

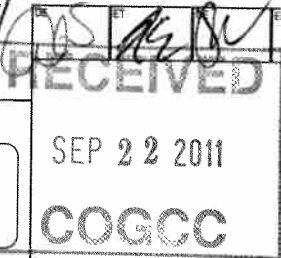


02305413

of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 100185	4. Contact Name: Jevin Croteau	Complete the Attachment Checklist
2. Name of Operator: Encana Oil & Gas (USA) Inc.	Phone: 720-876-5339	
3. Address: 370 17th Street, Suite 1700	Fax: 720-876-6339	OP OGCC
City: Denver State: CO Zip: 80202		
5. API Number 05-045-20187-00	OGCC Facility ID Number	Survey Plat
6. Well/Facility Name: Federal	7. Well/Facility Number 11-7C (RD-11)	Directional Survey X
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): NWNW of Sec. 11, T7S, R94W, 6th PM		Surface Eqmpt Diagram
9. County: Garfield	10. Field Name: Rulison	Technical Info Page X
11. Federal, Indian or State Lease Number: COC56040		Other

General Notice

☐ **CHANGE OF LOCATION:** Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

	FNL/FSL	FEL/FWL
Change of Surface Footage from Exterior Section Lines:		
Change of Surface Footage to Exterior Section Lines:		
Change of Bottomhole Footage from Exterior Section Lines:		
Change of Bottomhole Footage to Exterior Section Lines:		

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer

Latitude _____ Distance to nearest property line _____ Distance to nearest bldg, public rd, utility or RR _____

Longitude _____ Distance to nearest lease line _____ Is location in a High Density Area (rule 603b)? Yes/No _____

Ground Elevation _____ Distance to nearest well same formation _____ Surface owner consultation date: _____

attach directional survey

GPS DATA:

Date of Measurement _____ PDOP Reading _____ Instrument Operator's Name _____

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond

Signed surface use agreement attached

☐ CHANGE OF OPERATOR (prior to drilling):Effective Date: _____
Plugging Bond: ☐ Blanket ☐ Individual☐ CHANGE WELL NAMEFrom: _____ NUMBER _____
To: _____
Effective Date: _____☐ ABANDONED LOCATION:Was location ever built? ☐ Yes ☐ No
Is site ready for inspection? ☐ Yes ☐ No
Date Ready for inspection: _____☐ NOTICE OF CONTINUED SHUT IN STATUSDate well shut in or temporarily abandoned: _____
Has Production Equipment been removed from site? ☐ Yes ☐ No
MIT required if shut in longer than two years. Date of last MIT _____☐ SPUD DATE:☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)☐ SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK

*submit cbl and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

☐ RECLAMATION:

Attach technical page describing final reclamation procedures per Rule 1004.

Final reclamation will commence on approximately _____ ☐ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

☐ Notice of Intent

Approximate Start Date: _____

☐ Report of Work Done

Date Work Completed: _____

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input checked="" type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Other: _____	for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____
Print Name: Jevin CroteauDate: 9/21/11 Email: jevin.croteau@encana.com
Title: Regulatory Analyst

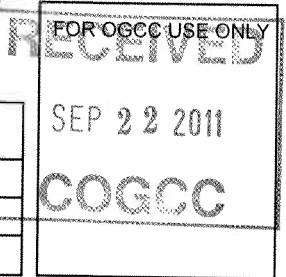
COGCC Approved: _____

Title: NWA Engineer Date: 11/15/11

CONDITIONS OF APPROVAL, IF ANY:

[see bottom portion of following, Tech Info,
page for 2 COAs]

TECHNICAL INFORMATION PAGE



1.	OGCC Operator Number:	100185	API Number:	05-045-20187-00
2.	Name of Operator:	Encana Oil & Gas (USA) Inc.	OGCC Facility ID #	
3.	Well/Facility Name:	Federal	Well/Facility Number:	11-7C (RD-11)
4.	Location (QtrQtr, Sec, Twp, Rng, Meridian): NWNW of Sec. 11, T7S, R94W, 6th PM			

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

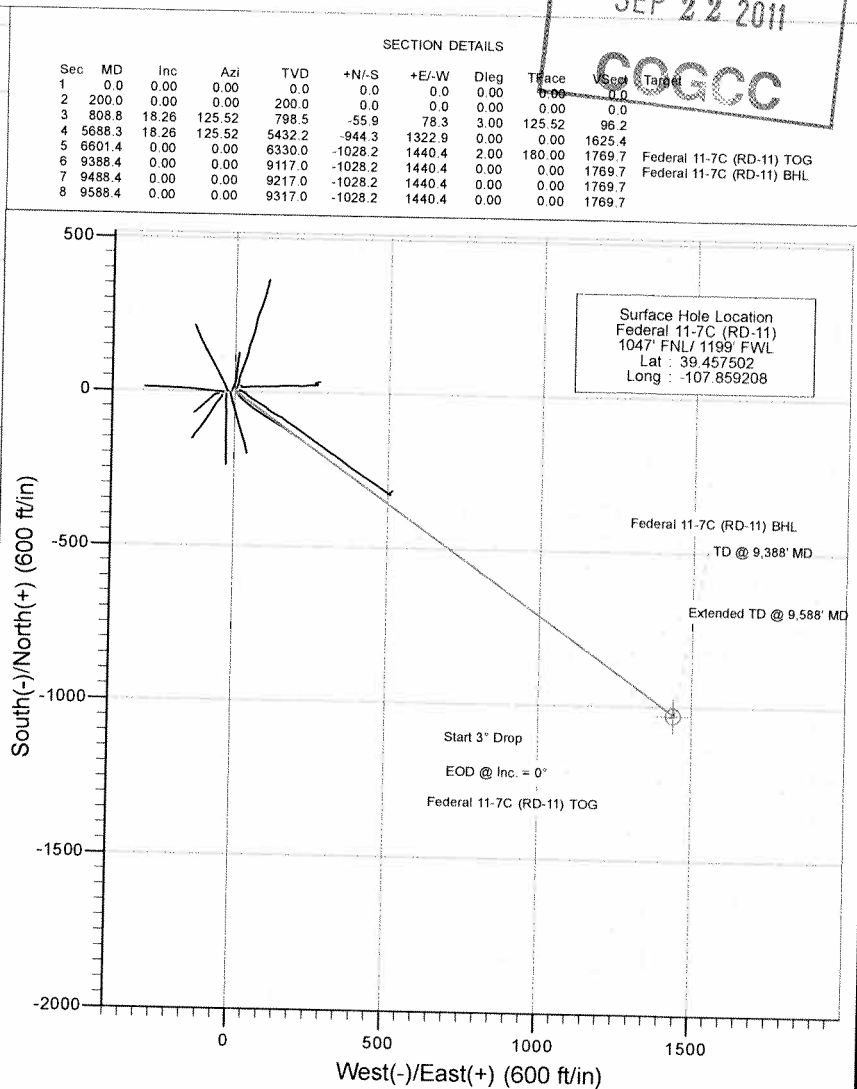
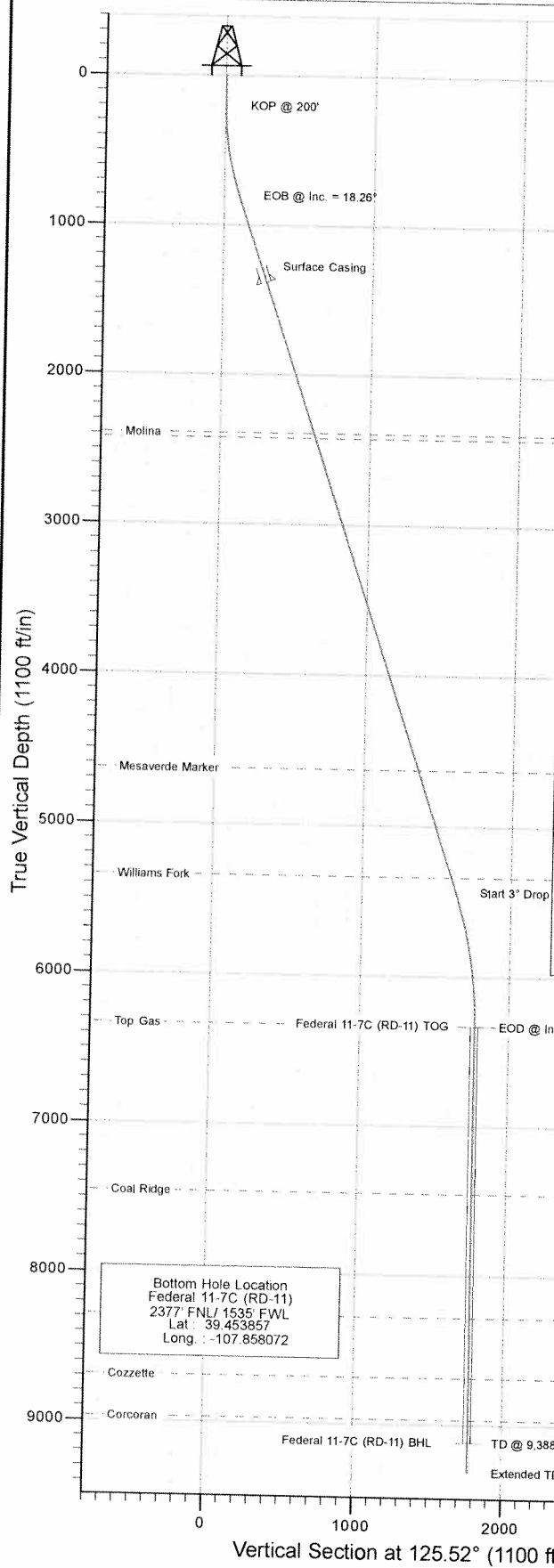
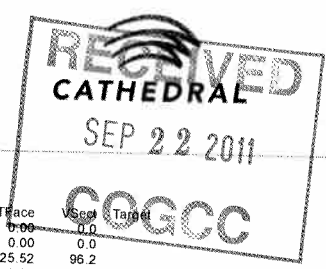
Encana Oil & Gas (USA) Inc. plans to change the MD of the subject well from 9485' to 9588'.

Please find attached a copy of the revised Directional Plan showing the new MD.

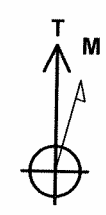
previous approved } WMS FK ILFS



Project: S. Piceance (Parachute)
Site: NWNW S11-T7S-R94W (RD-11)
Well: Federal 11-7C (RD-11)
Wellbore: DD
Design: Plan #3



SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Trace	VSeg
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0
3	808.8	18.26	125.52	798.5	-55.9	78.3	3.00	125.52	96.2
4	5688.3	18.26	125.52	5432.2	-944.3	1322.9	0.00	0.00	1625.4
5	6601.4	0.00	0.00	6330.0	-1028.2	1440.4	2.00	180.00	1769.7
6	9388.4	0.00	0.00	9117.0	-1028.2	1440.4	0.00	0.00	1769.7
7	9488.4	0.00	0.00	9217.0	-1028.2	1440.4	0.00	0.00	1769.7
8	9588.4	0.00	0.00	9317.0	-1028.2	1440.4	0.00	0.00	1769.7

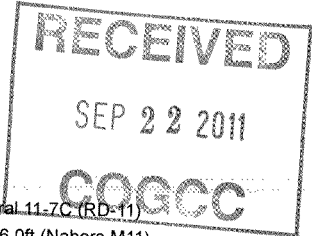


Azimuths to True North
Magnetic North: 10.26°
Magnetic Field
Strength: 52224.9snT
Dip Angle: 65.73°
Date: 8/22/2011
Model: IGRF2010

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2389.0	2483.6	Molina
2420.0	2516.3	Atwell Gulch
4630.0	4843.5	Mesaverde Marker
5339.0	5590.1	Williams Fork
6330.0	6601.4	Top Gas
7452.0	7723.4	Coal Ridge
8282.0	8553.4	Rollins
8687.0	8958.4	Cozzette
8967.0	9238.4	Corcoran

DESIGN DETAILS: Plan #3					
115314, 7558' BH					
KB @ 6406.0ft (Nabors M11)					
Target	Azimuth	Origin	N/S	E/W	From TVD
Federal 11-7C (RD-11) BHL	125.52	Slot	0.0	0.0	0.0

Cathedral Energy Services
Planning Report



Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: S. Piceance (Parachute)
Site: NWNW S11-T7S-R94W (RD-11)
Well: Federal 11-7C (RD-11)
Wellbore: DD
Design: Plan #3

Local Co-ordinate Reference: Well Federal 11-7C (RD-11)
TVD Reference: KB @ 6406.0ft (Nabors M11)
MD Reference: KB @ 6406.0ft (Nabors M11)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	S. Piceance (Parachute), Garfield County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	NWNW S11-T7S-R94W (RD-11)		
Site Position:		Northing:	1,600,170.34 ft
From:	Lat/Long	Easting:	2,333,893.08 ft
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in
		Latitude:	39.457481
		Longitude:	-107.859394
		Grid Convergence:	-1.49 °

Well	Federal 11-7C (RD-11)		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	
			Latitude:
			Longitude:
			Ground Level:

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	8/22/2011	10.26	65.73	52,225

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	125.52

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
808.8	18.26	125.52	798.5	-55.9	78.3	3.00	3.00	0.00	125.52	
5,688.3	18.26	125.52	5,432.2	-944.3	1,322.9	0.00	0.00	0.00	0.00	
6,601.4	0.00	0.00	6,330.0	-1,028.2	1,440.4	2.00	-2.00	0.00	180.00	Federal 11-7C (RD-11)
9,388.4	0.00	0.00	9,117.0	-1,028.2	1,440.4	0.00	0.00	0.00	0.00	Federal 11-7C (RD-11)
9,488.4	0.00	0.00	9,217.0	-1,028.2	1,440.4	0.00	0.00	0.00	0.00	
9,588.4	0.00	0.00	9,317.0	-1,028.2	1,440.4	0.00	0.00	0.00	0.00	

Cathedral Energy Services
Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Federal 11-7C (RD-11)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 6406.0ft (Nabors M11)
Project:	S. Piceance (Parachute)	MD Reference:	KB @ 6406.0ft (Nabors M11)
Site:	NWNW S11-T7S-R94W (RD-11)	North Reference:	True
Well:	Federal 11-7C (RD-11)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

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	3.00	125.52	300.0	-1.5	2.1	2.6	3.00	3.00	KOP @ 200'
400.0	6.00	125.52	399.6	-6.1	8.5	10.5	3.00	3.00	
500.0	9.00	125.52	498.8	-13.7	19.1	23.5	3.00	3.00	
600.0	12.00	125.52	597.1	-24.2	34.0	41.7	3.00	3.00	
700.0	15.00	125.52	694.3	-37.8	53.0	65.1	3.00	3.00	
808.8	18.26	125.52	798.5	-55.9	78.3	96.2	3.00	3.00	EOB @ Inc. = 18.26°
900.0	18.26	125.52	885.1	-72.5	101.6	124.8	0.00	0.00	
1,000.0	18.26	125.52	980.1	-90.7	127.1	156.1	0.00	0.00	
1,100.0	18.26	125.52	1,075.1	-108.9	152.6	187.5	0.00	0.00	
1,200.0	18.26	125.52	1,170.0	-127.1	178.1	218.8	0.00	0.00	
1,300.0	18.26	125.52	1,265.0	-145.3	203.6	250.1	0.00	0.00	
1,400.0	18.26	125.52	1,360.0	-163.5	229.1	281.5	0.00	0.00	
1,422.5	18.26	125.52	1,381.3	-167.6	234.8	288.5	0.00	0.00	Surface Casing
1,500.0	18.26	125.52	1,454.9	-181.8	254.6	312.8	0.00	0.00	
1,600.0	18.26	125.52	1,549.9	-200.0	280.1	344.2	0.00	0.00	
1,700.0	18.26	125.52	1,644.8	-218.2	305.6	375.5	0.00	0.00	
1,800.0	18.26	125.52	1,739.8	-236.4	331.1	406.8	0.00	0.00	
1,900.0	18.26	125.52	1,834.8	-254.6	356.6	438.2	0.00	0.00	
2,000.0	18.26	125.52	1,929.7	-272.8	382.1	469.5	0.00	0.00	
2,100.0	18.26	125.52	2,024.7	-291.0	407.7	500.9	0.00	0.00	
2,200.0	18.26	125.52	2,119.7	-309.2	433.2	532.2	0.00	0.00	
2,300.0	18.26	125.52	2,214.6	-327.4	458.7	563.5	0.00	0.00	
2,400.0	18.26	125.52	2,309.6	-345.6	484.2	594.9	0.00	0.00	
2,483.6	18.26	125.52	2,389.0	-360.8	505.5	621.1	0.00	0.00	Molina
2,500.0	18.26	125.52	2,404.5	-363.8	509.7	626.2	0.00	0.00	
2,516.3	18.26	125.52	2,420.0	-366.8	513.8	631.3	0.00	0.00	Atwell Gulch
2,600.0	18.26	125.52	2,499.5	-382.0	535.2	657.6	0.00	0.00	
2,700.0	18.26	125.52	2,594.5	-400.2	560.7	688.9	0.00	0.00	
2,800.0	18.26	125.52	2,689.4	-418.5	586.2	720.2	0.00	0.00	
2,900.0	18.26	125.52	2,784.4	-436.7	611.7	751.6	0.00	0.00	
3,000.0	18.26	125.52	2,879.4	-454.9	637.2	782.9	0.00	0.00	
3,100.0	18.26	125.52	2,974.3	-473.1	662.7	814.2	0.00	0.00	
3,200.0	18.26	125.52	3,069.3	-491.3	688.2	845.6	0.00	0.00	
3,300.0	18.26	125.52	3,164.2	-509.5	713.7	876.9	0.00	0.00	
3,400.0	18.26	125.52	3,259.2	-527.7	739.2	908.3	0.00	0.00	
3,500.0	18.26	125.52	3,354.2	-545.9	764.7	939.6	0.00	0.00	
3,600.0	18.26	125.52	3,449.1	-564.1	790.2	970.9	0.00	0.00	
3,700.0	18.26	125.52	3,544.1	-582.3	815.8	1,002.3	0.00	0.00	
3,800.0	18.26	125.52	3,639.1	-600.5	841.3	1,033.6	0.00	0.00	
3,900.0	18.26	125.52	3,734.0	-618.7	866.8	1,065.0	0.00	0.00	
4,000.0	18.26	125.52	3,829.0	-636.9	892.3	1,096.3	0.00	0.00	
4,100.0	18.26	125.52	3,924.0	-655.2	917.8	1,127.6	0.00	0.00	
4,200.0	18.26	125.52	4,018.9	-673.4	943.3	1,159.0	0.00	0.00	
4,300.0	18.26	125.52	4,113.9	-691.6	968.8	1,190.3	0.00	0.00	
4,400.0	18.26	125.52	4,208.8	-709.8	994.3	1,221.6	0.00	0.00	
4,500.0	18.26	125.52	4,303.8	-728.0	1,019.8	1,253.0	0.00	0.00	
4,600.0	18.26	125.52	4,398.8	-746.2	1,045.3	1,284.3	0.00	0.00	
4,700.0	18.26	125.52	4,493.7	-764.4	1,070.8	1,315.7	0.00	0.00	
4,800.0	18.26	125.52	4,588.7	-782.6	1,096.3	1,347.0	0.00	0.00	

Cathedral Energy Services
Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Federal 11-7C (RD-11)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 6406.0ft (Nabors M11)
Project:	S. Piceance (Parachute)	MD Reference:	KB @ 6406.0ft (Nabors M11)
Site:	NWNW S11-T7S-R94W (RD-11)	North Reference:	True
Well:	Federal 11-7C (RD-11)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

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
4,843.5	18.26	125.52	4,630.0	-790.5	1,107.4	1,360.6	0.00	0.00	Mesaverde Marker
4,900.0	18.26	125.52	4,683.7	-800.8	1,121.8	1,378.3	0.00	0.00	
5,000.0	18.26	125.52	4,778.6	-819.0	1,147.3	1,409.7	0.00	0.00	
5,100.0	18.26	125.52	4,873.6	-837.2	1,172.8	1,441.0	0.00	0.00	
5,200.0	18.26	125.52	4,968.5	-855.4	1,198.4	1,472.4	0.00	0.00	
5,300.0	18.26	125.52	5,063.5	-873.6	1,223.9	1,503.7	0.00	0.00	
5,400.0	18.26	125.52	5,158.5	-891.9	1,249.4	1,535.0	0.00	0.00	
5,500.0	18.26	125.52	5,253.4	-910.1	1,274.9	1,566.4	0.00	0.00	
5,590.1	18.26	125.52	5,339.0	-926.5	1,297.9	1,594.6	0.00	0.00	
5,600.0	18.26	125.52	5,348.4	-928.3	1,300.4	1,597.7	0.00	0.00	Williams Fork
5,688.3	18.26	125.52	5,432.2	-944.3	1,322.9	1,625.4	0.00	0.00	
5,700.0	18.03	125.52	5,443.4	-946.5	1,325.9	1,629.0	2.00	-2.00	
5,800.0	16.03	125.52	5,539.0	-963.5	1,349.7	1,658.3	2.00	-2.00	Start 3° Drop
5,900.0	14.03	125.52	5,635.5	-978.5	1,370.8	1,684.2	2.00	-2.00	
6,000.0	12.03	125.52	5,733.0	-991.6	1,389.2	1,706.8	2.00	-2.00	
6,100.0	10.03	125.52	5,831.1	-1,002.8	1,404.7	1,725.9	2.00	-2.00	
6,200.0	8.03	125.52	5,929.9	-1,011.9	1,417.5	1,741.6	2.00	-2.00	
6,300.0	6.03	125.52	6,029.1	-1,019.0	1,427.5	1,753.8	2.00	-2.00	
6,400.0	4.03	125.52	6,128.7	-1,024.1	1,434.6	1,762.6	2.00	-2.00	
6,500.0	2.03	125.52	6,228.6	-1,027.1	1,438.9	1,767.9	2.00	-2.00	
6,601.4	0.00	0.00	6,330.0	-1,028.2	1,440.4	1,769.7	2.00	-2.00	
6,700.0	0.00	0.00	6,428.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	EOD @ Inc. = 0° - Top Gas
6,800.0	0.00	0.00	6,528.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
6,900.0	0.00	0.00	6,628.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,000.0	0.00	0.00	6,728.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,100.0	0.00	0.00	6,828.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,200.0	0.00	0.00	6,928.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,300.0	0.00	0.00	7,028.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,400.0	0.00	0.00	7,128.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,500.0	0.00	0.00	7,228.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,600.0	0.00	0.00	7,328.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,700.0	0.00	0.00	7,428.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,723.4	0.00	0.00	7,452.0	-1,028.2	1,440.4	1,769.7	0.00	0.00	
7,800.0	0.00	0.00	7,528.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	Coal Ridge
7,900.0	0.00	0.00	7,628.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,000.0	0.00	0.00	7,728.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,100.0	0.00	0.00	7,828.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,200.0	0.00	0.00	7,928.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,300.0	0.00	0.00	8,028.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,400.0	0.00	0.00	8,128.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,500.0	0.00	0.00	8,228.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,553.4	0.00	0.00	8,282.0	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,600.0	0.00	0.00	8,328.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	Rollins
8,700.0	0.00	0.00	8,428.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,800.0	0.00	0.00	8,528.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,900.0	0.00	0.00	8,628.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
8,958.4	0.00	0.00	8,687.0	-1,028.2	1,440.4	1,769.7	0.00	0.00	
9,000.0	0.00	0.00	8,728.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
9,100.0	0.00	0.00	8,828.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	Cozzette
9,200.0	0.00	0.00	8,928.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
9,238.4	0.00	0.00	8,967.0	-1,028.2	1,440.4	1,769.7	0.00	0.00	
9,300.0	0.00	0.00	9,028.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	Corcoran

Cathedral Energy Services
Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Federal 11-7C (RD-11)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 6406.0ft (Nabors M11)
Project:	S. Piceance (Parachute)	MD Reference:	KB @ 6406.0ft (Nabors M11)
Site:	NWNW S11-T7S-R94W (RD-11)	North Reference:	True
Well:	Federal 11-7C (RD-11)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

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
9,388.4	0.00	0.00	9,117.0	-1,028.2	1,440.4	1,769.7	0.00	0.00	TD @ 9,388' MD
9,400.0	0.00	0.00	9,128.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
9,488.4	0.00	0.00	9,217.0	-1,028.2	1,440.4	1,769.7	0.00	0.00	
9,500.0	0.00	0.00	9,228.6	-1,028.2	1,440.4	1,769.7	0.00	0.00	
9,588.4	0.00	0.00	9,317.0	-1,028.2	1,440.4	1,769.7	0.00	0.00	Extended TD @ 9,588' MD

Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	
- Shape									
Federal 11-7C (RD-11) E		0.00	0.00	9,117.0	-1,028.2	1,440.4	1,599,111.37	2,335,358.95	
- plan hits target center									
- Circle (radius 25.0)									
Federal 11-7C (RD-11) T		0.00	0.00	6,330.0	-1,028.2	1,440.4	1,599,111.37	2,335,358.95	
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,422.5	1,381.3	Surface Casing		0.000	0.000

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,483.6	2,389.0	Molina				
2,516.3	2,420.0	Atwell Gulch		0.00		
4,843.5	4,630.0	Mesaverde Marker		0.00		
5,590.1	5,339.0	Williams Fork				
6,601.4	6,330.0	Top Gas				
7,723.4	7,452.0	Coal Ridge				
8,553.4	8,282.0	Rollins				
8,958.4	8,687.0	Cozzette				
9,238.4	8,967.0	Corcoran				

Cathedral Energy Services
Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Federal 11-7C (RD-11)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 6406.0ft (Nabors M11)
Project:	S. Piceance (Parachute)	MD Reference:	KB @ 6406.0ft (Nabors M11)
Site:	NWNW S11-T7S-R94W (RD-11)	North Reference:	True
Well:	Federal 11-7C (RD-11)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
808.8	798.5	-55.9	78.3	EOB @ Inc. = 18.26°
5,688.3	5,432.2	-944.3	1,322.9	Start 3° Drop
6,601.4	6,330.0	-1,028.2	1,440.4	EOD @ Inc. = 0°
9,388.4	9,117.0	-1,028.2	1,440.4	TD @ 9,388' MD
9,588.4	9,317.0	-1,028.2	1,440.4	Extended TD @ 9,588' MD