss.	559'
Kirtland	697'
Fruitland Coal	1009'
Pictured Cliffs	1302'
Lewis	1461'
Cliffhouse	2036'
Menefee	2599'
Point Lookout	3717'
Mancos Shale	3899'
Mancos Silt	4429'
Gallup	4699'

The referenced surface elevation is 6866', KB 6879'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth (TVD)</u>
Gas	Fruitland Coal	1009'
Gas	Pictured Cliffs	1302'
Gas	Cliffhouse	2036'
Gas	Point Lookout	3717'
Oil/Gas	Mancos	3899'

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

3. PRESSURE CONTROL

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

Good Times P36A-2410 03H
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San Juan County, New Mexico
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- i) BOP remote controls shall be located on the rig floor at a location readily accessible to the driller. Master controls shall be on the ground at the accumulator and shall have the capability to function all preventers.
- j) The kill line shall be 2-inch minimum and contain two kill line valves, one of which shall be a check valve.
- k) The choke line shall be a 2-inch minimum and contain two choke line valves (2-inch minimum).
- l) The choke and manifold shall contain two adjustable chokes.
- m) Hand wheels shall be installed on all ram preventers.
- n) Safety valves and wrenches (with subs for drill string connections) shall be available on the rig floor at all times.
- o) Inside BOP or float sub shall also be available on the rig floor at all times.

Proposed BOP and choke manifold arrangements are attached.

4. CASING & CEMENTING PROGRAM

The proposed casing and cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported.

- a) The proposed casing design is as follows:

Casing	Depth	Hole Size	Csg Size	Weight	Grade
Conductor	0-60'	30"	20"	94#	H40, STC New
Surface	0'-500'	12 1/4"	9 5/8"	36#	J55, STC New
Intermediate	0'-5284'MD	8 1/2"	7"	26#	J55, LTC New
Production Liner	5084'-10007'MD	6 1/8"	4 1/2"	11.6#	B80*, LTC New

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

*B80 pipe specifications are attached

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

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

- b) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

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Casing	Depth	Cement Volume (sacks)	Cement Type&Yield	Designed TOC	Centralizers
Conductor	60'	100sk	Type I Neat 14.8 ppg	Surface	None
Surface	500'	178sk	Type III Cement + 1% CaCl + 0.25lb/sk Cello Flake + 0.2% FL, 14.6ppg, 1.38cuf/sk	Surface	1 per joint on bottom 3 joints
Intermediate	5284'MD	30% open hole excess Stage 1 Lead: 213sk Stage 1 Tail: 147sk Stage 2 Lead: 105sk	Lead (Stages 1 and 2): PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuf/sk Tail (Stage 1): Type III Cmt + 1% CaCl + 0.25lb/sk Cello Flake 14.5ppg 1.38cuf/sk	Surface	1 per joint for bottom 3 joints, 1 every 3 joints for remaining joints
Production Liner*	5084'-10007'	None – External casing packers	N/A	N/A	N/A

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

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed above or equivalent slurries depending on service provider selected. Cement yields may change depending on slurries selected.

All waiting on cement times shall be a minimum of 8 hours or adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. WELL PLAN & DIRECTIONAL DRILLING PROGRAM

The proposed horizontal well will have a kick off point of 4289'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	4876'/10007'	Gallup

Good Times P36A-2410 03H
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341 FSL and 837 FEL
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330 FSL and 730 FEL
San Juan County, New Mexico
Lease Number: NM 42059

6. DRILLING FLUIDS PROGRAM

a) Surface through Intermediate Casing Point:

Hole Size (in)	Depth (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
30"	0-60' TVD	Fresh Water	8.3-9.2	38-100	4-28
12 1/4"	0-500' TVD	Fresh Water	8.4-8.6	60-70	NC
8 1/2"	500'TVD- 4950'TVD/5284'MD	Fresh Water LSND	8.5-8.8	40-50	8-10

b) Intermediate Casing Point to TD:

Hole Size (in)	MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6 1/8"	5284'-10007'	Synthetic Oil Based Mud	8.6-9.0	15-25	<15

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

7. TESTING, CORING and LOGGING

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

Cased Hole:

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

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The anticipated bottom hole pressure is +/- 2320 psi based on a 9.0 ppg at 4957' TVD of the landing point of the horizontal lateral. No abnormal pressure or temperatures are anticipated.

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

Good Times P36A-2410 03H

**SHL: SESE Section 36, T24N, R10W
341 FSL and 837 FEL**

**BHL: SESE Section 1, T23N, R10W
330 FSL and 730 FEL**

San Juan County, New Mexico

Lease Number: NM 42059

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on June 28, 2013. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

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



Boomerang Tube LLC

CASING (OR) TUBING DESCRIPTION AND PERFORMANCE PROPERTIES

Pipe Outside Diameter (ins)	_____	4,500
Pipe Wall Thickness (ins)	_____	0.250
Nominal Weight Per Foot (lbs)	_____	11.60
Thread Name	_____	Long Thread CSG
Grade Name	_____	SB-80
Pipe Minimum Yield (psi)	_____	80,000
Pipe Minimum Ultimate (psi)	_____	90,000
Coupling Minimum Yield (psi)	_____	80,000
Coupling Minimum Ultimate (psi)	_____	100,000
Coupling or Joint Outside Diameter (ins)	_____	5.000
Drift Diameter (ins)	_____	3.875
Plain End Weight per Foot (lbs)	_____	11.36
Joint Strength (lbs)	_____	201,000
Internal Yield (psi)	_____	7,780
Collapse Rating (psi)	_____	6,350

MAXIMUM DEPTH/LENGTH BASED ON MUD WTS & SAFETY FACTORS

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

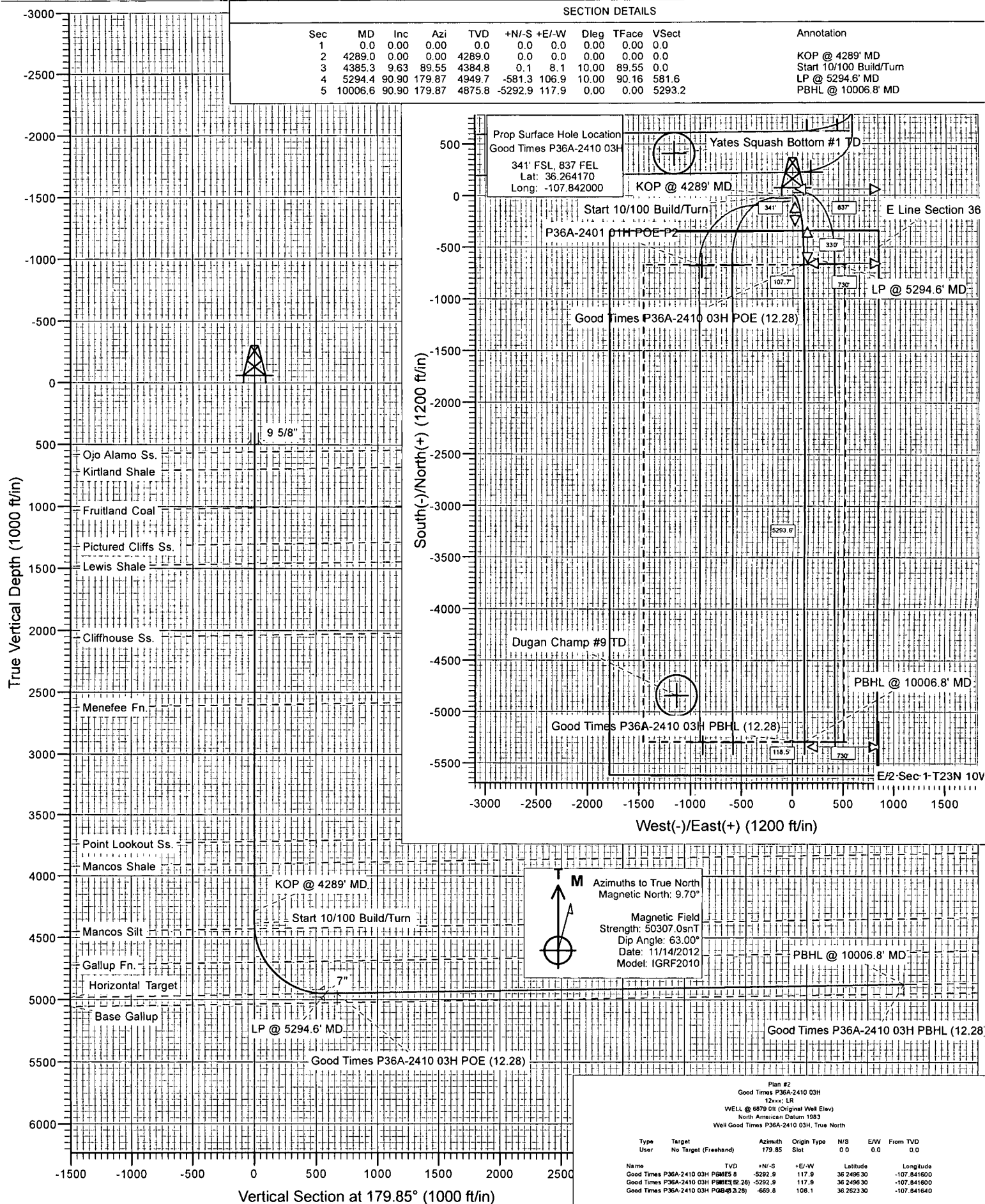
API RELATED VALUES and INTERMEDIATE CALCULATION RESULTS

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

encana™

natural gas

Project: San Juan County, NM
 Site: S36-T24N-R10W (Good Times)
 Well: Good Times P36A-2410 03H
 Wellbore: Hz
 Design: Plan #2



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times P36A-2410 03H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6879.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	WELL @ 6879.0ft (Original Well Elev)
Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 03H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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	S36-T24N-R10W (Good Times)				
Site Position:		Northing:	1,937,831.40 ft	Latitude:	36.325610
From:	Lat/Long	Easting:	2,706,101.56 ft	Longitude:	-107.891030
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-0.03 °

Well	Good Times P36A-2410 03H					
Well Position	+N/-S	0.0 ft	Northing:	1,915,460.67 ft	Latitude:	36.264170
	+E/-W	0.0 ft	Easting:	2,720,542.19 ft	Longitude:	-107.842000
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,866.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/14/2012	9.70	63.00	50,307

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	179.85

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,289.0	0.00	0.00	4,289.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,385.3	9.63	89.55	4,384.8	0.1	8.1	10.00	10.00	0.00	89.55	
5,294.4	90.90	179.87	4,949.7	-581.3	106.9	10.00	8.94	9.94	90.16	
10,006.6	90.90	179.87	4,875.8	-5,292.9	117.9	0.00	0.00	0.00	0.00	Good Times P36A-24

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times P36A-2410 03H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6879.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	WELL @ 6879.0ft (Original Well Elev)
Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 03H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
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"
559.0	0.00	0.00	559.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
697.0	0.00	0.00	697.0	0.0	0.0	0.0	0.00	0.00	Kirtland Shale
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,009.0	0.00	0.00	1,009.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,302.0	0.00	0.00	1,302.0	0.0	0.0	0.0	0.00	0.00	Pictured Cliffs Ss.
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,461.0	0.00	0.00	1,461.0	0.0	0.0	0.0	0.00	0.00	Lewis Shale
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
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	
1,800.0	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	
2,036.0	0.00	0.00	2,036.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
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	
2,400.0	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	
2,599.0	0.00	0.00	2,599.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn.
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	
3,100.0	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	
3,717.0	0.00	0.00	3,717.0	0.0	0.0	0.0	0.00	0.00	Point Lookout Ss.
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	
3,899.0	0.00	0.00	3,899.0	0.0	0.0	0.0	0.00	0.00	Mancos Shale
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times P36A-2410 03H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6879.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	WELL @ 6879.0ft (Original Well Elev)
Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 03H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,289.0	0.00	0.00	4,289.0	0.0	0.0	0.0	0.00	0.00	KOP @ 4289' MD
4,300.0	1.10	89.55	4,300.0	0.0	0.1	0.0	10.00	10.00	
4,385.3	9.63	89.55	4,384.8	0.1	8.1	0.0	10.00	10.00	
4,385.9	9.63	89.92	4,385.5	0.1	8.2	0.0	10.00	0.00	Start 10/100 Build/Turn
4,400.0	9.74	98.27	4,399.3	-0.1	10.5	0.1	10.00	0.76	
4,430.1	10.60	114.68	4,429.0	-1.6	15.6	1.7	10.00	2.87	Mancos Silt
4,500.0	14.92	140.14	4,497.2	-11.2	27.2	11.3	10.00	6.17	
4,600.0	23.42	156.64	4,591.6	-39.4	43.4	39.5	10.00	8.50	
4,700.0	32.75	164.41	4,679.8	-83.8	58.6	84.0	10.00	9.33	
4,721.3	34.79	165.57	4,697.5	-95.3	61.6	95.5	10.00	9.54	Gallup Fn.
4,800.0	42.36	168.99	4,759.0	-143.1	72.3	143.3	10.00	9.63	
4,900.0	52.10	172.12	4,826.8	-215.5	84.2	215.7	10.00	9.74	
5,000.0	61.90	174.51	4,881.2	-298.7	93.8	298.9	10.00	9.80	
5,100.0	71.74	176.50	4,920.5	-390.2	101.0	390.5	10.00	9.84	
5,200.0	81.59	178.28	4,943.5	-487.3	105.3	487.5	10.00	9.85	
5,284.0	89.88	179.69	4,949.8	-570.9	106.8	571.2	10.00	9.86	7"
5,294.4	90.90	179.87	4,949.7	-581.3	106.9	581.6	10.00	9.86	
5,294.6	90.90	179.87	4,949.7	-581.6	106.9	581.9	0.00	0.00	LP @ 5294.6' MD
5,300.0	90.90	179.87	4,949.6	-586.9	106.9	587.2	0.00	0.00	
5,382.9	90.90	179.87	4,948.3	-669.8	107.1	670.1	0.00	0.00	Good Times P36A-2410 03H POE (12.28)
5,400.0	90.90	179.87	4,948.1	-686.9	107.1	687.2	0.00	0.00	
5,500.0	90.90	179.87	4,946.5	-786.9	107.4	787.2	0.00	0.00	
5,600.0	90.90	179.87	4,944.9	-886.9	107.6	887.2	0.00	0.00	
5,700.0	90.90	179.87	4,943.4	-986.9	107.8	987.2	0.00	0.00	
5,800.0	90.90	179.87	4,941.8	-1,086.9	108.1	1,087.2	0.00	0.00	
5,900.0	90.90	179.87	4,940.2	-1,186.9	108.3	1,187.1	0.00	0.00	
6,000.0	90.90	179.87	4,938.7	-1,286.9	108.5	1,287.1	0.00	0.00	
6,100.0	90.90	179.87	4,937.1	-1,386.8	108.8	1,387.1	0.00	0.00	
6,200.0	90.90	179.87	4,935.5	-1,486.8	109.0	1,487.1	0.00	0.00	
6,300.0	90.90	179.87	4,934.0	-1,586.8	109.2	1,587.1	0.00	0.00	
6,400.0	90.90	179.87	4,932.4	-1,686.8	109.5	1,687.1	0.00	0.00	
6,500.0	90.90	179.87	4,930.8	-1,786.8	109.7	1,787.1	0.00	0.00	
6,600.0	90.90	179.87	4,929.3	-1,886.8	109.9	1,887.1	0.00	0.00	
6,700.0	90.90	179.87	4,927.7	-1,986.8	110.2	1,987.0	0.00	0.00	
6,800.0	90.90	179.87	4,926.1	-2,086.8	110.4	2,087.0	0.00	0.00	
6,900.0	90.90	179.87	4,924.5	-2,186.7	110.6	2,187.0	0.00	0.00	
7,000.0	90.90	179.87	4,923.0	-2,286.7	110.9	2,287.0	0.00	0.00	
7,100.0	90.90	179.87	4,921.4	-2,386.7	111.1	2,387.0	0.00	0.00	
7,200.0	90.90	179.87	4,919.8	-2,486.7	111.3	2,487.0	0.00	0.00	
7,300.0	90.90	179.87	4,918.3	-2,586.7	111.6	2,587.0	0.00	0.00	
7,400.0	90.90	179.87	4,916.7	-2,686.7	111.8	2,687.0	0.00	0.00	
7,500.0	90.90	179.87	4,915.1	-2,786.7	112.1	2,786.9	0.00	0.00	
7,600.0	90.90	179.87	4,913.6	-2,886.7	112.3	2,886.9	0.00	0.00	
7,700.0	90.90	179.87	4,912.0	-2,986.6	112.5	2,986.9	0.00	0.00	
7,800.0	90.90	179.87	4,910.4	-3,086.6	112.8	3,086.9	0.00	0.00	
7,900.0	90.90	179.87	4,908.9	-3,186.6	113.0	3,186.9	0.00	0.00	
8,000.0	90.90	179.87	4,907.3	-3,286.6	113.2	3,286.9	0.00	0.00	
8,100.0	90.90	179.87	4,905.7	-3,386.6	113.5	3,386.9	0.00	0.00	
8,200.0	90.90	179.87	4,904.2	-3,486.6	113.7	3,486.9	0.00	0.00	
8,300.0	90.90	179.87	4,902.6	-3,586.6	113.9	3,586.9	0.00	0.00	
8,400.0	90.90	179.87	4,901.0	-3,686.6	114.2	3,686.8	0.00	0.00	
8,500.0	90.90	179.87	4,899.5	-3,786.5	114.4	3,786.8	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times P36A-2410 03H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6879.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	WELL @ 6879.0ft (Original Well Elev)
Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 03H	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,600.0	90.90	179.87	4,897.9	-3,886.5	114.6	3,886.8	0.00	0.00	
8,700.0	90.90	179.87	4,896.3	-3,986.5	114.9	3,986.8	0.00	0.00	
8,800.0	90.90	179.87	4,894.8	-4,086.5	115.1	4,086.8	0.00	0.00	
8,900.0	90.90	179.87	4,893.2	-4,186.5	115.3	4,186.8	0.00	0.00	
9,000.0	90.90	179.87	4,891.6	-4,286.5	115.6	4,286.8	0.00	0.00	
9,100.0	90.90	179.87	4,890.1	-4,386.5	115.8	4,386.8	0.00	0.00	
9,200.0	90.90	179.87	4,888.5	-4,486.5	116.0	4,486.7	0.00	0.00	
9,300.0	90.90	179.87	4,886.9	-4,586.4	116.3	4,586.7	0.00	0.00	
9,400.0	90.90	179.87	4,885.4	-4,686.4	116.5	4,686.7	0.00	0.00	
9,500.0	90.90	179.87	4,883.8	-4,786.4	116.8	4,786.7	0.00	0.00	
9,600.0	90.90	179.87	4,882.2	-4,886.4	117.0	4,886.7	0.00	0.00	
9,700.0	90.90	179.87	4,880.6	-4,986.4	117.2	4,986.7	0.00	0.00	
9,800.0	90.90	179.87	4,879.1	-5,086.4	117.5	5,086.7	0.00	0.00	
9,900.0	90.90	179.87	4,877.5	-5,186.4	117.7	5,186.7	0.00	0.00	
10,000.0	90.90	179.87	4,875.9	-5,286.4	117.9	5,286.6	0.00	0.00	
10,006.6	90.90	179.87	4,875.8	-5,292.9	117.9	5,293.2	0.00	0.00	PBHL @ 10006.8' MD - Good Times P36A-2410

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Good Times P36A-2410	0.00	0.00	4,875.8	-5,292.9	117.9	1,910,167.75	2,720,659.66	36.249630	-107.841600
- plan hits target center									
- Polygon									
Point 1			4,875.8	-330.0	-500.0	1,909,837.79	2,720,159.63		
Point 2			4,875.8	-330.0	730.0	1,909,837.68	2,721,389.63		
Point 3			4,875.8	200.0	730.0	1,910,367.68	2,721,389.68		
Point 4			4,875.8	-330.0	730.0	1,909,837.68	2,721,389.63		
Good Times P36A-2410	0.00	0.00	4,875.8	-5,292.9	117.9	1,910,167.75	2,720,659.66	36.249630	-107.841600
- plan hits target center									
- Point									
Good Times P36A-2410	0.00	0.00	4,948.3	-669.8	106.1	1,914,790.85	2,720,648.26	36.262330	-107.841640
- plan misses target center by 0.9ft at 5382.9ft MD (4948.3 TVD, -669.8 N, 107.1 E)									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
500.0	500.0	9 5/8"	9.625	12.250
5,284.0	4,949.8	7"	7.000	7.500

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times P36A-2410 03H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6879.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	WELL @ 6879.0ft (Original Well Elev)
Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 03H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
559.0	559.0	Ojo Alamo Ss.		-0.90	179.85
697.0	697.0	Kirtland Shale		-0.90	179.85
1,009.0	1,009.0	Fruitland Coal		-0.90	179.85
1,302.0	1,302.0	Pictured Cliffs Ss.		-0.90	179.85
1,461.0	1,461.0	Lewis Shale		-0.90	179.85
2,036.0	2,036.0	Cliffhouse Ss.		-0.90	179.85
2,599.0	2,599.0	Menefee Fn.		-0.90	179.85
3,717.0	3,717.0	Point Lookout Ss.		-0.90	179.85
3,899.0	3,899.0	Mancos Shale		-0.90	179.85
4,430.1	4,429.0	Mancos Silt		-0.90	179.85
4,721.3	4,699.0	Gallup Fn.		-0.90	179.85

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,289.0	4,289.0	0.0	0.0	KOP @ 4289' MD
4,385.9	4,385.5	0.1	8.2	Start 10/100 Build/Turn
5,294.6	4,949.7	-581.6	106.9	LP @ 5294.6' MD
10,006.6	4,875.8	-5,292.9	117.9	PBHL @ 10006.8' MD

WELLHEAD BLOWOUT CONTROL SYSTEM



Well name and number:

Good Times P36A-2410 03H

