

RECEIVED

Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 08 2014

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

SUNDRY NOTICES AND REPORTS ON WELLSTON Field Office
Do not use this form for proposals to drill or re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Encana Oil & Gas (USA) Inc.

3a. Address

370 17th Street, Suite 1700 Denver, CO 80202

3b. Phone No. (include area code)

720-876-3926

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 287' FSL and 862' FEL Section 36, T24N, R10W
BHL: 330' FGL and 1730' FEL Section 1, T23N, R10W

5. Lease Serial No.

NM 42059

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit of CA/Agreement, Name and/or No

N/A

8. Well Name and No.

Good Times P36A-2410 01H

9. API Well No.

30-045-35449

10. Field and Pool or Exploratory Area

South Bisti-Gallup

11. County or Parish, State

San Juan County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other <u>Change TVD</u>
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Encana Oil & Gas (USA) Inc. (Encana) requests approval to land the Total Vertical Depth (TVD) of the Good Times P36A-2410 01H (API: 30-045-35449-0000) approximately 175' above the original TVD. The new TVD target is still within the Gallup formation and still within the depths defining the permitted pool. The 7" casing point will be at 230' FNL in Section 1, T23N, R10W. The last completion packer will be set on the legal side of the 330' FNL setback in Section 1, T23N, R10W. The updated plan is attached for your reference.

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations

OIL CONS. DIV DIST. 3
MAY 14 2014

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

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Jessica Gregg

Title Regulatory Analyst

Signature

Jessica Gregg

Date 05/07/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

William Tambekou

Title

Petroleum Engineer

Date

5/12/2014

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

FFD

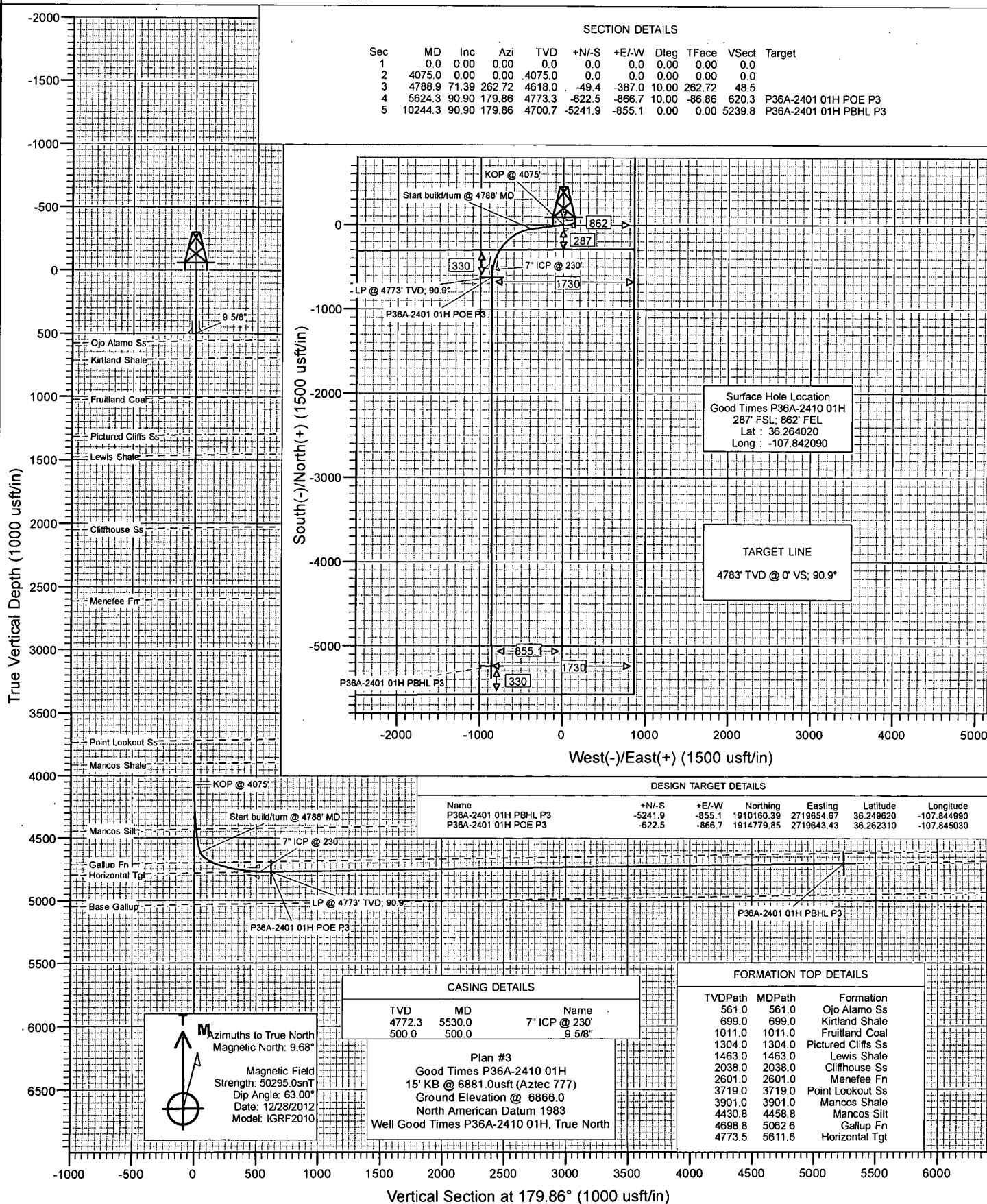
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCDA



Project: San Juan County, NM
 Site: S36-T24N-R10W (Good Times)
 Well: Good Times P36A-2410 01H
 Wellbore: HZ
 Design: Plan #3



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times P36A-2410 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	15' KB @ 6881.0usft (Aztec 777)
Project:	San Juan County, NM	MD Reference:	15' KB @ 6881.0usft (Aztec 777)
Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

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:	1,937,827.53 usft	Latitude:	36.325610
From:	Lat/Long	Easting:	2,706,096.15 usft	Longitude:	-107.891030
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-0.03 °

Well	Good Times P36A-2410 01H				
Well Position	+N/-S	0.0 usft	Northing:	1,915,402.24 usft	Latitude: 36.264020
	+E/-W	0.0 usft	Easting:	2,720,510.22 usft	Longitude: -107.842090
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level: 6,866.0 usft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/28/2012	9.68	63.00	50,295

Design	Plan #3				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	-1.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	179.86	

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	
4,075.0	0.00	0.00	4,075.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,788.9	71.39	262.72	4,618.0	-49.4	-387.0	10.00	10.00	0.00	262.72	
5,624.3	90.90	179.86	4,773.3	-622.5	-866.7	10.00	2.34	-9.92	-86.86	P36A-2401 01H POE
10,244.3	90.90	179.86	4,700.7	-5,241.9	-855.1	0.00	0.00	0.00	0.00	P36A-2401 01H PBH

Cathedral Energy Services

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Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

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"
561.0	0.00	0.00	561.0	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	
699.0	0.00	0.00	699.0	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	
1,011.0	0.00	0.00	1,011.0	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	
1,304.0	0.00	0.00	1,304.0	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	
1,463.0	0.00	0.00	1,463.0	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	
2,038.0	0.00	0.00	2,038.0	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	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,601.0	0.00	0.00	2,601.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn
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	
3,719.0	0.00	0.00	3,719.0	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	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
3,901.0	0.00	0.00	3,901.0	0.0	0.0	0.0	0.00	0.00	Mancos Shale
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,075.0	0.00	0.00	4,075.0	0.0	0.0	0.0	0.00	0.00	KOP @ 4075'
4,100.0	2.50	262.72	4,100.0	-0.1	-0.5	0.1	10.00	10.00	

Cathedral Energy Services

Planning Report

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Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

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
4,200.0	12.50	262.72	4,199.0	-1.7	-13.5	1.7	10.00	10.00	
4,300.0	22.50	262.72	4,294.3	-5.5	-43.3	5.4	10.00	10.00	
4,400.0	32.50	262.72	4,382.9	-11.4	-89.0	11.1	10.00	10.00	
4,458.8	38.38	262.72	4,430.8	-15.7	-122.8	15.4	10.00	10.00	Mancos Silt
4,500.0	42.50	262.72	4,462.1	-19.1	-149.3	18.7	10.00	10.00	
4,600.0	52.50	262.72	4,529.6	-28.4	-222.3	27.8	10.00	10.00	
4,700.0	62.50	262.72	4,583.2	-39.1	-305.9	38.3	10.00	10.00	
4,788.9	71.39	262.72	4,618.0	-49.4	-387.0	48.5	10.00	10.00	Start build/turn @ 4788' MD
4,800.0	71.45	261.56	4,621.6	-50.8	-397.4	49.9	10.02	0.58	
4,900.0	72.35	251.08	4,652.7	-73.3	-489.6	72.1	10.00	0.90	
5,000.0	73.80	240.73	4,681.9	-112.3	-576.8	110.9	10.00	1.45	
5,062.6	74.96	234.35	4,698.8	-144.7	-627.6	143.1	10.00	1.85	Gallup Fn
5,100.0	75.73	230.57	4,708.2	-166.7	-656.3	165.1	10.00	2.08	
5,200.0	78.09	220.59	4,730.9	-234.8	-725.7	233.1	10.00	2.36	
5,300.0	80.80	210.79	4,749.3	-314.6	-782.9	312.7	10.00	2.70	
5,400.0	83.76	201.15	4,762.7	-403.6	-826.3	401.5	10.00	2.96	
5,500.0	86.89	191.63	4,770.9	-499.1	-854.3	497.0	10.00	3.14	
5,530.0	87.86	188.78	4,772.3	-528.6	-859.6	526.5	10.00	3.20	7" ICP @ 230'
5,600.0	90.12	182.15	4,773.5	-598.2	-866.3	596.1	10.00	3.23	
5,611.6	90.49	181.05	4,773.5	-609.8	-866.6	607.7	10.00	3.23	Horizontal Tgt
5,624.3	90.90	179.86	4,773.3	-622.4	-866.7	620.3	10.00	3.23	LP @ 4773' TVD; 90.9°
5,700.0	90.90	179.86	4,772.1	-698.2	-866.5	696.0	0.00	0.00	
5,800.0	90.90	179.86	4,770.5	-798.2	-866.3	796.0	0.00	0.00	
5,900.0	90.90	179.86	4,769.0	-898.1	-866.0	896.0	0.00	0.00	
6,000.0	90.90	179.86	4,767.4	-998.1	-865.8	996.0	0.00	0.00	
6,100.0	90.90	179.86	4,765.8	-1,098.1	-865.5	1,096.0	0.00	0.00	
6,200.0	90.90	179.86	4,764.3	-1,198.1	-865.3	1,196.0	0.00	0.00	
6,300.0	90.90	179.86	4,762.7	-1,298.1	-865.0	1,296.0	0.00	0.00	
6,400.0	90.90	179.86	4,761.1	-1,398.1	-864.8	1,396.0	0.00	0.00	
6,500.0	90.90	179.86	4,759.5	-1,498.1	-864.5	1,495.9	0.00	0.00	
6,600.0	90.90	179.86	4,758.0	-1,598.0	-864.3	1,595.9	0.00	0.00	
6,700.0	90.90	179.86	4,756.4	-1,698.0	-864.0	1,695.9	0.00	0.00	
6,800.0	90.90	179.86	4,754.8	-1,798.0	-863.8	1,795.9	0.00	0.00	
6,900.0	90.90	179.86	4,753.3	-1,898.0	-863.5	1,895.9	0.00	0.00	
7,000.0	90.90	179.86	4,751.7	-1,998.0	-863.3	1,995.9	0.00	0.00	
7,100.0	90.90	179.86	4,750.1	-2,098.0	-863.0	2,095.9	0.00	0.00	
7,200.0	90.90	179.86	4,748.5	-2,198.0	-862.8	2,195.9	0.00	0.00	
7,300.0	90.90	179.86	4,747.0	-2,298.0	-862.5	2,295.8	0.00	0.00	
7,400.0	90.90	179.86	4,745.4	-2,397.9	-862.2	2,395.8	0.00	0.00	
7,500.0	90.90	179.86	4,743.8	-2,497.9	-862.0	2,495.8	0.00	0.00	
7,600.0	90.90	179.86	4,742.3	-2,597.9	-861.7	2,595.8	0.00	0.00	
7,700.0	90.90	179.86	4,740.7	-2,697.9	-861.5	2,695.8	0.00	0.00	
7,800.0	90.90	179.86	4,739.1	-2,797.9	-861.2	2,795.8	0.00	0.00	
7,900.0	90.90	179.86	4,737.5	-2,897.9	-861.0	2,895.8	0.00	0.00	
8,000.0	90.90	179.86	4,736.0	-2,997.9	-860.7	2,995.8	0.00	0.00	
8,100.0	90.90	179.86	4,734.4	-3,097.9	-860.5	3,095.7	0.00	0.00	
8,200.0	90.90	179.86	4,732.8	-3,197.8	-860.2	3,195.7	0.00	0.00	
8,300.0	90.90	179.86	4,731.3	-3,297.8	-860.0	3,295.7	0.00	0.00	
8,400.0	90.90	179.86	4,729.7	-3,397.8	-859.7	3,395.7	0.00	0.00	
8,500.0	90.90	179.86	4,728.1	-3,497.8	-859.5	3,495.7	0.00	0.00	
8,600.0	90.90	179.86	4,726.5	-3,597.8	-859.2	3,595.7	0.00	0.00	
8,700.0	90.90	179.86	4,725.0	-3,697.8	-859.0	3,695.7	0.00	0.00	

Cathedral Energy Services

Planning Report

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Wellbore:	HZ		
Design:	Plan #3		

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	90.90	179.86	4,723.4	-3,797.8	-858.7	3,795.7	0.00	0.00	
8,900.0	90.90	179.86	4,721.8	-3,897.8	-858.5	3,895.6	0.00	0.00	
9,000.0	90.90	179.86	4,720.3	-3,997.7	-858.2	3,995.6	0.00	0.00	
9,100.0	90.90	179.86	4,718.7	-4,097.7	-858.0	4,095.6	0.00	0.00	
9,200.0	90.90	179.86	4,717.1	-4,197.7	-857.7	4,195.6	0.00	0.00	
9,300.0	90.90	179.86	4,715.5	-4,297.7	-857.5	4,295.6	0.00	0.00	
9,400.0	90.90	179.86	4,714.0	-4,397.7	-857.2	4,395.6	0.00	0.00	
9,500.0	90.90	179.86	4,712.4	-4,497.7	-856.9	4,495.6	0.00	0.00	
9,600.0	90.90	179.86	4,710.8	-4,597.7	-856.7	4,595.6	0.00	0.00	
9,700.0	90.90	179.86	4,709.3	-4,697.7	-856.4	4,695.6	0.00	0.00	
9,800.0	90.90	179.86	4,707.7	-4,797.6	-856.2	4,795.5	0.00	0.00	
9,900.0	90.90	179.86	4,706.1	-4,897.6	-855.9	4,895.5	0.00	0.00	
10,000.0	90.90	179.86	4,704.5	-4,997.6	-855.7	4,995.5	0.00	0.00	
10,100.0	90.90	179.86	4,703.0	-5,097.6	-855.4	5,095.5	0.00	0.00	
10,200.0	90.90	179.86	4,701.4	-5,197.6	-855.2	5,195.5	0.00	0.00	
10,244.3	90.90	179.86	4,700.7	-5,241.9	-855.1	5,239.8	0.00	0.00	TD at 10244.3

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									
P36A-2401 01H PBHL P	0.00	0.00	4,876.7	-5,241.9	-855.1	1,910,160.39	2,719,654.67	36.249620	-107.844990
- plan misses target center by 175.9usft at 10241.6usft MD (4700.7 TVD, -5239.2 N, -855.1 E)									
- Point									
P36A-2401 01H POE P2	0.00	0.00	4,949.2	-622.5	-866.7	1,914,779.85	2,719,643.43	36.262310	-107.845030
- plan misses target center by 175.9usft at 5622.2usft MD (4773.3 TVD, -620.3 N, -866.7 E)									
- Point									
P36A-2401 01H PBHL P	0.00	0.00	4,700.7	-5,241.9	-855.1	1,910,160.39	2,719,654.67	36.249620	-107.844990
- plan hits target center									
- Point									
P36A-2401 01H POE P3	0.00	0.00	4,773.3	-622.5	-866.7	1,914,779.85	2,719,643.43	36.262310	-107.845030
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
5,530.0	4,772.3	7" ICP @ 230'	0	0
500.0	500.0	9 5/8"	0	0

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Good Times P36A-2410 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	15' KB @ 6881.0usft (Aztec 777)
Project:	San Juan County, NM	MD Reference:	15' KB @ 6881.0usft (Aztec 777)
Site:	S36-T24N-R10W (Good Times)	North Reference:	True
Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
561.0	561.0	Ojo Alamo Ss		-0.90	179.86
699.0	699.0	Kirtland Shale		-0.90	179.86
1,011.0	1,011.0	Fruitland Coal		-0.90	179.86
1,304.0	1,304.0	Pictured Cliffs Ss		-0.90	179.86
1,463.0	1,463.0	Lewis Shale		-0.90	179.86
2,038.0	2,038.0	Cliffhouse Ss		-0.90	179.86
2,601.0	2,601.0	Menefee Fn		-0.90	179.86
3,719.0	3,719.0	Point Lookout Ss		-0.90	179.86
3,901.0	3,901.0	Mancos Shale		-0.90	179.86
4,458.8	4,431.0	Mancos Silt		-0.90	179.86
5,062.6	4,701.0	Gallup Fn		-0.90	179.86
5,611.6	4,783.0	Horizontal Tgt		-0.90	179.86

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,075.0	4,075.0	0.0	0.0	KOP @ 4075'
4,788.9	4,618.0	-49.4	-387.0	Start build/turn @ 4788' MD
5,624.3	4,773.2	-622.5	-866.7	LP @ 4773' TVD; 90.9°
10,244.3	4,700.7	-5,241.9	-855.1	TD at 10244.3

EnCana Oil & Gas (USA) Inc

San Juan County, NM

S36-T24N-R10W (Good Times)

Good Times P36A-2410 01H

HZ

Plan #3

Anticollision Report

30 April, 2014

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Good Times P36A-2410 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6882.0ft (Aztec 950)
Reference Site:	S36-T24N-R10W (Good Times)	MD Reference:	16' KB @ 6882.0ft (Aztec 950)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference Plan #3

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program Date 4/30/2014

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,244.3	Plan #3 (HZ)	MWD	Geolink MWD

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S36-T24N-R10W (Good Times)						
Good Times P36A-2410 03H - Hz - Plan #4	4,000.0	3,999.0	31.4	17.5	2.259	CC
Good Times P36A-2410 03H - Hz - Plan #4	4,100.0	4,099.0	31.7	17.4	2.223	ES, SF

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Good Times P36A-2410 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6882.0ft (Aztec 950)
Reference Site:	S36-T24N-R10W (Good Times)	MD Reference:	16' KB @ 6882.0ft (Aztec 950)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S36-T24N-R10W (Good Times) - Good Times P36A-2410 03H - Hz - Plan #4														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning		
Reference	Offset	Reference	Offset	Reference	Offset		+N-S (ft)	+E-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	22.04	29.1	11.8	31.4						
100.0	100.0	99.0	99.0	0.1	0.1	22.04	29.1	11.8	31.4	31.1	0.29	107.073			
200.0	200.0	199.0	199.0	0.3	0.3	22.04	29.1	11.8	31.4	30.8	0.64	48.921			
300.0	300.0	299.0	299.0	0.5	0.5	22.04	29.1	11.8	31.4	30.4	0.99	31.694			
400.0	400.0	399.0	399.0	0.7	0.7	22.04	29.1	11.8	31.4	30.1	1.34	23.440			
500.0	500.0	499.0	499.0	0.8	0.8	22.04	29.1	11.8	31.4	29.7	1.69	18.597			
600.0	600.0	599.0	599.0	1.0	1.0	22.04	29.1	11.8	31.4	29.4	2.04	15.413			
700.0	700.0	699.0	699.0	1.2	1.2	22.04	29.1	11.8	31.4	29.0	2.39	13.159			
800.0	800.0	799.0	799.0	1.4	1.4	22.04	29.1	11.8	31.4	28.7	2.74	11.481			
900.0	900.0	899.0	899.0	1.5	1.5	22.04	29.1	11.8	31.4	28.3	3.09	10.182			
1,000.0	1,000.0	999.0	999.0	1.7	1.7	22.04	29.1	11.8	31.4	28.0	3.43	9.147			
1,100.0	1,100.0	1,099.0	1,099.0	1.9	1.9	22.04	29.1	11.8	31.4	27.6	3.78	8.303			
1,200.0	1,200.0	1,199.0	1,199.0	2.1	2.1	22.04	29.1	11.8	31.4	27.3	4.13	7.602			
1,300.0	1,300.0	1,299.0	1,299.0	2.2	2.2	22.04	29.1	11.8	31.4	26.9	4.48	7.010			
1,400.0	1,400.0	1,399.0	1,399.0	2.4	2.4	22.04	29.1	11.8	31.4	26.6	4.83	6.504			
1,500.0	1,500.0	1,499.0	1,499.0	2.6	2.6	22.04	29.1	11.8	31.4	26.2	5.18	6.065			
1,600.0	1,600.0	1,599.0	1,599.0	2.8	2.8	22.04	29.1	11.8	31.4	25.9	5.53	5.682			
1,700.0	1,700.0	1,699.0	1,699.0	2.9	2.9	22.04	29.1	11.8	31.4	25.5	5.88	5.345			
1,800.0	1,800.0	1,799.0	1,799.0	3.1	3.1	22.04	29.1	11.8	31.4	25.2	6.23	5.045			
1,900.0	1,900.0	1,899.0	1,899.0	3.3	3.3	22.04	29.1	11.8	31.4	24.8	6.58	4.778			
2,000.0	2,000.0	1,999.0	1,999.0	3.5	3.5	22.04	29.1	11.8	31.4	24.5	6.93	4.537			
2,100.0	2,100.0	2,099.0	2,099.0	3.6	3.6	22.04	29.1	11.8	31.4	24.1	7.27	4.319			
2,200.0	2,200.0	2,199.0	2,199.0	3.8	3.8	22.04	29.1	11.8	31.4	23.8	7.62	4.121			
2,300.0	2,300.0	2,299.0	2,299.0	4.0	4.0	22.04	29.1	11.8	31.4	23.4	7.97	3.941			
2,400.0	2,400.0	2,399.0	2,399.0	4.2	4.2	22.04	29.1	11.8	31.4	23.1	8.32	3.776			
2,500.0	2,500.0	2,499.0	2,499.0	4.3	4.3	22.04	29.1	11.8	31.4	22.7	8.67	3.624			
2,600.0	2,600.0	2,599.0	2,599.0	4.5	4.5	22.04	29.1	11.8	31.4	22.4	9.02	3.483			
2,700.0	2,700.0	2,699.0	2,699.0	4.7	4.7	22.04	29.1	11.8	31.4	22.0	9.37	3.354			
2,800.0	2,800.0	2,799.0	2,799.0	4.9	4.9	22.04	29.1	11.8	31.4	21.7	9.72	3.233			
2,900.0	2,900.0	2,899.0	2,899.0	5.0	5.0	22.04	29.1	11.8	31.4	21.4	10.07	3.121			
3,000.0	3,000.0	2,999.0	2,999.0	5.2	5.2	22.04	29.1	11.8	31.4	21.0	10.42	3.016			
3,100.0	3,100.0	3,099.0	3,099.0	5.4	5.4	22.04	29.1	11.8	31.4	20.7	10.77	2.919			
3,200.0	3,200.0	3,199.0	3,199.0	5.6	5.6	22.04	29.1	11.8	31.4	20.3	11.11	2.827			
3,300.0	3,300.0	3,299.0	3,299.0	5.7	5.7	22.04	29.1	11.8	31.4	20.0	11.46	2.741			
3,400.0	3,400.0	3,399.0	3,399.0	5.9	5.9	22.04	29.1	11.8	31.4	19.6	11.81	2.660			
3,500.0	3,500.0	3,499.0	3,499.0	6.1	6.1	22.04	29.1	11.8	31.4	19.3	12.16	2.583			
3,600.0	3,600.0	3,599.0	3,599.0	6.3	6.3	22.04	29.1	11.8	31.4	18.9	12.51	2.511			
3,700.0	3,700.0	3,699.0	3,699.0	6.4	6.4	22.04	29.1	11.8	31.4	18.6	12.86	2.443			
3,800.0	3,800.0	3,799.0	3,799.0	6.6	6.6	22.04	29.1	11.8	31.4	18.2	13.21	2.379			
3,900.0	3,900.0	3,899.0	3,899.0	6.8	6.8	22.04	29.1	11.8	31.4	17.9	13.56	2.317			
4,000.0	4,000.0	3,999.0	3,999.0	7.0	7.0	22.04	29.1	11.8	31.4	17.5	13.91	2.259 CC			
4,055.8	4,055.7	4,054.7	4,054.7	7.1	7.1	120.33	29.1	11.8	31.8	17.7	14.10	2.252			
4,100.0	4,100.0	4,099.0	4,099.0	7.1	7.1	120.11	29.1	11.8	31.7	17.4	14.25	2.223 ES, SF			
4,200.0	4,199.0	4,196.4	4,195.9	7.3	7.3	146.62	24.8	18.5	41.6	27.1	14.45	2.877			
4,300.0	4,294.3	4,278.5	4,275.7	7.5	7.5	171.78	14.2	34.8	82.4	68.2	14.21	5.797			
4,400.0	4,382.9	4,339.3	4,332.5	7.9	7.6	-177.40	2.4	52.9	150.9	137.2	13.71	11.004			
4,500.0	4,462.1	4,379.3	4,368.4	8.5	7.8	-170.93	-7.1	67.5	236.1	223.0	13.06	18.080			
4,600.0	4,529.7	4,400.0	4,386.6	9.4	7.8	-162.27	-12.5	75.9	330.7	318.1	12.62	26.210			
4,700.0	4,583.4	4,410.4	4,395.5	10.7	7.9	-116.83	-15.4	80.4	429.6	412.4	17.18	25.011			
4,800.0	4,621.8	4,400.0	4,386.6	12.3	7.8	-24.31	-12.5	75.9	529.3	510.5	12.79	41.376			
4,900.0	4,653.0	4,400.0	4,386.6	14.1	7.8	-56.32	-12.5	75.9	627.5	608.2	19.33	32.462			
5,000.0	4,682.4	4,400.0	4,386.6	15.9	7.8	-64.69	-12.5	75.9	722.9	701.0	21.84	33.105			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Good Times P36A-2410 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6882.0ft (Aztec 950)
Reference Site:	S36-T24N-R10W (Good Times)	MD Reference:	16' KB @ 6882.0ft (Aztec 950)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S36-T24N-R10W (Good Times) - Good Times P36A-2410 03H - Hz - Plan #4												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,100.0	4,708.8	4,400.0	4,386.6	17.7	7.8	-66.98	-12.5	75.9	814.0	790.8	23.21	35.070	
5,200.0	4,731.6	4,400.0	4,386.6	19.3	7.8	-67.37	-12.5	75.9	899.9	876.0	23.96	37.562	
5,300.0	4,750.1	4,417.0	4,401.2	20.8	7.9	-68.67	-17.3	83.2	979.3	955.0	24.36	40.194	

Cathedral Energy Services

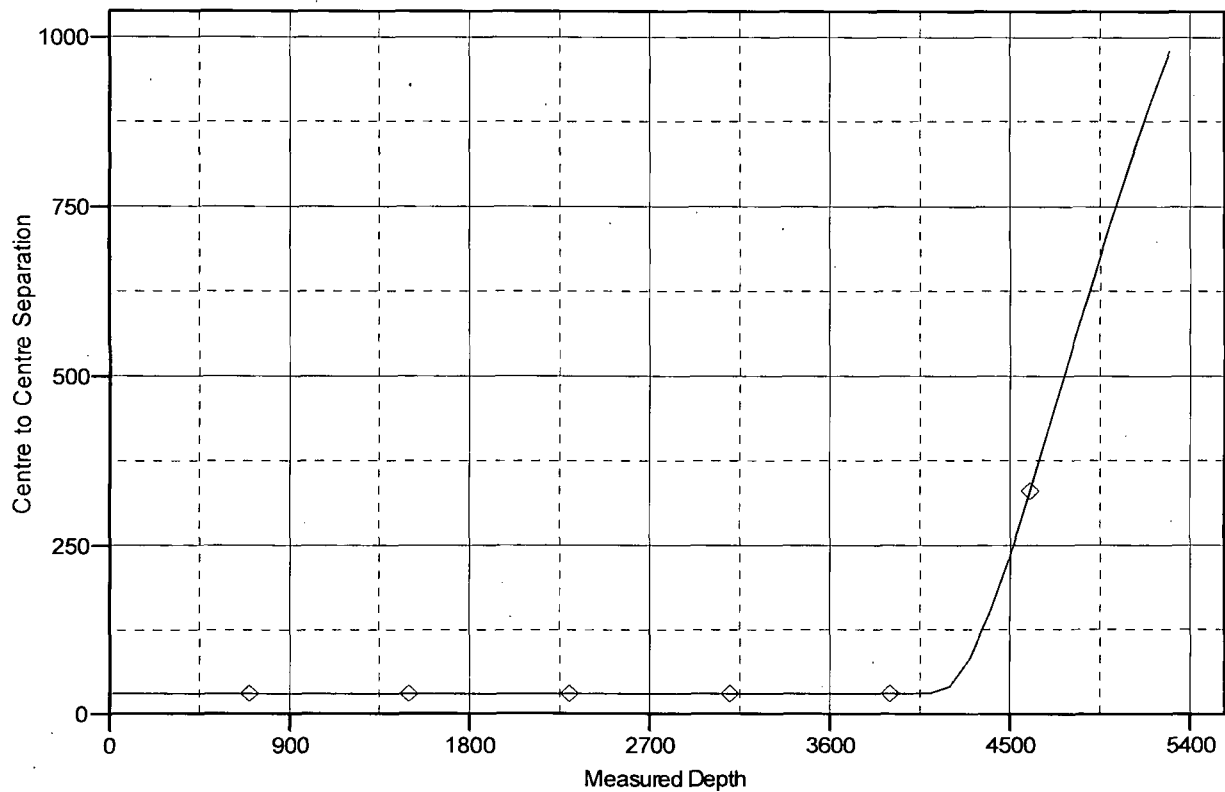
Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Good Times P36A-2410 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6882.0ft (Aztec 950)
Reference Site:	S36-T24N-R10W (Good Times)	MD Reference:	16' KB @ 6882.0ft (Aztec 950)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Good Times P36A-2410 01H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 16' KB @ 6882.0ft (Aztec 950)
Offset Depths are relative to Offset Datum
Central Meridian is -107.833333 °

Coordinates are relative to: Good Times P36A-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 P36A-2410 03H, Hz, Plan #4 V0