

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate
District Office

☒ AS-DRILLED
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-35855		2 Pool Code 98080		3 Pool Name NAGEEZI UNIT; MANCOS	
4 Property Code 315244		5 Property Name NAGEEZI UNIT			6 Well Number 507H
7 OGRID No. 282327		8 Operator Name ENCANA OIL & GAS (USA) INC.			9 Elevation 6748'

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
A	9	23N	9W		260'	NORTH	309'	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
M	33	24N	9W		396'	SOUTH	339'	WEST	SAN JUAN

12 Dedicated Acres PENETRATED SPACING UNIT; SW/SW SEC. 3 (40 AC.), SE/4, SW/NE, SE/NW AND LOTS 3 & 4 SEC. 4 (321.96 AC.), SW/SW SEC 33 (40 AC); 401.96 ACRES TOTAL		13 Joint or Infill		14 Consolidation Code		15 Order No.	
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16

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.

Steven Merrell 09/27/18
Signature Date

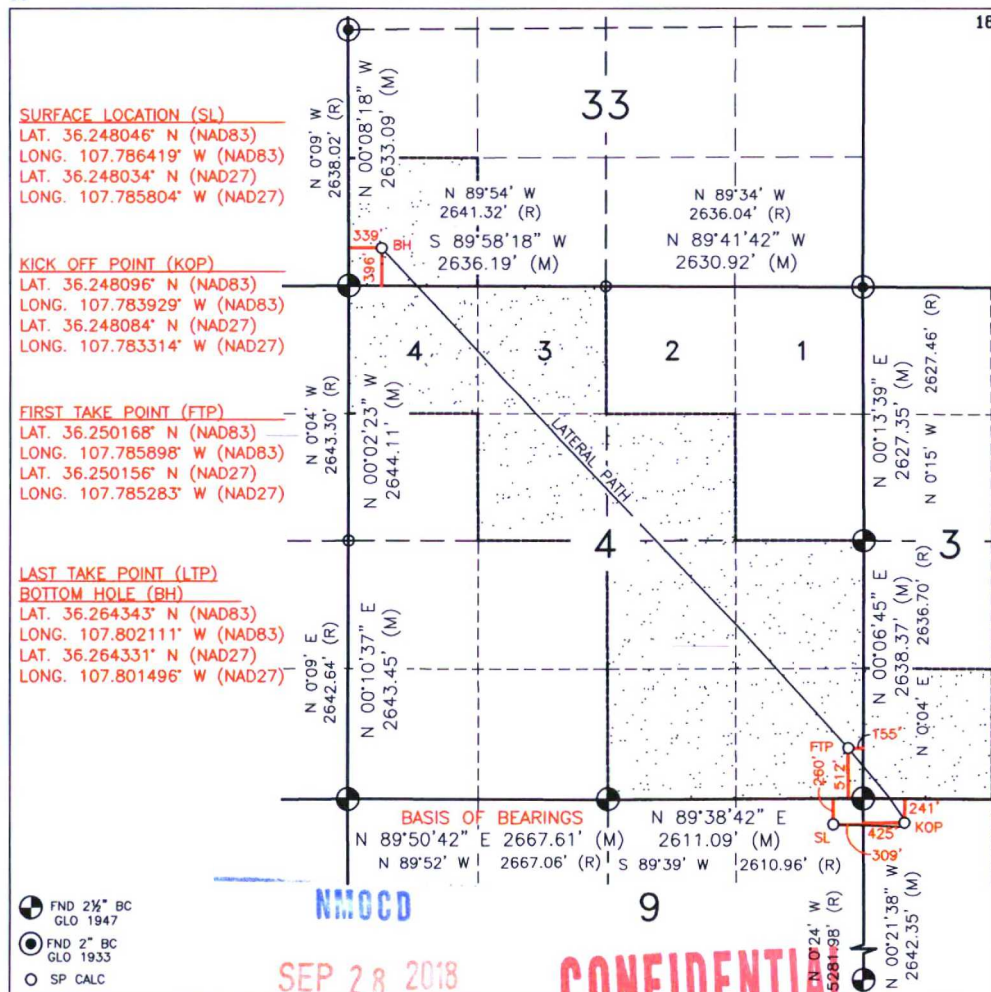
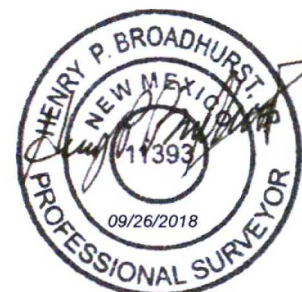
Steven Merrell
Printed Name
Steven.Merrell@encana.com
E-mail Address

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.

SEPTEMBER 11, 2018

Date of Survey
Signature and Seal of Professional Surveyor:



SEP 28 2018

CONFIDENTIAL

DISTRICT III

15



Scientific Drilling

Directional Survey Certification

2948 I-70 Business Loop
Grand Junction, CO 81504
(970)-245-9447 Fax (970)-245-9454

Operator	EnCana
Well Name & No.	Nageezi Unit 507H
County & State	San Juan County, NM
SDI Job No.	OP.0011998
Rig	Aztec 920

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 366 feet to a measured depth of 12,548 feet is true and correct as determined from all available records.


Signature

27-Aug-18
Date

Janie Collins
Colorado District Well Planner
Scientific Drilling International

NMOC
SEP 27 2018
DISTRICT III



Scientific Drilling, Intl
Survey Report



Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: Nageezi Unit
Well: Nageezi Unit 507H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Nageezi Unit 507H
TVD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
MD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

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	Nageezi Unit				
Site Position:		Northing:	1,909,590.56 usft	Latitude:	36.2480460
From:	Lat/Long	Easting:	2,736,924.75 usft	Longitude:	-107.7864190
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.03 °

Well	Nageezi Unit 507H					
Well Position	+N/-S	0.00 ft	Northing:	1,909,590.56 usft	Latitude:	36.2480460
	+E/-W	0.00 ft	Easting:	2,736,924.75 usft	Longitude:	-107.7864190
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	6,748.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/19/2018	8.97	62.80	49,556

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	321.98	

Survey Program	Date 8/27/2018				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
366.00	4,157.00	Survey #1 - Surface MWD Survey (OH)	MWD+HDGM	OWSG MWD + HDGM	
4,189.00	5,448.00	Survey #2 - Curve MWD Survey (OH)	MWD+HDGM	OWSG MWD + HDGM	
5,511.00	12,548.00	Survey #3 - Lateral MWD Survey (OH)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
366.00	0.78	321.78	365.99	1.96	-1.54	2.49	0.21	0.21	0.00	
428.00	0.76	325.21	427.98	2.63	-2.04	3.32	0.08	-0.03	5.53	
489.00	0.27	73.76	488.98	3.00	-2.13	3.67	1.45	-0.80	177.95	
548.00	1.83	88.20	547.97	3.07	-1.05	3.07	2.66	2.64	24.47	
610.00	2.86	86.44	609.92	3.19	1.48	1.61	1.67	1.66	-2.84	
671.00	4.41	86.31	670.79	3.44	5.34	-0.58	2.54	2.54	-0.21	
732.00	5.59	91.42	731.56	3.52	10.65	-3.79	2.07	1.93	8.38	
793.00	7.01	94.71	792.19	3.14	17.33	-8.20	2.40	2.33	5.39	



Scientific Drilling, Intl
Survey Report



Company: EnCana Oil & Gas (USA) Inc
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Well: Nageezi Unit 507H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Nageezi Unit 507H
TVD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
MD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
854.00	8.03	93.12	852.66	2.60	25.29	-13.53	1.71	1.67	-2.61
914.00	8.91	92.78	912.01	2.15	34.12	-19.32	1.47	1.47	-0.57
975.00	10.28	92.99	972.15	1.63	44.27	-25.98	2.25	2.25	0.34
1,036.00	11.58	93.07	1,032.05	1.02	55.82	-33.58	2.13	2.13	0.13
1,097.00	12.50	92.42	1,091.70	0.42	68.53	-41.88	1.52	1.51	-1.07
1,158.00	12.47	91.45	1,151.26	-0.03	81.71	-50.35	0.35	-0.05	-1.59
1,219.00	12.43	91.63	1,210.83	-0.38	94.86	-58.73	0.09	-0.07	0.30
1,280.00	13.04	90.99	1,270.33	-0.69	108.30	-67.25	1.03	1.00	-1.05
1,340.00	13.01	90.56	1,328.78	-0.87	121.82	-75.72	0.17	-0.05	-0.72
1,402.00	13.19	92.96	1,389.17	-1.31	135.87	-84.71	0.92	0.29	3.87
1,463.00	13.02	91.34	1,448.58	-1.83	149.68	-93.63	0.66	-0.28	-2.66
1,523.00	12.15	90.66	1,507.14	-2.06	162.76	-101.87	1.47	-1.45	-1.13
1,584.00	13.09	92.15	1,566.66	-2.39	176.08	-110.34	1.63	1.54	2.44
1,645.00	13.64	93.22	1,626.01	-3.05	190.16	-119.53	0.99	0.90	1.75
1,706.00	13.82	91.79	1,685.27	-3.68	204.63	-128.94	0.63	0.30	-2.34
1,767.00	13.87	91.36	1,744.50	-4.09	219.22	-138.24	0.19	0.08	-0.70
1,827.00	14.13	90.91	1,802.72	-4.37	233.73	-147.41	0.47	0.43	-0.75
1,888.00	13.98	91.67	1,861.89	-4.71	248.54	-156.79	0.39	-0.25	1.25
1,948.00	13.99	92.29	1,920.11	-5.21	263.03	-166.11	0.25	0.02	1.03
2,009.00	14.10	92.37	1,979.29	-5.81	277.82	-175.70	0.18	0.18	0.13
2,070.00	14.13	91.19	2,038.45	-6.27	292.69	-185.22	0.47	0.05	-1.93
2,131.00	13.64	93.26	2,097.66	-6.83	307.31	-194.67	1.14	-0.80	3.39
2,192.00	13.47	95.79	2,156.96	-7.96	321.56	-204.33	1.01	-0.28	4.15
2,252.00	12.60	95.19	2,215.42	-9.26	335.03	-213.65	1.47	-1.45	-1.00
2,312.00	12.75	94.96	2,273.96	-10.42	348.15	-222.65	0.26	0.25	-0.38
2,372.00	12.45	93.99	2,332.51	-11.44	361.20	-231.49	0.61	-0.50	-1.62
2,433.00	12.13	92.96	2,392.11	-12.23	374.16	-240.09	0.64	-0.52	-1.69
2,495.00	12.25	92.36	2,452.72	-12.84	387.23	-248.63	0.28	0.19	-0.97
2,556.00	12.28	92.91	2,512.32	-13.43	400.18	-257.07	0.20	0.05	0.90
2,617.00	11.91	93.15	2,571.97	-14.11	412.94	-265.46	0.61	-0.61	0.39
2,678.00	10.98	91.76	2,631.76	-14.63	425.03	-273.32	1.59	-1.52	-2.28
2,739.00	11.79	91.39	2,691.55	-14.96	437.07	-281.00	1.33	1.33	-0.61
2,799.00	11.78	92.92	2,750.29	-15.42	449.31	-288.90	0.52	-0.02	2.55
2,861.00	11.37	93.36	2,811.03	-16.11	461.74	-297.09	0.68	-0.66	0.71
2,921.00	12.49	92.50	2,869.73	-16.73	474.12	-305.21	1.89	1.87	-1.43
2,982.00	13.03	90.67	2,929.23	-17.10	487.59	-313.80	1.11	0.89	-3.00
3,043.00	13.05	90.92	2,988.65	-17.29	501.35	-322.42	0.10	0.03	0.41
3,104.00	12.77	90.52	3,048.11	-17.47	514.98	-330.95	0.48	-0.46	-0.66
3,164.00	12.92	90.57	3,106.61	-17.59	528.32	-339.27	0.25	0.25	0.08
3,225.00	12.88	90.34	3,166.07	-17.70	541.93	-347.74	0.11	-0.07	-0.38
3,286.00	12.31	90.17	3,225.60	-17.76	555.24	-355.98	0.94	-0.93	-0.28
3,347.00	12.75	90.13	3,285.15	-17.80	568.47	-364.16	0.72	0.72	-0.07
3,409.00	12.59	91.26	3,345.64	-17.96	582.07	-372.66	0.48	-0.26	1.82



Scientific Drilling, Intl
Survey Report



Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: Nageezi Unit
Well: Nageezi Unit 507H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Nageezi Unit 507H
TVD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
MD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,470.00	12.77	92.07	3,405.15	-18.35	595.45	-381.22	0.41	0.30	1.33
3,531.00	12.86	92.13	3,464.63	-18.84	608.97	-389.93	0.15	0.15	0.10
3,593.00	12.05	92.39	3,525.17	-19.37	622.33	-398.58	1.31	-1.31	0.42
3,653.00	12.38	90.31	3,583.81	-19.67	635.02	-406.63	0.92	0.55	-3.47
3,713.00	13.20	89.50	3,642.32	-19.64	648.30	-414.79	1.40	1.37	-1.35
3,777.00	13.33	93.26	3,704.62	-20.00	662.98	-424.11	1.36	0.20	5.88
3,840.00	12.67	95.78	3,766.00	-21.11	677.10	-433.68	1.38	-1.05	4.00
3,881.00	11.84	94.65	3,806.07	-21.90	685.77	-439.64	2.11	-2.02	-2.76
3,911.00	11.81	88.49	3,835.43	-22.07	691.91	-443.56	4.21	-0.10	-20.53
3,942.00	12.52	81.23	3,865.74	-21.47	698.40	-447.09	5.44	2.29	-23.42
3,973.00	12.98	73.10	3,895.98	-19.95	705.05	-449.98	5.97	1.48	-26.23
4,003.00	13.24	64.04	3,925.20	-17.47	711.36	-451.91	6.90	0.87	-30.20
4,033.00	13.35	54.49	3,954.40	-13.95	717.27	-452.78	7.32	0.37	-31.83
4,063.00	13.86	43.38	3,983.56	-9.32	722.56	-452.40	8.86	1.70	-37.03
4,094.00	14.40	34.73	4,013.63	-3.46	727.31	-450.70	7.02	1.74	-27.90
4,125.00	14.82	23.60	4,043.63	3.34	731.09	-447.67	9.14	1.35	-35.90
4,157.00	14.83	11.85	4,074.57	11.10	733.57	-443.09	9.38	0.03	-36.72
4,189.00	15.20	1.48	4,105.48	19.31	734.52	-437.21	8.46	1.16	-32.41
4,221.00	15.31	349.35	4,136.37	27.66	733.85	-430.22	9.96	0.34	-37.91
4,252.00	16.89	348.05	4,166.15	36.08	732.16	-422.54	5.23	5.10	-4.19
4,284.00	17.34	342.43	4,196.73	45.18	729.76	-413.89	5.35	1.41	-17.56
4,315.00	18.69	338.18	4,226.21	54.19	726.52	-404.79	6.08	4.35	-13.71
4,347.00	20.86	335.17	4,256.33	64.13	722.22	-394.32	7.49	6.78	-9.41
4,378.00	23.07	331.97	4,285.08	74.50	717.05	-382.96	8.11	7.13	-10.32
4,409.00	25.17	331.42	4,313.37	85.65	711.04	-370.48	6.81	6.77	-1.77
4,441.00	27.11	330.27	4,342.09	97.96	704.16	-356.55	6.27	6.06	-3.59
4,473.00	28.82	328.89	4,370.36	110.90	696.56	-341.68	5.71	5.34	-4.31
4,505.00	30.60	327.68	4,398.15	124.38	688.22	-325.91	5.87	5.56	-3.78
4,536.00	32.68	326.96	4,424.54	138.07	679.44	-309.72	6.82	6.71	-2.32
4,568.00	34.58	326.17	4,451.18	152.85	669.67	-292.06	6.09	5.94	-2.47
4,600.00	36.10	324.82	4,477.29	168.10	659.19	-273.58	5.34	4.75	-4.22
4,631.00	37.83	323.46	4,502.05	183.21	648.26	-254.96	6.17	5.58	-4.39
4,663.00	39.48	322.25	4,527.04	199.14	636.19	-234.97	5.67	5.16	-3.78
4,694.00	40.88	320.70	4,550.73	214.78	623.73	-214.98	5.55	4.52	-5.00
4,725.00	42.65	319.37	4,573.85	230.60	610.47	-194.34	6.38	5.71	-4.29
4,757.00	45.22	319.35	4,596.89	247.45	596.01	-172.16	8.03	8.03	-0.06
4,788.00	47.04	320.22	4,618.37	264.52	581.58	-149.83	6.21	5.87	2.81
4,820.00	49.26	321.13	4,639.72	282.96	566.48	-126.00	7.25	6.94	2.84
4,851.00	51.69	321.29	4,659.45	301.59	551.50	-102.10	7.85	7.84	0.52
4,883.00	54.19	320.23	4,678.73	321.37	535.35	-76.57	8.25	7.81	-3.31
4,915.00	56.99	319.55	4,696.82	341.55	518.34	-50.19	8.92	8.75	-2.13
4,946.00	58.96	318.91	4,713.25	361.46	501.17	-23.94	6.59	6.35	-2.06
4,978.00	61.48	318.55	4,729.15	382.33	482.85	3.79	7.94	7.88	-1.13



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Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,010.00	63.28	318.41	4,743.98	403.56	464.06	32.09	5.64	5.63	-0.44
5,041.00	65.27	318.88	4,757.44	424.52	445.61	59.97	6.56	6.42	1.52
5,056.00	65.92	319.01	4,763.63	434.82	436.64	73.61	4.40	4.33	0.87
5,132.00	68.19	319.44	4,793.26	487.82	390.93	143.51	3.03	2.99	0.57
5,164.00	68.57	319.13	4,805.05	510.37	371.53	173.22	1.49	1.19	-0.97
5,196.00	72.00	318.35	4,815.84	533.01	351.66	203.30	10.96	10.72	-2.44
5,227.00	74.93	317.75	4,824.67	555.10	331.80	232.94	9.63	9.45	-1.94
5,259.00	78.07	319.21	4,832.14	578.40	311.18	263.99	10.77	9.81	4.56
5,290.00	80.04	320.28	4,838.02	601.63	291.51	294.40	7.20	6.35	3.45
5,322.00	82.36	320.76	4,842.92	626.03	271.41	326.02	7.40	7.25	1.50
5,353.00	83.58	321.21	4,846.71	649.94	252.04	356.78	4.19	3.94	1.45
5,385.00	85.73	321.58	4,849.69	674.84	232.16	388.63	6.82	6.72	1.16
5,416.00	88.05	321.49	4,851.37	699.07	212.91	419.59	7.49	7.48	-0.29
5,448.00	88.79	321.48	4,852.26	724.10	192.99	451.57	2.31	2.31	-0.03
5,511.00	88.79	320.98	4,853.59	773.21	153.55	514.55	0.79	0.00	-0.79
5,575.00	88.79	320.76	4,854.94	822.84	113.17	578.53	0.34	0.00	-0.34
5,638.00	88.39	320.26	4,856.49	871.45	73.12	641.49	1.02	-0.63	-0.79
5,702.00	88.83	318.62	4,858.04	920.05	31.51	705.40	2.65	0.69	-2.56
5,765.00	87.35	318.24	4,860.14	967.16	-10.26	768.24	2.43	-2.35	-0.60
5,828.00	87.18	319.14	4,863.15	1,014.43	-51.80	831.07	1.45	-0.27	1.43
5,891.00	87.01	318.35	4,866.34	1,061.73	-93.29	893.89	1.28	-0.27	-1.25
5,954.00	87.21	317.46	4,869.52	1,108.41	-135.47	956.65	1.45	0.32	-1.41
6,017.00	87.99	317.04	4,872.15	1,154.64	-178.20	1,019.38	1.41	1.24	-0.67
6,080.00	88.62	317.01	4,874.02	1,200.71	-221.13	1,082.11	1.00	1.00	-0.05
6,144.00	88.42	317.30	4,875.67	1,247.62	-264.63	1,145.87	0.55	-0.31	0.45
6,208.00	89.09	317.55	4,877.06	1,294.74	-307.92	1,209.65	1.12	1.05	0.39
6,271.00	88.89	318.11	4,878.17	1,341.42	-350.21	1,272.47	0.94	-0.32	0.89
6,335.00	89.36	317.85	4,879.15	1,388.96	-393.04	1,336.31	0.84	0.73	-0.41
6,398.00	90.34	317.23	4,879.31	1,435.44	-435.57	1,399.12	1.84	1.56	-0.98
6,461.00	91.78	316.95	4,878.15	1,481.57	-478.46	1,461.88	2.33	2.29	-0.44
6,524.00	92.01	317.28	4,876.07	1,527.71	-521.31	1,524.62	0.64	0.37	0.52
6,587.00	92.15	316.43	4,873.78	1,573.64	-564.36	1,587.32	1.37	0.22	-1.35
6,650.00	92.05	316.57	4,871.47	1,619.31	-607.70	1,649.99	0.27	-0.16	0.22
6,714.00	91.51	316.79	4,869.48	1,665.85	-651.59	1,713.69	0.91	-0.84	0.34
6,776.00	92.21	316.28	4,867.47	1,710.83	-694.21	1,775.37	1.40	1.13	-0.82
6,839.00	91.95	316.35	4,865.18	1,756.36	-737.70	1,838.02	0.43	-0.41	0.11
6,903.00	89.90	316.03	4,864.15	1,802.53	-781.99	1,901.69	3.24	-3.20	-0.50
6,966.00	90.03	315.94	4,864.19	1,847.84	-825.77	1,964.34	0.25	0.21	-0.14
7,029.00	90.91	315.72	4,863.67	1,893.03	-869.67	2,026.98	1.44	1.40	-0.35
7,094.00	90.54	315.09	4,862.85	1,939.31	-915.30	2,091.54	1.12	-0.57	-0.97
7,157.00	92.62	315.70	4,861.11	1,984.14	-959.52	2,154.10	3.44	3.30	0.97
7,220.00	91.78	316.14	4,858.69	2,029.36	-1,003.31	2,216.70	1.50	-1.33	0.70
7,283.00	90.57	316.94	4,857.40	2,075.08	-1,046.64	2,279.40	2.30	-1.92	1.27
7,346.00	90.27	316.62	4,856.94	2,120.99	-1,089.78	2,342.14	0.70	-0.48	-0.51



Scientific Drilling, Intl
Survey Report



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Project: San Juan County, NM
Site: Nageezi Unit
Well: Nageezi Unit 507H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Nageezi Unit 507H
TVD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
MD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,409.00	89.56	315.66	4,857.03	2,166.42	-1,133.43	2,404.81	1.90	-1.13	-1.52
7,472.00	91.11	317.01	4,856.67	2,211.99	-1,176.92	2,467.50	3.26	2.46	2.14
7,535.00	91.31	318.40	4,855.33	2,258.57	-1,219.31	2,530.31	2.23	0.32	2.21
7,599.00	92.05	318.32	4,853.46	2,306.38	-1,261.82	2,594.16	1.16	1.16	-0.13
7,661.00	91.68	318.19	4,851.44	2,352.62	-1,303.07	2,655.99	0.63	-0.60	-0.21
7,725.00	92.31	317.66	4,849.21	2,400.09	-1,345.93	2,719.79	1.29	0.98	-0.83
7,788.00	92.28	316.72	4,846.69	2,446.27	-1,388.71	2,782.52	1.49	-0.05	-1.49
7,851.00	91.14	316.03	4,844.81	2,491.86	-1,432.16	2,845.19	2.11	-1.81	-1.10
7,912.00	91.31	316.24	4,843.51	2,535.83	-1,474.42	2,905.86	0.44	0.28	0.34
7,973.00	89.77	316.52	4,842.93	2,579.98	-1,516.50	2,966.57	2.57	-2.52	0.46
8,033.00	89.50	316.34	4,843.31	2,623.45	-1,557.85	3,026.28	0.54	-0.45	-0.30
8,094.00	88.79	315.71	4,844.22	2,667.35	-1,600.20	3,086.95	1.56	-1.16	-1.03
8,155.00	88.66	315.59	4,845.58	2,710.95	-1,642.83	3,147.56	0.29	-0.21	-0.20
8,216.00	88.93	316.78	4,846.86	2,754.96	-1,685.05	3,208.23	2.00	0.44	1.95
8,277.00	89.46	317.94	4,847.72	2,799.83	-1,726.37	3,269.03	2.09	0.87	1.90
8,337.00	89.56	317.77	4,848.23	2,844.31	-1,766.63	3,328.87	0.33	0.17	-0.28
8,398.00	89.23	317.41	4,848.88	2,889.35	-1,807.77	3,389.69	0.80	-0.54	-0.59
8,459.00	88.32	316.96	4,850.18	2,934.09	-1,849.21	3,450.46	1.66	-1.49	-0.74
8,521.00	87.85	316.61	4,852.25	2,979.25	-1,891.64	3,512.17	0.94	-0.76	-0.56
8,582.00	88.89	316.53	4,853.99	3,023.53	-1,933.56	3,572.87	1.71	1.70	-0.13
8,641.00	89.36	316.89	4,854.89	3,066.47	-1,974.01	3,631.62	1.00	0.80	0.61
8,702.00	88.89	316.60	4,855.82	3,110.89	-2,015.81	3,692.35	0.91	-0.77	-0.48
8,763.00	89.33	317.36	4,856.77	3,155.48	-2,057.42	3,753.11	1.44	0.72	1.25
8,824.00	89.43	317.42	4,857.43	3,200.37	-2,098.71	3,813.91	0.19	0.16	0.10
8,886.00	88.93	317.15	4,858.32	3,245.92	-2,140.77	3,875.70	0.92	-0.81	-0.44
8,946.00	88.69	316.74	4,859.56	3,289.75	-2,181.72	3,935.46	0.79	-0.40	-0.68
9,008.00	89.66	316.99	4,860.46	3,334.99	-2,224.11	3,997.20	1.62	1.56	0.40
9,068.00	89.66	317.01	4,860.81	3,378.87	-2,265.03	4,056.97	0.03	0.00	0.03
9,129.00	89.46	316.98	4,861.28	3,423.48	-2,306.63	4,117.74	0.33	-0.33	-0.05
9,190.00	89.40	316.51	4,861.89	3,467.90	-2,348.43	4,178.48	0.78	-0.10	-0.77
9,251.00	89.83	317.36	4,862.30	3,512.47	-2,390.08	4,239.25	1.56	0.70	1.39
9,311.00	89.33	316.42	4,862.74	3,556.27	-2,431.08	4,299.01	1.77	-0.83	-1.57
9,373.00	88.29	315.25	4,864.02	3,600.73	-2,474.27	4,360.63	2.52	-1.68	-1.89
9,434.00	88.86	315.52	4,865.54	3,644.14	-2,517.10	4,421.21	1.03	0.93	0.44
9,494.00	88.63	316.06	4,866.85	3,687.14	-2,558.92	4,480.85	0.98	-0.38	0.90
9,555.00	89.56	316.71	4,867.82	3,731.30	-2,601.00	4,541.55	1.86	1.52	1.07
9,615.00	89.77	317.40	4,868.17	3,775.22	-2,641.87	4,601.33	1.20	0.35	1.15
9,675.00	89.83	317.39	4,868.38	3,819.38	-2,682.49	4,661.13	0.10	0.10	-0.02
9,736.00	89.03	316.91	4,868.99	3,864.10	-2,723.97	4,721.91	1.53	-1.31	-0.79
9,798.00	89.63	317.97	4,869.71	3,909.76	-2,765.90	4,783.71	1.96	0.97	1.71
9,859.00	89.26	319.01	4,870.30	3,955.44	-2,806.33	4,844.60	1.81	-0.61	1.70
9,919.00	89.16	318.97	4,871.13	4,000.71	-2,845.70	4,904.51	0.18	-0.17	-0.07
9,979.00	88.96	318.84	4,872.11	4,045.92	-2,885.13	4,964.41	0.40	-0.33	-0.22



Scientific Drilling, Intl
Survey Report



Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: Nageezi Unit
Well: Nageezi Unit 507H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Nageezi Unit 507H
TVD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
MD Reference: GL 6748' & RKB 14' @ 6762.00ft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,040.00	88.66	318.44	4,873.38	4,091.69	-2,925.43	5,025.30	0.82	-0.49	-0.66
10,100.00	89.40	317.91	4,874.40	4,136.40	-2,965.43	5,085.16	1.52	1.23	-0.88
10,160.00	89.30	317.44	4,875.08	4,180.76	-3,005.83	5,144.98	0.80	-0.17	-0.78
10,222.00	89.97	317.61	4,875.47	4,226.48	-3,047.70	5,206.79	1.11	1.08	0.27
10,284.00	90.34	317.87	4,875.30	4,272.37	-3,089.39	5,268.62	0.73	0.60	0.42
10,344.00	89.63	317.75	4,875.32	4,316.82	-3,129.69	5,328.46	1.20	-1.18	-0.20
10,405.00	89.50	317.52	4,875.78	4,361.89	-3,170.79	5,389.29	0.43	-0.21	-0.38
10,467.00	89.16	317.26	4,876.51	4,407.52	-3,212.76	5,451.08	0.69	-0.55	-0.42
10,527.00	89.08	317.28	4,877.43	4,451.59	-3,253.47	5,510.87	0.14	-0.13	0.03
10,588.00	89.60	317.59	4,878.13	4,496.51	-3,294.73	5,571.68	0.99	0.85	0.51
10,649.00	90.57	318.02	4,878.04	4,541.71	-3,335.70	5,632.52	1.74	1.59	0.70
10,709.00	89.53	318.34	4,877.99	4,586.42	-3,375.71	5,692.38	1.81	-1.73	0.53
10,770.00	88.83	319.13	4,878.86	4,632.27	-3,415.93	5,753.28	1.73	-1.15	1.30
10,831.00	88.52	319.06	4,880.27	4,678.36	-3,455.87	5,814.18	0.52	-0.51	-0.11
10,891.00	88.19	319.08	4,881.99	4,723.67	-3,495.16	5,874.08	0.55	-0.55	0.03
10,952.00	86.91	316.65	4,884.60	4,768.86	-3,536.04	5,934.86	4.50	-2.10	-3.98
11,013.00	88.19	316.03	4,887.21	4,812.95	-3,578.11	5,995.51	2.33	2.10	-1.02
11,074.00	89.83	316.00	4,888.26	4,856.83	-3,620.47	6,056.17	2.69	2.69	-0.05
11,136.00	91.27	316.01	4,887.67	4,901.43	-3,663.53	6,117.83	2.32	2.32	0.02
11,197.00	91.47	316.28	4,886.21	4,945.40	-3,705.78	6,178.49	0.55	0.33	0.44
11,259.00	90.91	316.31	4,884.92	4,990.21	-3,748.61	6,240.18	0.90	-0.90	0.05
11,320.00	89.46	313.86	4,884.73	5,033.41	-3,791.67	6,300.73	4.67	-2.38	-4.02
11,380.00	89.73	313.80	4,885.15	5,074.96	-3,834.96	6,360.12	0.46	0.45	-0.10
11,441.00	90.57	314.50	4,884.99	5,117.45	-3,878.73	6,420.55	1.79	1.38	1.15
11,502.00	89.56	315.53	4,884.92	5,160.59	-3,921.85	6,481.10	2.36	-1.66	1.69
11,564.00	90.37	316.83	4,884.96	5,205.32	-3,964.77	6,542.78	2.47	1.31	2.10
11,625.00	89.60	316.15	4,884.97	5,249.56	-4,006.77	6,603.50	1.68	-1.26	-1.11
11,686.00	90.13	316.25	4,885.12	5,293.59	-4,048.99	6,664.19	0.88	0.87	0.16
11,747.00	90.81	317.14	4,884.62	5,337.98	-4,090.83	6,724.93	1.84	1.11	1.46
11,808.00	91.31	316.38	4,883.49	5,382.41	-4,132.61	6,785.66	1.49	0.82	-1.25
11,871.00	93.22	317.64	4,881.00	5,428.45	-4,175.53	6,848.37	3.63	3.03	2.00
11,935.00	92.65	318.42	4,877.72	5,475.97	-4,218.27	6,912.14	1.51	-0.89	1.22
11,998.00	90.67	319.61	4,875.90	5,523.51	-4,259.57	6,975.02	3.67	-3.14	1.89
12,061.00	89.30	318.55	4,875.91	5,571.11	-4,300.84	7,037.94	2.75	-2.17	-1.68
12,124.00	89.40	319.24	4,876.63	5,618.58	-4,342.25	7,100.84	1.11	0.16	1.10
12,187.00	89.43	318.64	4,877.27	5,666.08	-4,383.63	7,163.75	0.95	0.05	-0.95
12,250.00	90.03	318.91	4,877.57	5,713.46	-4,425.15	7,226.65	1.04	0.95	0.43
12,313.00	88.93	317.23	4,878.14	5,760.33	-4,467.24	7,289.50	3.19	-1.75	-2.67
12,376.00	88.99	316.79	4,879.28	5,806.40	-4,510.19	7,352.25	0.70	0.10	-0.70
12,439.00	88.56	316.89	4,880.63	5,852.35	-4,553.28	7,414.98	0.70	-0.68	0.16
12,490.00	88.09	316.21	4,882.12	5,889.35	-4,588.34	7,465.73	1.62	-0.92	-1.33
12,548.00	88.09	316.21	4,884.06	5,931.20	-4,628.45	7,523.41	0.00	0.00	0.00



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Checked By: _____	Approved By: _____	Date: _____
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