Edith Chin
Senior Manager, Upstream
Regulatory Strategy
Regulatory Affairs

Tel 416 495 5499
Edith.Chin@enbridge.com

Enbridge Gas Distribution
500 Consumers Road
North York, Ontario M2J 1P8
Canada

VIA RESS, EMAIL AND COURIER

November 6, 2015

Ms. Kirsten Walli
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 26th Floor
Toronto, ON M4P 1E4

Re: Enbridge Gas Distribution Inc. ("Enbridge")
Ontario Energy Board ("Board") File No.: EB-2015-0303
Application to Drill Wells in a Designated Storage Area

On November 6, 2015, Enbridge Gas Distribution Inc. ("Enbridge") applied to the Ministry of Natural Resources and Forestry ("MNRF") for permission to drill a well within the Corunna Designated Storage Area. Pursuant to section 40 of the Ontario Energy Board Act, 1998, S.O. 1998 c.15, Schedule B, the Minister of Natural Resources is obligated to refer the application for the granting of a licence related to a well in a designated storage area to the Ontario Energy Board for a report.

The proposed well is being drilled to replace deliverability lost due to the abandonment of two wells and the conversion of one injection well to an observation well. Details can be found in Enbridge's letter to the MNRF.

Enclosed please find the drilling applications filed by Enbridge with the MNRF.

For further information about the project, please visit the Other Regulatory Proceedings tab on the Enbridge website at: www.enbridgegas.com/ratecase.

Please contact the undersigned if you have any questions.

Sincerely,

(Original Signed)

Edith Chin
Senior Manager, Upstream Regulatory Strategy

Encl.

Gas Storage Operations
3595 Tecumseh Road
Mooretown, ON N0N 1M0
(519) 862-1473
(519) 862-1168 Fax

ENBRIDGE

November 6, 2015

Ministry of Natural Resources and Forestry
Petroleum Operations Section
659 Exeter Road
London, Ontario
N6E 1L3

Attention: Mr. Jug Manocha, Operations Engineer

Subject: Submittal of Drilling Application for:
TC 9H (Horiz.#1) Moore 4-20-X

Enclosed, please find the drilling application for a proposed gas storage well to be located in the Corunna Designated Storage Area. The application includes two copies of the Form 1, two copies of the Wellsite Survey, two copies of the Drilling Program and a cheque for the well application fee. It is our hope to start the drilling of the wells by April 1st, 2016. The Risk Assessment has been initiated and will be submitted to your office for confidential review. We would be pleased to meet with you to review or clarify any portion of the applications.

The proposed well is being drilled to replace deliverability lost due to the abandonment of two wells and the conversion of one injection well to an observation well. The two wells, TC 4 and TC 6, were abandoned in 2015 and 2011, respectively. TC 4 was an observation well that did not provide accurate data with respect to reef pressure during injection and withdrawal operations, the well was positioned in a poorer part of the reef and the observation well pressure always lagged behind the reef pressure by a few days. It was decided to abandon the TC 4 well and convert the TC 3 well to an observation well, removing the ability to use the TC 3 well as an injection well. The TC 6 well was abandoned in 2011 as it could not be repaired to meet the CSA Z341 Standard. By abandoning TC 6 and converting TC 3 to an observation well, approximately 23% of the deliverability of the Corunna Pool was lost, driving the need to replace the lost deliverability with a new well.

If approved, the TC 9H well will be drilled in Lot 20, Concession 10 on property owned by Mr. Richard Wellington. The well location was chosen based on 1.) Geological; 2.) Drilling operations concerns; and 3.) Minimal drainage disruption for the land, as follows:

1. Based on our past drilling experience, it has been found that to allow for the optimal placement of the production (219mm) casing, drilling must occur on the reef crest as opposed to landing the casing on the slope of the reef. There is a higher degree of uncertainty when picking the 219mm casing point, as the geology is extremely complicated off the crest of the reef and the formations – A-1 Carbonate, A-2 Anhydrite and Guelph – can interfinger further complicating the casing pick. Drilling on the crest of the Corunna reef allows the 219mm casing to be placed in the thickest part of the A-2

Anhydrite and at the point where the vertical section of the reef is at its maximum thickness.

2. Drilling on the reef crest is especially important in the Corunna reef as it is smaller in vertical section than normal and we need as much vertical section as possible to land the horizontal portion of the well in our target zone of -480m subsea. The more vertical section that we can utilize the smaller the dog legs in the build section and the lower the probability of drilling complications – such as becoming stuck in the hole or twisting off the drill string.

3. The proposed well is located at the end of an existing laneway. The field drainage tiles were previously re-located and re-routed around the driveway to allow proper drainage. Enbridge is continuing discussion with the landowner to understand if there are other potential issues which need to be addressed.

Enbridge has positioned the proposed well in a location that provides minimal disruption for the field tile drainage pattern, but still ensures that the well will be drilled in the most optimum location geologically and operationally. The well will be located approximately 21m from the Enbridge gathering line and as such, the drilling pad will be located over the pipeline – for the duration of the drilling activities, the pipeline pressure will be reduced to 0 psi and will be taken out of service.

An Environmental Screening has also been initiated and will be submitted to the Ontario Energy Board (OEB) and the MNRF upon completion, targeted by the end of this month.

It is our understanding that the drilling application will be forwarded to the OEB by your office and we are requesting your earliest attention to this application. For your information, Enbridge has also submitted a package containing the drilling applications to the OEB.

If any further information is required please contact the undersigned at 519-862-6025 or Kathy McConnell at 519-862-6032.

Yours truly,

Brian Black, P.Eng.
Director, Gas Storage Operations
3595 Tecumseh Road
Mooretown, Ontario
N0N 1M0

Enclosures

Oil, Gas and Salt Resources Act

Application for a Well Licence

Form 1 — To the Minister of Natural Resources — v.2013-10-04

The undersigned operator applies for a well licence under the Oil, Gas and Salt Resources Act and the Regulations thereunder and submits the following information, together with the application fee of $100 + 13% HST. Make cheques payable to "Minister of Finance".

1. WELL NAME TC 9H (HORIZ#1) Moore 4-2-10 — Target Formation: Guelph

Purpose of Proposed Well (Well Type): Gas Storage

2. OPERATOR Enbridge Gas Distribution Inc. — Tel # 519-862-1473 — Fax # 519-862-1178

Street Address: 3595 Tecumseh Road — City: Mooretown — Prov.: ON — Postal Code: N0N 1M0

Mailing Address: 3595 Tecumseh Road — City: Mooretown — Prov.: ON — Postal Code: N0N 1M0

Contact Name: Kathy McConnell — Contact Tel #: 519-862-6032

Email: kathy.mcconnell@enbridge.com

3. LOCATION County: Lambton — Township: Moore

Tract: 4 — Lot: 20 — Concession: 10 — Lake Erie: Block / Tract / Licence/Lease No.

Surface location, metres from Lot Boundaries: 532.7m m North [ ] South [X] — 139.2m m East [ ] West [X]

Latitude: 42° 52' 57.285" — Longitude: 82° 22' 44.769"

Bottom-hole Lat.: 42° 53' 07.100" — Bottom-hole Long.: 82° 22' 42.695"

Within 1.6 km of Designated Storage Area? Yes [X] No [ ]

Off-target? Yes [ ] No [X]

4. WELL PARTICULARS Vertical [ ] Horizontal [X] Directional [ ] Deepening [ ] Re-entry [ ] Lateral [ ]

Rig Type: Rotary [X] Cable [X] — Well to be cored? Yes [ ] No [X] — Formation at TD: Guelph

Ground Elevation: 196.72 — Proposed Depth: 940.0 — Proposed Depth TVD: 681.00 — Proposed Start Date: 1-Apr-16

5. LANDOWNER [redacted] — Tel # [redacted]

Street Address [redacted] — City [redacted] — Prov. [redacted] — Postal Code [redacted]

The landowner herby provides consent for the collection of their personal information, via the operator, as per Section 12 of this form. Landowner Signature: unavailable for signature, still attempting to contact

Pooling of the Spacing Unit or unitization of the Unit Area shown on the attached well location plan has been completed (see Ont. Reg. 245/97 definitions for "pooled spacing unit" and "unitize") Yes [X] No [ ]

6. DRILLING CONTRACTOR TW Marsh Well Drilling & Servicing / Rotary Contractor - Unknown — Tel # 519-695-6060 / Unknown

Address: Box 53 / Unknown — City: Bothwell / Unknown — Prov.: ON — Postal Code: N0P 2C0

7. PROPOSED CASING AND CEMENTING PROGRAM

Hole Size (mm)	Casing O.D. (mm)	Weight (kg/m)	Grade	New Used or in-hole	Setting Depth TVD	Setting Depth Meas.	Setting Formation	CASING SETTING INFORMATION		
								How Set	Cement Type	Cement Top KB / RF
508	508	158.47	LS	New	46	46	Kettle Point	Driven	nil	nil
508	406	96.42	LS	New	61	61	Kettle Point	Cement	Class 'G'	surface
375	298	69.94	J55	New	405	405	F Unit	Cement	Class 'G'	surface
270	219	47.62	J55	New	649	663.6	A-2 Anhydrite	Cement	Class 'G'	surface

8. BLOW-OUT PREVENTION EQUIPMENT 16" 2M MSP Hydrill

11" 3M Annular Preventor and Double Gate (pipe and blind)

9. WELL SECURITY Name of Trustee: Harrison Pensa LLP — Total # Unplugged Wells: 148 — Current Balance: $70K

10. REMARKS Rotating Control Device 11" x 2M will be used for drilling in the reef

11. ENCLOSURES Fee [X] — Location Plan [X] (Land wells only) — Drilling Program [X]

12. NOTICE OF COLLECTION

The Ministry of Natural Resources is collecting your personal information under the authority of the *Oil, Gas and Salt Resources Act*. Any personal information provided on this application will be used for licensing and law enforcement purposes only and will be protected in accordance with the Freedom of Information and Protection of Privacy Act.

If you have questions about use of your personal information, please contact the Policy and Program Officer, Petroleum Operations Section, Ministry of Natural Resources, 659 Exeter Road, London N6E1L3, 519-873-4638.

13. AUTHORITY

The undersigned certifies that the information provided herein is complete and accurate, the operator has the right to drill or operate a well in the above location, and he/she has authority to bind the operator.

Date (d/m/y)	06.Nov.15	Name	Brian Black	Signature	
		Company	Enbridge Gas Distribution Inc.	Title	Director, Storage Operations

TC 9H (HORZ. #1) MOORE 4-20-X

DRILLING PROGRAM

TABLE OF CONTENTS

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

SECTION 1.0 - GENERAL DATA

Section 1.1 - Well Summary

Well Name:	TC 9H (Horiz. # 1) Moore 4-20-X
Operator:	Enbridge Gas Distribution Inc.
Surface Hole Location:	Tract 4, Lot 20, Con. 10, Moore Twp, Lambton County N 4 748 698.00; E 387 377. 00
Surface Hole Coordinates:	532.7m South; 139.2m West
Bottom Hole Location :	Tract 1, Lot 20, Con. 10, Moore Twp, Lambton County
Bottom Hole Coordinates:	N 4 749 000.00; E 387 429.00
Ground Elevation:	196.72m
KB Elevation:	200.72m
Total Depth:	681mTVD; 940mMD
Target Formation:	Guelph
Logging Program:	CBL-GR – 219mm casing Vertilog – 219mm casing
Spud Date:	April 15, 2016
Duration:	30 days

Section 1.2 – Special Notes

1. Safety of personnel and environment is our primary concern. Section 6.1 of this program, outlines Enbridge's general safety requirements which obliges all personnel on the wellsite to follow the Occupational Health and Safety Act and Regulations (Ministry of Labour (MOL)) and the Oil, Gas & Salt Resources Act and Regulations (Ministry of Natural Resources and Forestry (MNRF)). Safety and/or environmental ("tailgate") meetings shall be conducted as per Section 6. Wellsite Supervisor shall conduct daily 'walk around' inspections of the equipment on site and record the results on the daily reports. Please refer to Section 5.2 for the procedure to be followed if a worker injury occurs.

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

2. The Wellsite Supervisor has authority over all activities conducted on the drilling location. The Wellsite Supervisor shall ensure that all applicable regulations and policies (MNRF, MOL, Ministry of the Environment and Climate Change (MOECC), and Enbridge) are followed and that all permits are kept on site and/or signed off as required.

3. All operations are to be to MNRF standards.

4. BOPs are to be installed, maintained and used as per MNRF requirements. Testing of the BOPs must be in accordance with Section 6.2 of this program.

5. Tower sheets must be completed daily and will include the information listed in Section 5.1 of this program. The Wellsite Supervisor will complete daily reports and forward the reports to Enbridge's office by 10am the following day.

6. The well will be drilled in 2 stages:

    a. A cable tool rig will drive the conductor casing and will drill the surface casing into the Kettle Point formation and cement the casing to surface. Drilling this portion of the well with a cable tool rig will ensure that the fresh water zone will be exposed to a minimal amount of drilling fluid.

    b. A rotary rig will be moved onto location and will drill to TD. The rotary will set the intermediate and production casings and will drill the open hole horizontal section in the Guelph reef.

7. During the rotary phase of the well, the well will be drilled with fresh water or formation brine, hauled to location by an approved contractor. The fresh water will be obtained from local municipal water systems, located at Brigden, Corruna and other available water systems. The brine used will be Guelph formation brine obtained from Enbridge's existing operations.

8. The production casing will be set in the A-2 Anhydrite to allow for an effective cement job and successful pressure testing, prior to penetrating the Guelph formation

9. A minimum of two 500 bbl frac tanks will be spotted on location prior to the drilling of the Detroit River formation. The tanks will be filled with fresh water / brine as reserve for the drilling of potential loss circulation zones. Potential loss circulation zones exist in the Detroit River formation (intermediate hole) and the Guelph formation (main hole).

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Section 1.3 - Contact Numbers

Emergency Numbers:

Police, Fire & Ambulance:* 911

911 Address: 1049 Petrolia Line, Corunna, Ontario

* For 911 Map and Map and Directions to Nearest Hospital see attached Map at end of Section 1.3

Enbridge Gas Distribution Inc.

Rob Carlson	Reservoir Field Supervisor	Office: 519-862-6036 Fax: 519-862-1168 Cell: 519-312-4863 robert.carlson@enbridge.com
Kathy McConnell	Manager Reservoir Development	Office: 519-862-6032 Fax: 519-862-1168 Cell: 519-312-2168 kathy.mcconnell@enbridge.com
Terry Chupa	Land Administrator	Office: 519-862-6008 Fax: 519-862-1168 Cell: 519-384-0215 terry.chupa@enbridge.com
Control Room		Office: 519-862-6012

Drilling Supervisor:

Wayne Bolton	Cell: 519-312-8437 kegconsulting@aim.com
Steve Thompson	Cell: 519-383-5404 omniconsulting@rogers.com

Geologist:

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Neil Hoey		Office: 519-472-4776 Fax: 519-472-4776 Cell: 519-649-6918 neil_hoey@hotmail.com

Cable Tool Rig:

Terry Marsh	Terry Marsh Well Drilling & Servicing Owner / Operator	Office: 519-695-6060 Fax: 519-695-6464 Mobile: 519-359-9804 twmarshca@yahoo.com

Rotary Rig:

Keith Davis	Ecan Energy Services Inc.	Office: 519-627-3824 Fax: 519-627-5306 Mobile: 519-437-7038 kmecanen@kent.net

Directional Drillers:

Danny Brown	Account Manager - Weatherford	Office: 403-693-7831 Fax: 403-510-1995 daniel.brown@ca.weatherford.com
Craig Dalziel	Drilling Technologist - Weatherford	Office: 780-979-4539 Craig.dalziel@ca.weatherford.com

Cementing:

Ian Veen	Black Creek Well Service President	Office: 519-882-4732 Fax: 519-834-2466 Cell: 519-383-4645

Casing, Wellheads & ESDs:

Brian DeJaegher	Wellmaster Pipe &Supply Sales Representative	Office: 519-688-0500 Fax: 519-688-0563 bdejaegher@wellmaster.ca
Graham Shone	DNow Manager	Office: 519-336-9797 Fax: 519-336-9733

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

		graham.shone@dnow.com
Karen Derrick	Stream-Flo Ltd. Technical Sales Rep.	Office: 832-647-0710 Fax: 519-688-0563 kderrick@streamflo.com
Drill Bits:		
Brad Takenaka	Varel Rock Bits Canada Sales Manager	Office: 403-968-9369 Cell: 403-303-2533 btakenaka@varelintl.com
Mike Kellar	Trendon Bit Service Ltd. Director, Sales	Office: 403-990-1299 mkellar@trendoninc.com
Wireline Services:		
Gord Mackenzie	Baker Atlas Station Manager	Office: 519-332-8030 Fax: 519-332-4714 Cell: 519-339-6783 gord.mackenzie@bakerhughes.com
Dave Tipping	Weatherford Canada – Wireline & Logging Services Station Manager	Office: 519-683-2010 Fax: 519-683-2577 Cell: 519-436-3541 dave.tipping@canada.weatherford.com
Water Hauling:		
Keith McKeegan	President McKeegan Trucking Limited	Office: 519-864-1037 Fax: 519-864-1036 Cell: 519-490-4042
Denis Marcus	President Harold Marcus Limited	Office: 519-695-3735 Fax: 519-695-2249 Cell: 519-380-5238 dmarcus@haroldmarcus.com
Rental Equipment:		
Dale Holland	Wheatley Wireline Services Ltd.	Office: 519-825-3680 Fax: 519-825-9348 Cell: 519-322-8015
Keith Davis	Ecan Energy Services Inc.	Office: 519-627-3824

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

		Fax: 519-627-5306 Cell: 519-437-7038 kmecanen@kent.net
Brian Lackie	Weatherford Fishing Supervisor & Shop Manager	Office: 780-955-7933 Cell: 780-490-8710 brian.lackie@ca.weatherford.com
Orval Beam	Orval L. Beam Limited Operations Manager Tank Rentals	Office: 519-436-0164 Fax: 519-436-0164 Cell: 519-436-4801

Welders:

John Dawson	St. Clair Mechanical President	Office: 519-864-0927 Fax: 519-864-0801 Cell: 519-330-9672

Government & Other Agencies

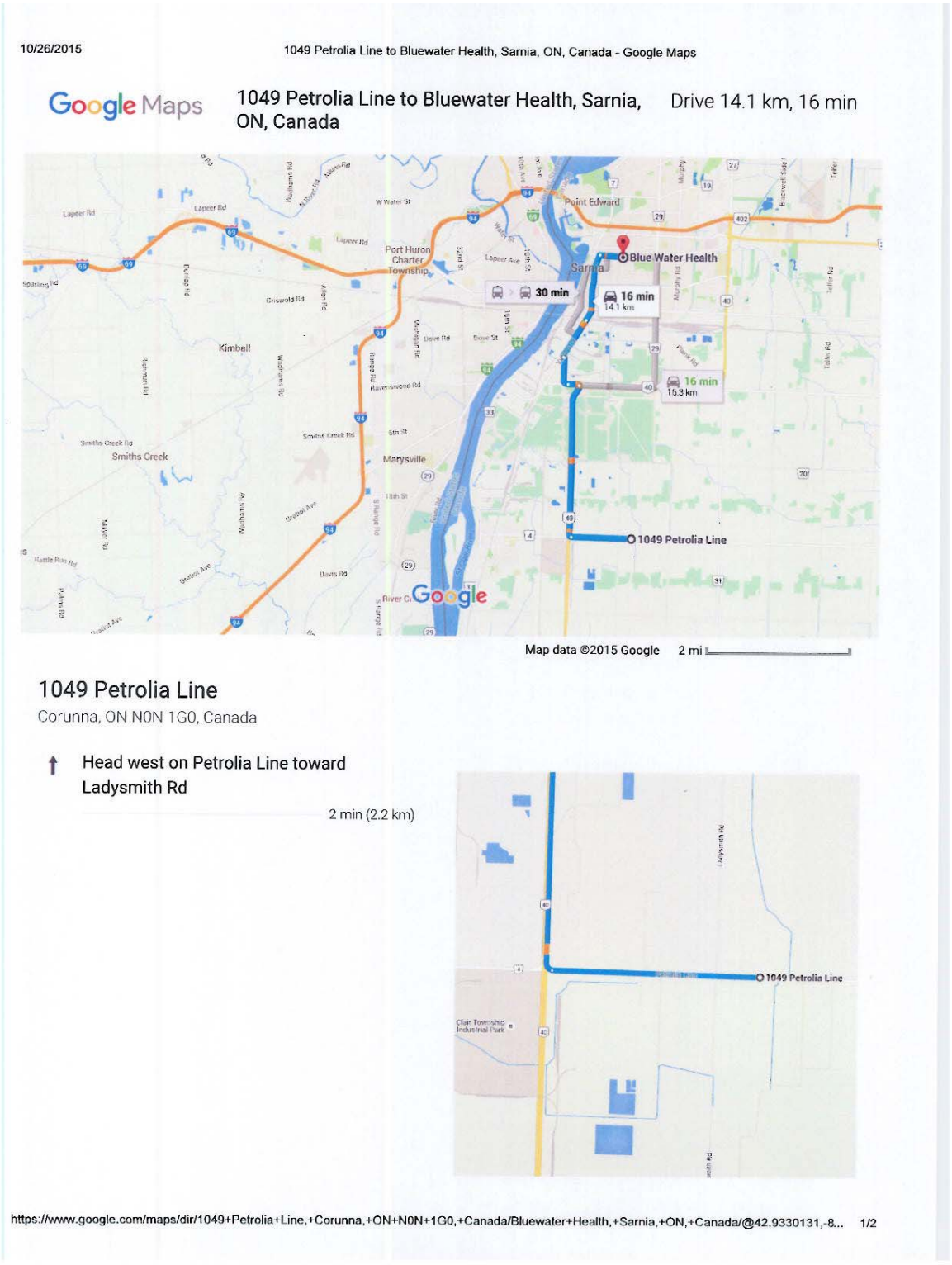
MNRF	Petroleum Resources Centre	Office: 519-873-4634 Fax: 519-873-4645 ogsr.mnr.gov.on.ca
MOECC	Spill Reporting	1-800-268-6060
MOL	Health & Safety	1-800-265-1676
Oil, Gas & Salt Resources Library		Office: 519-686-2772 Fax: 519-686-7225

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

911 Map & Directions to Nearest Hospital:



Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Turn right onto ON-40 N

4 min (5.5 km)

Take Vidal St S and Hwy 40B to London Rd/Route 16 in Sarnia

10 min (6.4 km)

3. ON-40 N turns left and becomes Churchill Rd

450 m

4. Turn right onto Tashmoo Ave

1.0 km

5. Turn left onto Kenny St

39 m

6. Turn right onto Vidal St S

1.6 km

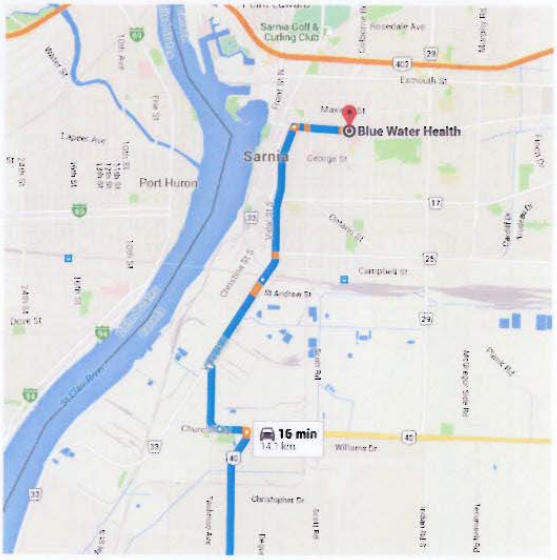
7. Vidal St S turns slightly right and becomes Hwy 40B

2.4 km

8. Turn right onto London Rd/Route 16

Destination will be on the right

850 m



Blue Water Health

Canada

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Live traffic Fast Slow

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Section 2.0 - Geological Prognosis

TC 9H Moore

County: Lambton Twp: Moore Conc: X Lot: 20 Tract: 5

Survey Co-ordinates: ***4748698 Northig*** ***387377 Easting***

Elevation: 197.3m

Formation	Top	Elevation	Thickness	Gas	Oil	Water	Pressure
K.B.	0.0	201.3	4.6				
Drift	4.0	197.3	41.4			Fresh @ 45m	
Kettle Point	45.4	155.9	30.4				
Hamilton	75.8	125.5	83.9				
Dundee	159.7	41.6	34.1				
Detroit River	193.8	7.5	110.3			Sulphur @199m	
Bois Blanc	304.1	-102.8	36.4				
Bass Islands	340.5	-139.2	53.6				
G-Shale	394.1	-192.8	5.8				
F-Shale	399.9	-198.6	99.8				
E-Carbonate	499.7	-298.4	25.0				
D-Salt	524.7	-323.4	8.9				
C-Shale	533.6	-332.3	23.5				
B-Salt	557.1	-355.8	59.5				
A-2 Carbonate	616.6	-415.3	30.3				
A-2 Anhydrite	646.9	-445.6	6.2				
Guelph	653.1	-451.8	200±	XX			2400 kPa

Note: Prognosis with TVD tops.
Note: TC1 Moore 20-X and TC4 Moore 20-X used to build prog

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Section 3.0 - Casing and Cementing Summary

Section 3.1 - Summary

Hole Size (mm)	Casing Size (mm)	Casing Grade	Casing Weight (kg/m)	Setting Depth (mKB)	How Set
508	508	LS	158.47	46	Driven – cement squeeze if necessary
508	406	LS	96.42	61	Cemented to surface with 100% excess Class G 0-1-0 cement + 2 – 3% $CaCl_2$
375	298	J-55	69.94	405	Cemented to surface with Class 'G' 0-1-8% plus 1 to 3% $CaCl_2$, followed by Class 'G' neat cement plus 1 to 3% $CaCl_2$. Cement volumes will be calculated with a 50% excess- gel cement and 30% excess – neat cement. Depending upon hole conditions, consideration may be given to running thixotropic cement plus additional loss circulation materials, across porous zone(s).
270	219	J-55	47.62	649m TVD 663.63 mMD	Cemented to surface with Class 'G' 0-1-0% plus 1 to 2% $CaCl_2$ plus 10% NaCl. Cement volumes will be calculated with a 50% excess on the open hole section and 30% excess on the cased hole section.

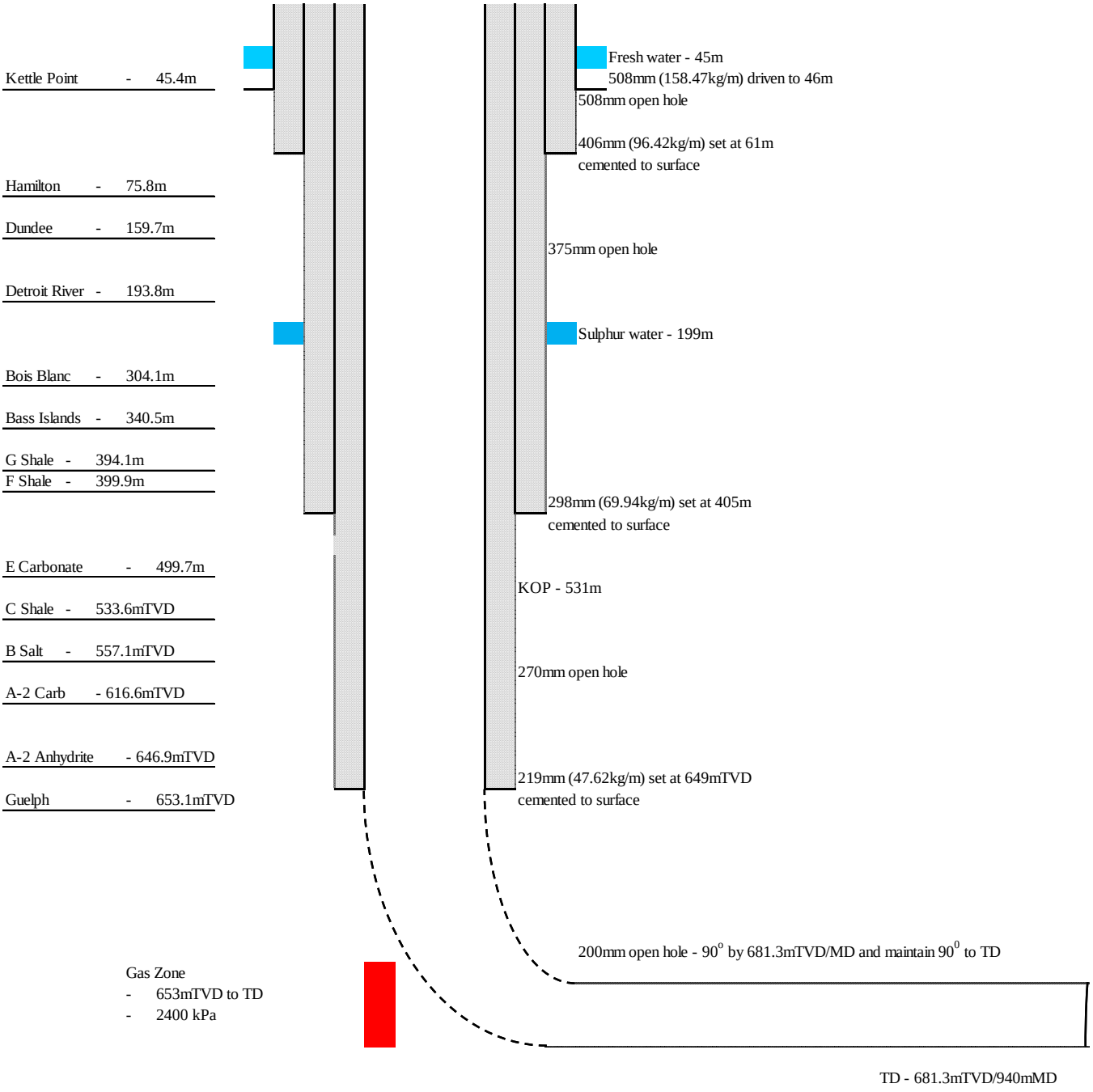
Main Hole: 200mm open hole will be drilled from 649m TVD at 47.5^0 and will reach 90^0 at 681mTVD (754.73mMD) and will be drilled horizontally for approximately 182m to a TD of 681mTVD (940mMD) at 90^0.

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Section 3.2 - Wellbore Diagram



Drilling Program

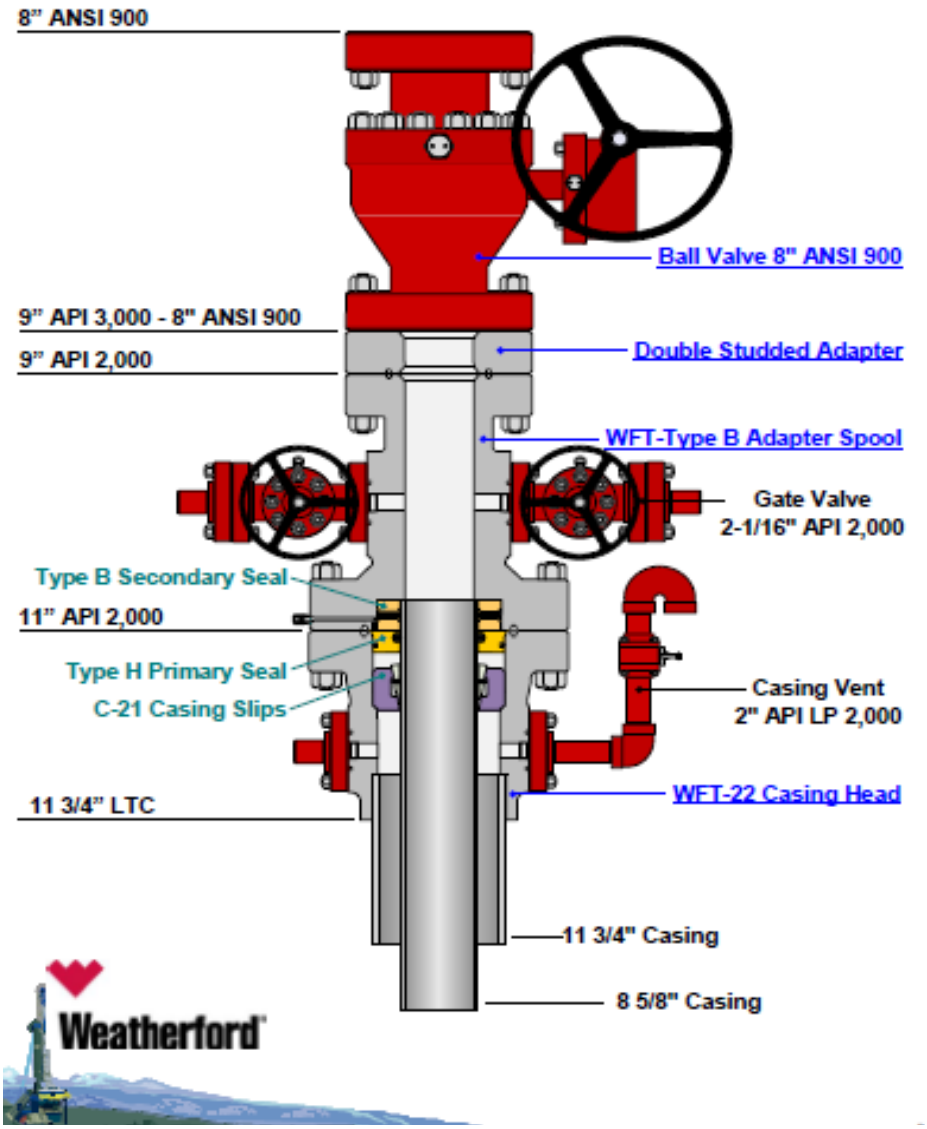
TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Section 3.3 - Wellhead Summary

Weatherford 13.8 MPa Wellhead:

406mm x 425.5mm slip on casing bowl (for BOP installation)
298mm x 340mm slip on casing bowl
340mm x 228.6mm spool c/w 2 gate valves on side outlets
203.2mm ANSI 900 Cameron Grove full port ball valve

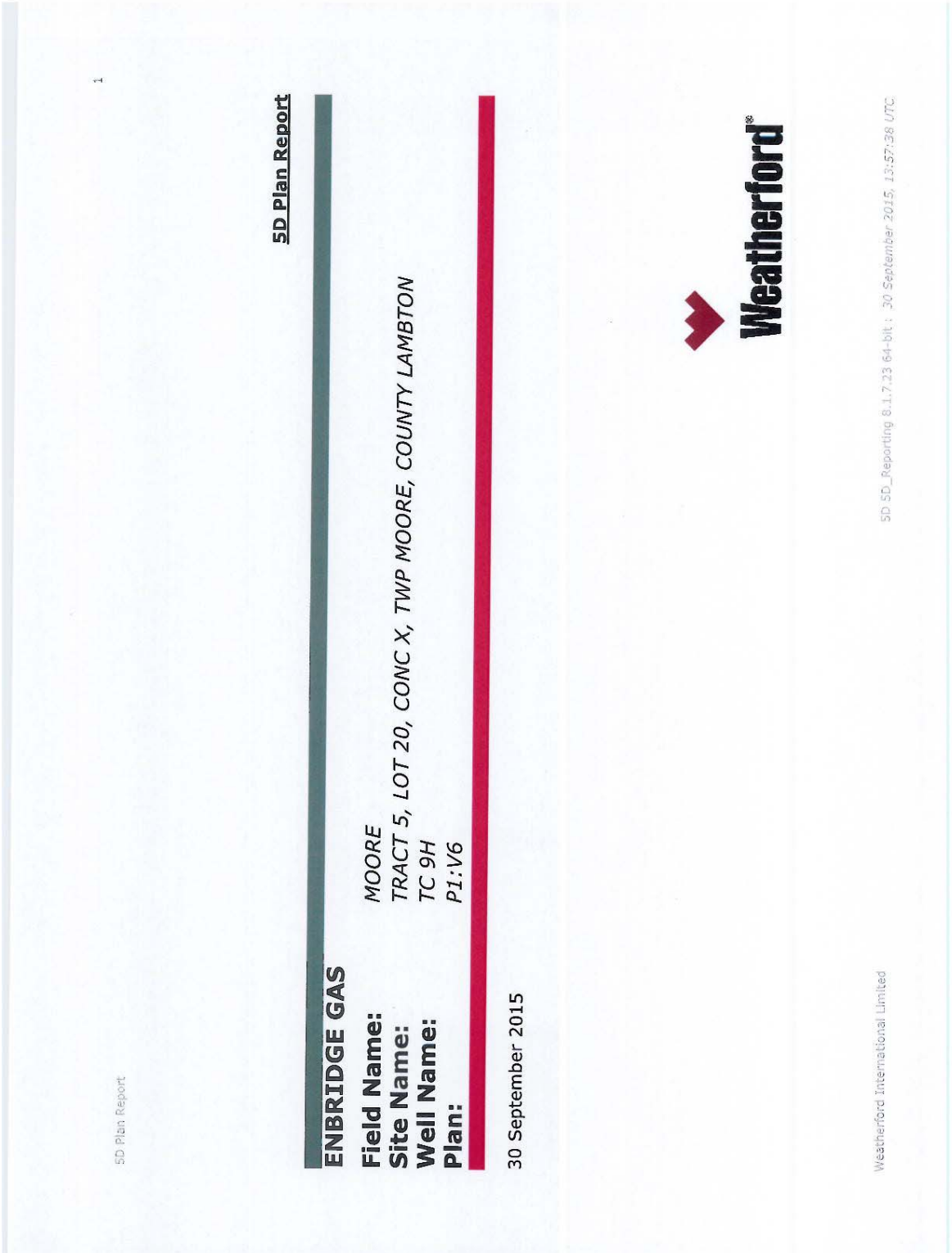


Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

Section 3.4 - Directional Planning Report



TC 9H

Field Name: MOORE	**Map Units:** m		**Company Name:** ENBRIDGE GAS
	Vertical Reference Datum (VRD): Mean Sea Level		
	Projected Coordinate System: NAD83 / UTM zone 17N		
	Comment:		
Site: TRACT 5, LOT 20, CONC X, TWP MOORE, COUNTY LAMBTON	**Units:** m	**North Reference:** True	**Convergence Angle:** -0.94
	Position:	**Northing:** 4748698.00m	**Latitude:** 42.882579221
		Easting: 387377.00m	**Longitude:** -82.379102423
	Elevation above MSL: 197.30 m		
	Comment:		
Slot: TC 9H	**Position (Relative to Site Centre)**		
	+N/-S: 0.00m	**Northing:** 4748698.00m	**Latitude:** 42.882579221
	+E/-W: 0.00m	**Easting:** 387377.00m	**Longitude:** -82.379102423
	Slot TVD Reference: Ground Elevation		
	Elevation above MSL: 197.30m		
	Comment:		
Well: TC 9H	**Type:** Main well	**UWI:**	**Plan:** P1:V6
	File Number: **Comment:**		
	Closure Distance: 306.444m	**Closure Azimuth:** 8.83°	
	Vertical Section: Position of Origin (Relative to Slot centre)		
	+N/-S: 0.00m	**+E/-W:** 0.00m	**Az:** 8.83°
	Magnetic Parameters:		
	Model: bggm2015 **Field Strength:** 54039.8nT	**Declination:** -8.38°	**Dip:** 69.62° **Date:** 15/Sep/2015

Drill floor: Plan: P1:V6

Rig Height (Drill Floor): 4.00m **Elevation above MSL:** 201.30m **Inclination:** 0.00° **Azimuth:** 0.00°

Plan Archive:

Plan Folder	Date	Comment	Plans		
			Plan	Date	Comment
P1	15/Sep/2015		P1:V1	15/Sep/2015	
			P1:V2	23/Sep/2015	
			P1:V3	23/Sep/2015	

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

5D Plan Report

Plan Archive:

Plan Folder	Date	Comment	Plans		
			Plan	Date	Comment
			P1:V4	24/Sep/2015	STRAIGHT BUILD
			P1:V5	24/Sep/2015	ADJUSTED D'LEGS
			P1:V6	24/Sep/2015	

Wellpath created using minimum curvature.

Tie Point:
MD: 0.00m **Inclination:** 0.00° **Azimuth:** 0.00° **TVD:** 0.00m **North Offset:** 0.00m **East Offset:** 0.00m

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)

Comment	MD (m)	Inc (°)	Az (°)	TVD (m)	SS Elevation (m)	N.Offset (m)	E.Offset (m)	Northing (m)	Easting (m)	VS (m)	DLS (°/30m)	T.Face (°)	B.Rate (°/30m)	T.Rate (°/30m)
	0.00	0.00	0.00	0.00	201.30	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	30.00	0.00	0.00	30.00	171.30	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
KETTLE POINT :	45.40	0.00	0.00	45.40	155.90	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	60.00	0.00	0.00	60.00	141.30	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
HAMILTON :	75.80	0.00	0.00	75.80	125.50	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	90.00	0.00	0.00	90.00	111.30	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	120.00	0.00	0.00	120.00	81.30	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
DUNDEE :	150.00	0.00	0.00	150.00	51.30	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	159.70	0.00	0.00	159.70	41.60	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	180.00	0.00	0.00	180.00	21.30	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
DETROIT RIVER :	193.80	0.00	0.00	193.80	7.50	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	210.00	0.00	0.00	210.00	-8.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	240.00	0.00	0.00	240.00	-38.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	270.00	0.00	0.00	270.00	-68.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	300.00	0.00	0.00	300.00	-98.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
BOIS BLANC :	304.10	0.00	0.00	304.10	-102.80	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	330.00	0.00	0.00	330.00	-128.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
BASS ISLANDS :	340.50	0.00	0.00	340.50	-139.20	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	360.00	0.00	0.00	360.00	-158.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	390.00	0.00	0.00	390.00	-188.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
G-SHALE :	394.10	0.00	0.00	394.10	-192.80	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
F-SHALE :	399.90	0.00	0.00	399.90	-198.60	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	420.00	0.00	0.00	420.00	-218.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	450.00	0.00	0.00	450.00	-248.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	480.00	0.00	0.00	480.00	-278.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

SD Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)

Comment	MD (m)	Inc (°)	Az (°)	TVD (m)	SS Elevation (m)	N.Offset (m)	E.Offset (m)	Northing (m)	Easting (m)	VS (m)	DLS (°/30m)	T.Face (°)	B.Rate (°/30m)	T.Rate (°/30m)
E-CARBONATE :	499.70	0.00	0.00	499.70	-298.40	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
	510.00	0.00	0.00	510.00	-308.70	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
D-SALT :	524.70	0.00	0.00	524.70	-323.40	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
KOP	531.20	0.00	0.00	531.20	-329.90	0.00	0.00	4748698.00	387377.00	0.00	0.00	0.00	0.00	0.00
C-SHALE :	533.60	0.86	355.00	533.60	-332.30	0.02	-0.00	4748698.02	387377.00	0.02	10.75	355.00	10.75	0.00
	540.00	3.15	355.00	540.00	-338.70	0.24	-0.02	4748698.24	387376.98	0.24	10.75	0.00	10.75	0.00
B-SALT :	557.21	9.32	355.00	557.10	-355.80	2.10	-0.18	4748700.11	387376.85	2.05	10.75	0.00	10.75	-0.00
	570.00	13.90	355.00	569.62	-368.32	4.67	-0.41	4748702.67	387376.67	4.55	10.75	0.00	10.75	0.00
	600.00	24.65	355.00	597.90	-396.60	14.52	-1.27	4748712.54	387375.97	14.15	10.75	0.00	10.75	-0.00
A-2 CARBONATE :	621.29	32.28	355.00	616.60	-415.30	24.62	-2.15	4748722.65	387375.25	24.00	10.75	0.00	10.75	-0.00
	630.00	35.40	355.00	623.83	-422.53	29.45	-2.58	4748727.49	387374.91	28.71	10.75	0.00	10.75	0.00
	660.00	46.15	355.00	646.52	-445.22	48.94	-4.28	4748747.01	387373.52	47.71	10.75	0.00	10.75	-0.00
A-2 ANHYDRITE :	660.56	46.35	355.00	646.90	-445.60	49.34	-4.32	4748747.41	387373.49	48.10	10.75	0.00	10.75	-0.00
219mm CASING	663.63	47.45	355.00	649.00	-447.70	51.58	-4.51	4748749.65	387373.33	50.28	10.75	0.00	10.75	-0.00
GUELPH :	669.87	50.37	355.00	653.10	-451.80	56.26	-4.92	4748754.34	387373.00	54.84	14.01	0.00	14.01	-0.00
	690.00	59.77	355.00	664.61	-463.31	72.69	-6.36	4748770.78	387371.83	70.85	14.01	0.00	14.01	0.00
	720.00	73.78	355.00	676.42	-475.12	100.08	-8.76	4748798.21	387369.88	97.55	14.01	0.00	14.01	0.00
	750.00	87.79	355.00	681.21	-479.91	129.51	-11.33	4748827.68	387367.79	126.23	14.01	0.00	14.01	0.00
HEEL	754.73	90.00	355.00	681.30	-480.00	134.22	-11.74	4748832.40	387367.46	130.83	14.01	0.00	14.01	-0.00
	780.00	90.00	3.42	681.30	-480.00	159.46	-12.09	4748857.64	387367.52	155.72	10.00	90.00	0.00	10.00
	810.00	90.00	13.42	681.30	-480.00	189.10	-7.70	4748887.20	387372.40	185.68	10.00	90.00	0.00	10.00
	840.00	90.00	23.42	681.30	-480.00	217.53	1.77	4748915.47	387382.33	215.22	10.00	90.00	0.00	10.00
END OF TURN	854.76	90.00	28.34	681.30	-480.00	230.81	8.21	4748928.64	387388.99	229.33	10.00	90.00	0.00	10.00
	870.00	90.00	28.34	681.30	-480.00	244.22	15.44	4748941.93	387396.44	243.69	0.00	0.00	0.00	0.00
	900.00	90.00	28.34	681.30	-480.00	270.62	29.68	4748968.10	387411.11	271.97	0.00	0.00	0.00	0.00
	930.00	90.00	28.34	681.30	-480.00	297.03	43.93	4748994.27	387425.79	300.25	0.00	0.00	0.00	0.00
TD	936.57	90.00	28.34	681.30	-480.00	302.81	47.05	4749000.00	387429.00	306.44	0.00	0.00	0.00	0.00

Formation Points: (Relative to Slot centre)(TVD relative to Drill Floor)

Name	MD (m)	Inc (°)	Az (°)	TVD (m)	SS Elevation (m)	N.Offset (m)	E.Offset (m)	Northing (m)	Easting (m)
KETTLE POINT	45.40	0.00	0.00	45.40	155.90	0.00	0.00	4748698.00	387377.00
HAMILTON	75.80	0.00	0.00	75.80	125.50	0.00	0.00	4748698.00	387377.00
DUNDEE	159.70	0.00	0.00	159.70	41.60	0.00	0.00	4748698.00	387377.00
DETROIT RIVER	193.80	0.00	0.00	193.80	7.50	0.00	0.00	4748698.00	387377.00
BOIS BLANC	304.10	0.00	0.00	304.10	-102.80	0.00	0.00	4748698.00	387377.00
BASS ISLANDS	340.50	0.00	0.00	340.50	-139.20	0.00	0.00	4748698.00	387377.00
G-SHALE	394.10	0.00	0.00	394.10	-192.80	0.00	0.00	4748698.00	387377.00
F-SHALE	399.90	0.00	0.00	399.90	-198.60	0.00	0.00	4748698.00	387377.00

Weatherford International Limited

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Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.

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5D Plan Report

Formation Points: (Relative to Slot centre)(TVD relative to Drill Floor)

Name	MD (m)	Inc (°)	Az (°)	TVD (m)	SS Elevation (m)	N.Offset (m)	E.Offset (m)	Northing (m)	Easting (m)
E-CARBONATE	499.70	0.00	0.00	499.70	-298.40	0.00	0.00	4748698.00	387377.00
D-SALT	524.70	0.00	0.00	524.70	-323.40	0.00	0.00	4748698.00	387377.00
C-SHALE	533.60	0.86	355.00	533.60	-332.30	0.02	-0.00	4748698.02	387377.00
B-SALT	557.21	9.32	355.00	557.10	-355.80	2.10	-0.18	4748700.11	387376.85
A-2 CARBONATE	621.29	32.28	355.00	616.60	-415.30	24.62	-2.15	4748722.65	387375.25
A-2 ANHYDRITE	660.56	46.35	355.00	646.90	-445.60	49.34	-4.32	4748747.41	387373.49
GUELPH	669.87	50.37	355.00	653.10	-451.80	56.26	-4.92	4748754.34	387373.00

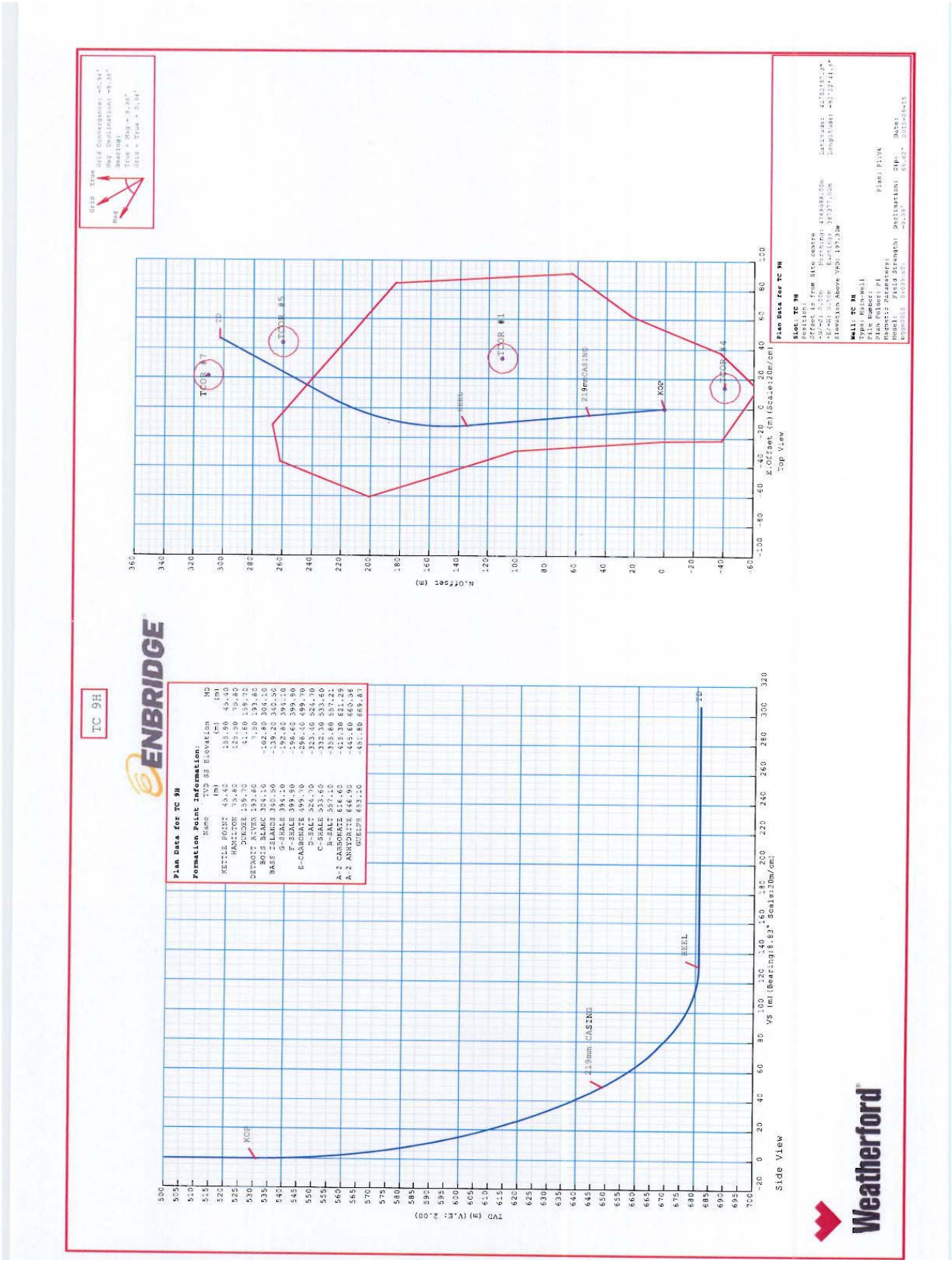
Weatherford International Limited

5D 5D_Reporting 8.1.7.23 64-bit : 30 September 2015, 13:57:38 UTC

Drilling Program

TC 9H (HORIZ. #1) MOORE 4-20-X

Enbridge Gas Distribution Inc.



SECTION 4.0 - DRILLING PROCEDURES

Section 4.1 - Pre Spud

1. Fresh Water Well Samples

   Obtain samples from all fresh water wells located within a 750 metre radius of the proposed well. Have routine water analysis done on all water samples by an independent laboratory in Sarnia. Ensure that copies of these reports are placed in the well files in Enbridge's office

2. Site Preparation

   Prepare drilling location as follows:

   a. Locate all drainage tiles crossing lease area
   b. Strip and properly stock pile all soil from the lease
   c. Cut, block and divert drainage tiles as required
   d. Construct adequate berms around lease and access road as required

3. Government Notification of Spud

   48 hours prior to spud, notify the Ministry of Natural Resources and Forestry – Petroleum Resources Section by fax @ (519) 873 – 4645 of the date of commencement of drilling operations

4. Signs

   Install rig signs on access road to lease.

5. Safety Meeting

   Conduct a pre-spud safety meeting for Cable Tool and Rotary crews. Tool push and all crewmembers must be present. A similar meeting shall be conducted with the remaining crew(s) as they come on duty. Additional safety meetings shall be conducted at the Wellsite Supervisor's discretion.

Section 4.2 - Conductor Casing

1. Drilling Method

   Move in and rig up Cable Tool Rig. Measure and record the distance from RF to ground and the RF elevation – include these measurements on the tower sheets and the daily report. Drill and drive 508mm casing to bedrock, to an approximate depth of 46m. Note any occurrence of water and record type of water, depth encountered, and static level of water and/or flow rate. If fresh water is

encountered during drilling, the well must be bail tested for at least 15 minutes, after the casing is landed, to ensure that the fresh water has been shut-off. If the fresh water has not been shut-off, contact Enbridge's office and be prepared to perform a cement squeeze as per Enbridge's requirements.

2. Cement Squeeze (if necessary)

   If fresh water is found in the drift and is not shut-off by the conductor casing, a flow rate will be established and a cement squeeze will be performed, using the cement volumes determined by Enbridge. Wait on cement 12 hours and bail the hole dry and monitor the well for at least 15 minutes to determine if the water has been shut-off. If necessary, the process will be repeated until the water is shut-off.

Section 4.3 - Surface Hole & Surface Casing

1. Drilling Method

   Drill a 508mm hole 15 metres into the Kettle Point formation, to an approximate depth of 61m. Ensure that drill cutting samples are taken every 3 metres and placed in the sample bags provided by the Ministry of Natural Resources and Forestry. The sample bags must be labeled with the well name, Township, Lot, Concession and Enbridge's name. Record on daily drilling reports any influx of fluids and/or hydrocarbons, static levels, pressures and any unusual hole conditions.

2. Casing Installation

   Depending upon hole conditions encountered, the 406mm casing will be run in the following manner:

   - Texas Shoe on bottom of first joint
   - Centralizers on the top and bottom of the first joint and coincident with the shoe of the conductor casing
   - 406mm casing to surface

3. Cementing Procedures

   Move in and rig up Cementers. Ensure pressure recorder is rigged in and serviceable. Pressure charts will be attached to the job ticket. Conduct a pre-job safety meeting to confirm volumes and procedures. Establish circulation using pump truck. The casing and the hole will be circulated with fresh water for 15 minutes to clean the borehole and to fill the casing and hole prior to cementing. Pressure test surface equipment to 14 MPa. Ensure that preflush and mix water are from a clean source and that the water truck are also clean. Pump preflush of 2.0m^3 of fresh water, with the addition of loss circulation material if necessary. Ensure that a minimum of 4 cement samples are taken and represent the cement at the beginning, middle and end of the cement job. Mix and pump

sufficient Class 'G' 0-1-0% cement plus 2 to 3% $CaCl_2$ with a density of 1901 kg/m^3 to cement the casing to surface with 100% excess. Displace cement with fresh water – under displace cement such that the bottom joint of 406mm casing is full of cement. Shut-in cementing valve at surface and set casing on bottom. Wait on cement a minimum of 24 hours before installing the BOPs.

4. Arrange to have surface hole cuttings solidified and then disposed in an approved manner.

5. Release the cable tool rig.

Section 4.4 - Intermediate Hole & Intermediate Casing

1. BOP Installation and Pressure Testing

   Move in and rig up rotary rig. Measure and record the distance from KB to ground and the KB elevation – include these measurements on the tower sheets and the daily report.

   Install 406mm x 425.5mm slip on weld casing bowl and temporarily blind flange, to secure well until drilling resumes with rotary rig. Install Class A (Rotary) BOPs as per MNRF requirements. After BOPs are installed and the cement samples indicate that the cement is competent, the rig will proceed to pressure test the BOPs, casing and shoe. Pressure test casing and each component of the BOPs as per Section 6.2. After successfully pressure testing the BOPs and casing, drill out cement and 0.5m of new formation and conduct a PIT, with the hole full of fresh water, using a bottom hole pressure equivalent to 18 kPa/m.

2. Drilling Method

   Drill a 375mm hole with fresh water, 5m ± into the F Shale formation, to an approximate depth of 405m. Notify Geologist 12 hours in advance of reaching intermediate casing point, so that they can be on site to determine the proper casing setting depth. When casing setting depth has been determined, circulate the hole clean and run a deviation survey. Perform a flow check prior to tripping and strap out of the hole. Fast tripping of the drill string is to be avoided in order to eliminate high annular velocities, pressure surges and swabbing (maximum rate of 27 metres per minute). Keeping hole full of fluid, trip out of hole and laydown bottom hole assembly and stand back drill collars and drill pipe,

   The potential for loss circulation exists while drilling through the Detroit River formations (Lucas and Amherstburg formations). If loss circulation is encountered use the loss circulation contingency program located in Section 4.7. Note all lost circulation intervals and monitor and record fluid loss volumes. If pit fluid must be hauled to disposal, keep solid content to a minimum to reduce costs.

   Ensure that drill cutting samples are taken every 3 metres and placed in the sample bags provided by the Ministry of Natural Resources and Forestry. Surveys are to be taken every 100 metres. Deviation shall not exceed 1 degree per 100 metres and shall not exceed 2 degrees at any point.

Record on daily tower sheets any influx of fluids (water and/or hydrocarbons), loss circulation (rate and depth) and/or any unusual hole conditions.

3. Casing Installation

Ensure that the threads are protected while hoisting casing to the floor. Drift all casing prior to running the casing in the well and apply proper API make-up torque to each connection.

Depending upon hole conditions encountered, the 298mm casing will be run in the following manner:

- Guide shoe
- 298mm joint of casing
- 298mm Float Insert or Float Collar
- Tack weld guide shoe, float collar and bottom 2 joints and use API modified pipe dope on all connections
- Centralizers will be installed one metre above the guide shoe, over the bottom of the first 2 collars and every 5 joints to surface
- 298mm casing to surface

4. Cementing Procedures

Move in and rig up Cementers. Ensure pressure recorder is rigged in and serviceable. Pressure charts will be attached to the job ticket. Conduct a pre-job safety meeting to confirm volumes and procedures. Establish circulation using pump truck. The casing and the hole will be circulated with fresh water for 15 minutes to clean the borehole and to fill the casing and hole prior to cementing. Pressure test surface equipment to 14MPa for 10 minutes. Preflush and mix water must be obtained from a clean source and the water trucks must be uncontaminated. Pump 3.0m^3 citric preflush with a 1.0m^3 fresh water spacer, with the addition of loss circulation material if necessary. Ensure that a minimum of 4 cement samples is taken and represent the cement at the beginning, middle and end of the cement job. Mix and pump sufficient 0-1-8% Class 'G' plus 1 to 3% $CaCl_2$ (50% excess) followed by 0-1-0% Class 'G' cement plus 1 to 3% $CaCl_2$ (30% excess) to cement casing to surface. Depending upon the severity of the loss circulation zones, thixotropic cement with additional loss circulation materials may be used to cover the loss zone. If there are no cement returns to surface, a feed rate will be established and the annulus will be grouted to surface. Drop wiper plug and displace cement and bump plug to 3.5 Mpa over final pumping pressure – do not exceed 60% of internal yield pressure of casing. Once plug is bumped bleed off casing pressure, close casing valves and bleed off surface line pressure and wash out BOPs. Wait on cement a minimum of 24 hours before slacking off casing. Remove 406mm x 425.5mm casing bowl and install the 298mm x 346.1mm casing bowl on the 298mm casing.

Section 4.5 - Production Hole & Production Casing

1. Pressure Testing

Check cement samples for hardness – if cement samples are set to the satisfaction of the Wellsite Supervisor, proceed with installation of the BOPS. Install Class B (Rotary) BOPs as per MNRF requirements on 298mm casing bowl. Stump test BOPs prior to installation. After BOPs are installed and the cement samples indicate that the cement is competent, the rig will proceed to pressure test the BOPs, casing and shoe. Pressure test casing and each component of the BOPs as per Section 6.2. After successfully pressure testing the BOPs and casing, drill out cement and 0.5m of new formation and conduct a PIT, with the hole full of fresh water, using a bottom hole pressure equivalent to 18 kPa/m.

2. Drilling Method

Drill a 270mm conventional hole to the kick-off point of 531m±. Brine will be used to drill this portion of the well, to prevent the dissolution of the salt layers. Ensure that drill cutting samples are taken every 3 metres and placed in the sample bags provided by the Ministry of Natural Resources and Forestry. Record on daily tower sheets any influx of fluids (water and/or hydrocarbons), loss circulation (rate and depth) and any unusual hole conditions.

At the kick-off point, circulate the hole clean, run a deviation survey and strap out of the hole. Pick up directional equipment and run in the hole with the directional bottom hole assembly. Prior to penetrating the A-2 Carbonate, the Wellsite Geologist and Wellsite Supervisor must be on-site and a BOP drill shall be completed to familiarize all on-site personnel with the proper procedures.

Drill a 270mm directional hole a minimum of 2 metres into the A-2 Anhydrite formation, at an approximate depth of 649mTVD / 663.6mMD at an angle of 47.5^0. The final casing point will be determined by the Wellsite Geologist. At casing total depth, circulate the hole clean and perform a flow check prior to tripping. Fast tripping of the drill string is to be avoided in order to eliminate high annular velocities, pressure surges and swabbing (maximum rate of 27 metres per minute). Keeping hole full of brine, trip out of hole – laydown bottom hole assembly, drill pipe and drill collars.

3. Casing Installation

Ensure that the threads are protected while hoisting casing to the floor. Drift all casing prior to running the casing in the well and apply proper API make-up torque to each connection.

Depending upon hole conditions encountered, the 219mm casing will be run in the following manner:

- Guide shoe
- 219mm joint of casing
- Float Insert or Float Collar
- Bottom 150 metres of 219mm casing shall have solid stand-off centralizers run on every other joint – above and below the collar

- Tack weld guide shoe, float collar and bottom 4 joints and use API modified pipe dope on all connections
- Centralizers will be installed on remaining casing – on every 5th joint to surface
- 219mm casing to surface

4. Cementing Procedures

Move in and rig up Cementers. Ensure pressure recorder is rigged in and serviceable. Pressure charts will be attached to the job ticket. Conduct a pre-job safety meeting to confirm volumes and procedures.

Establish circulation using pump truck. The casing and the hole will be circulated with brine for 15 minutes to clean the borehole and to fill the casing and hole prior to cementing. Pressure test surface equipment to 14 MPa for 10 minutes. Preflush and mix water must be obtained from a clean source and the water trucks must be uncontaminated. Pump preflush of 3.0m^3 of clean brine, with the addition of loss circulation material if necessary. Ensure that a minimum of 4 cement samples is taken and represent the cement at the beginning, middle and end of the cement job. Mix and pump sufficient Class 'G' 0-1-0% cement plus 10% NaCl, to cement the 219mm casing to surface plus 50% excess over open hole and 30% excess in cased hole. Drop wiper plug and displace cement with fresh water and bump plug to 3500 kPa over final pumping pressure – do not exceed 60% of internal yield pressure of casing. Once plug is bumped bleed off casing pressure, close casing valves and bleed off surface line pressure. Wash out BOPs and split BOP stack at 346mm flange, install 219mm slips and set slips in casing bowl. Wait on cement a minimum of 48 hours and cut casing and remove BOPs. Cut and bevel 219mm casing and install primary and secondary seals. Install 346mm x 228.6mm spool piece and test wellhead seals to 14 Mpa for 10 minutes.

Section 4.6 - Main Hole

1. Installation of the BOPs

Check cement samples for hardness – if cement samples are set to the satisfaction of the Wellsite Supervisor, proceed with installation of the BOPS. Install Class B (Rotary) BOPs as per MNRF requirements on 228.6mm flange. After BOPs are installed and the cement samples indicate that the cement is competent, move in and rig up the Wireline Company and run a cement bond log (both pressure (7000kPa) and non-pressure pass) over the 219mm casing. After the cement bond log is completed and the cement job is deemed successful, the rig will proceed to pressure test the BOPs, casing and shoe. Pressure test casing and each component of the BOPs as per Section 6.2. After successfully pressure testing the BOPs and casing, drill out cement and 0.5m of new formation and conduct a PIT, with the hole full of fresh water, using a bottom hole pressure equivalent to 18 kPa/m.

2. Logging

Move in and rig up Wireline Company. With hole full of fresh water, run a casing inspection log over the 219mm casing. Rig out Wireline Company and release.

3. Drilling Method

   Drill a 200mm hole with fresh water system – ensure that the frac tank is full of fresh water and water trucks have been put on alert. Drill from 649mTVD (663.6mMD) at 47.5^0 to 90^0 at 681.3mTVD (754.7mMD) and continue drilling to a depth of 940mMD (681mTVD) for a horizontal distance of approximately 180m. After drilling 2 lengths of drill pipe, work the newly drilled hole to ensure that there will not be any issues running in and out of the open hole. A high vis sweep with floc will be added at each connection to assist with hole cleaning.

   Ensure that Wellsite Geologist is on site to monitor cuttings and liaise with Directional Drillers concerning the path of the horizontal well. Drill to TD indicated by Wellsite Geologist. At TD pump a final sweep and if possible, circulate hole until clean returns are observed at surface.

   The potential for loss circulation exists while drilling through the Guelph formation. If loss circulation is encountered, use the loss circulation contingency program located in Section 4.7. Note all lost circulation intervals and monitor and record fluid loss volumes.

   Pull out of hole with drilling assembly and laydown drill pipe, drill collars and bottom hole assembly. Move in and rig up Wireline Company complete with full lubricators. Run in hole with gauge ring to ensure clear hole to bridge plug setting depth. Run in hole with wireline set, retrievable 219mm bridge plug and place as deep as possible in the 219mm casing and pull out of hole with the setting tool. Fill hole with fresh water and pressure test plug to 7000 kPa for 10 minutes. If the plug does not hold pressure, be prepared to set another 219mm retrievable bridge plug. Release Wireline Company and release Directional Drilling Company.

   Nipple down BOPs and install 315mm x 900 ANSI full port ball (master) valve. Close master valve and install 315mm blind flange. Install pressure recorder, ensure that the well is full of fresh water and pressure test casing, wellhead and master valve to a surface pressure of 11,000 kPa for a minimum of 4 hours. Call Enbridge Office with the results.

4. Rig down rotary rig and move off of location.

5. Restore wellsite to Enbridge's specifications.

Section 4.7 - Loss Circulation Procedure

1. Before drilling out the casing shoe:
   a. Identify sources and location of fresh water and/or brine, loss circulation materials and weight materials
   b. Ensure BOPs and manifold are properly installed
   c. Ensure auxiliary tanks are connected to the pumping system and a standby mud pump is hooked up for annular injection in case of severe loss circulation (so that fluid can be pumped down both the drill pipe and annulus simultaneously)
   d. Pressure test BOPs prior to drill out

2. After drilling out shoe:
   a. Alert water suppliers and haulers
   b. Ensure adequate amounts of fresh water and/or brine are readily available prior to penetrating the Detroit River and Guelph formations
   c. Mechanically test BOPs and perform BOP drill prior to penetrating the Detroit River and Guelph formations.

3. Drilling Blind – Detroit River formations:
   a. In an attempt to maintain or re-establish circulation, pump fluid down both the annulus and the drill pipe simultaneously
   b. Should severe loss circulation occur while drilling, the thief zone may be plugged with cement and/or loss circulation material at Enbridge's discretion.

4. Drilling Blind – Guelph
   a. In an attempt to maintain or re-establish circulation, pump fluid down both the annulus and the drill pipe simultaneously
   b. Make wiper trips or reciprocate the drill pipe to maintain a clean hole every joint or two as directed by the Wellsite Supervisor
   c. Sweep the hole every 1 to 3 joints
   d. Use a. and b. in combination
   e. At TD conduct a final sweep and then trip out BHA

SECTION 5.0 - REPORTING PROCEDURES

Section 5.1 - Tower Sheets

Shall be completed daily and shall include:

1. Bit size, fluid type and weight, weight on bit, deviation surveys, depth at the beginning of the shift and end of each shift.

2. Casing size, grade, weight, and number of joints, centralizers, cement baskets, total length and setting depth.

3. Cementing information – Service Company, cement type, amount, slurry density, additives, annular fluid returns, volume of displacement fluid and plug down time.

4. Water, gas or oil – type, depth encountered depth of sample collected and the static level and/or rate of flow.

5. Pressure tests – individually, surface pressures, fluid density used in the tests, bleed-off rate and duration of test.

6. Logging Details – type and interval.

7. Abandonment details – intervals, amount and type of cement, top of plug and time felt.

8. Rig release – date and time.

Section 5.2 – Worker Injury

Immediately provide first aid to the injured party and ensure that all personnel are removed from harm's way. Secure the area and ensure that the site is preserved in case an investigation is required.

Every work related accident or injury shall be reported immediately to the Wellsite Supervisor. The Supervisor shall immediately contact the Enbridge Gas Distribution Inc. Office, specifically the Senior Project Geologist, followed by the Reservoir Field Supervisor. The verbal report shall be followed with a written report, including but not limited to, the Contractor's Accident/Incident Investigation form. The affected Contractor is responsible to contact the proper authorities concerning the accident.

SECTION 6.0 - SAFETY AND PROCEDURES

Section 6.1 - General Safety

1. All works at the Wellsite shall be in compliance with the Occupational Health and Safety Act and the Oil, Gas & Salt Resources Act and all associated legislation. In addition, all work at the Wellsite shall be done in compliance with good oil field practices. All verbal notifications given to and approvals received from government agencies shall be recorded on the tower sheets.

2. Safety meetings are to be held with each crew, at the start of the well and periodically while drilling – meetings shall also be held prior to cementing and upon arrival of the logging company, prior to commencement of directional drilling operations and prior to penetrating the Detroit River formations and the A-2 Carbonate formation.

3. The Wellsite Supervisor shall ensure that the operations are in compliance with all applicable government regulations and shall complete daily walk around rig inspections.

Section 6.2 – Well Control

All blowout prevention systems are to be in strict compliance with MNR regulations. The function and pressure testing guidelines required by the regulatory bodies (such as daily function testing of the pipe rams) will be strictly adhered to.

1. All pressure tests of blowout prevention equipment will be conducted with fresh water and will be conducted in 2 stages – low and high pressure. It is essential that the low pressure test be done first, to prevent the high pressure test from healing leaks that would have been noted at low pressures.

2. The following pressure test will be conducted with fresh water prior to drilling out each casing string and the results recorded on the tower sheets and daily reports:

    a. The blind rams, kill lines and choke manifold will be tested individually for 10 minutes each to:
        i. Intermediate casing 2000 kPa low & 9000 kPa high
        ii. Production casing 2000 kPa low and 10000 kPa high

    b. Run in hole with BHA, drill pipe and drill collars and pressure test the casing string, pipe rams, kelly cock, stand pipe, swivel, safety valves, etc. will be tested individually for 10 minutes each to:
        i. Surface casing 1400 kPa low and 3500 kPa high (using AP)
        ii. Intermediate casing 2000kPa low & 9000 kPa high
        iii. Production casing 2000 kPa low and 10000 kPa high

c. The annular preventer will be tested for 10 minutes to
    i. Surface casing 1400 kPa low and 3500 kPa high
    ii. Intermediate casing 2000 kPa low & 9000 kPa high
    iii. Production casing 2000 kPa low and 10000 kPa high

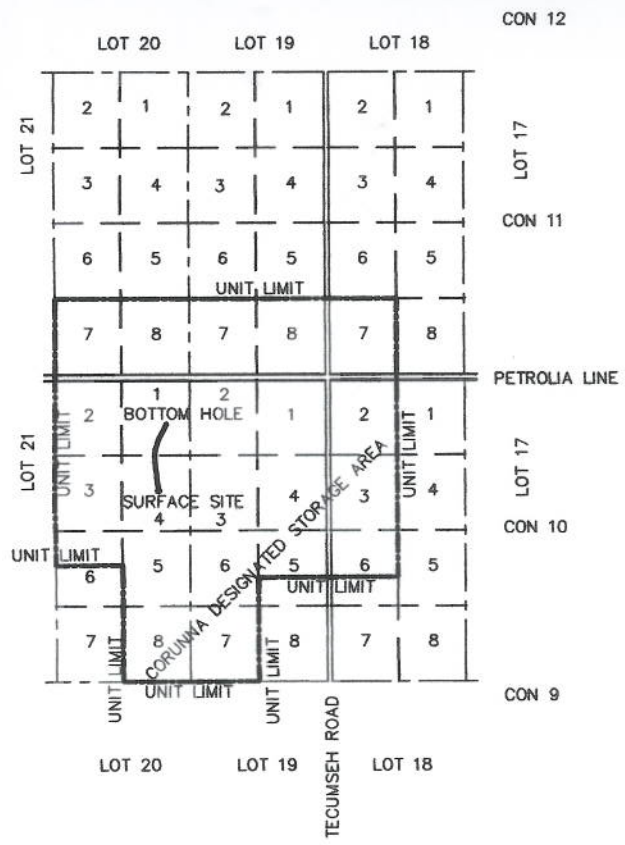
3. Upon drilling out the casing, drill 0.5m to 1.0m of new hole and test the formation, with the hole full of fluid, to a minimum bottom hole pressure of 18 kPa per metre.

4. After one day of drilling below the casing shoe, check the entire blowout prevention system and tighten all bolts.

5. Crews should be kept alert and familiar with the blowout prevention equipment. At least one member of the crew who has been trained in blowout prevention and well control procedures must be on the floor at all times.

6. Conduct blowout prevention drills prior to drilling out casing and once per week thereafter. Ensure that the drills are recorded in the tour book.

7. The blowout preventers are to be function tested once per tour. Ensure that the function test is recorded on the tower sheets.



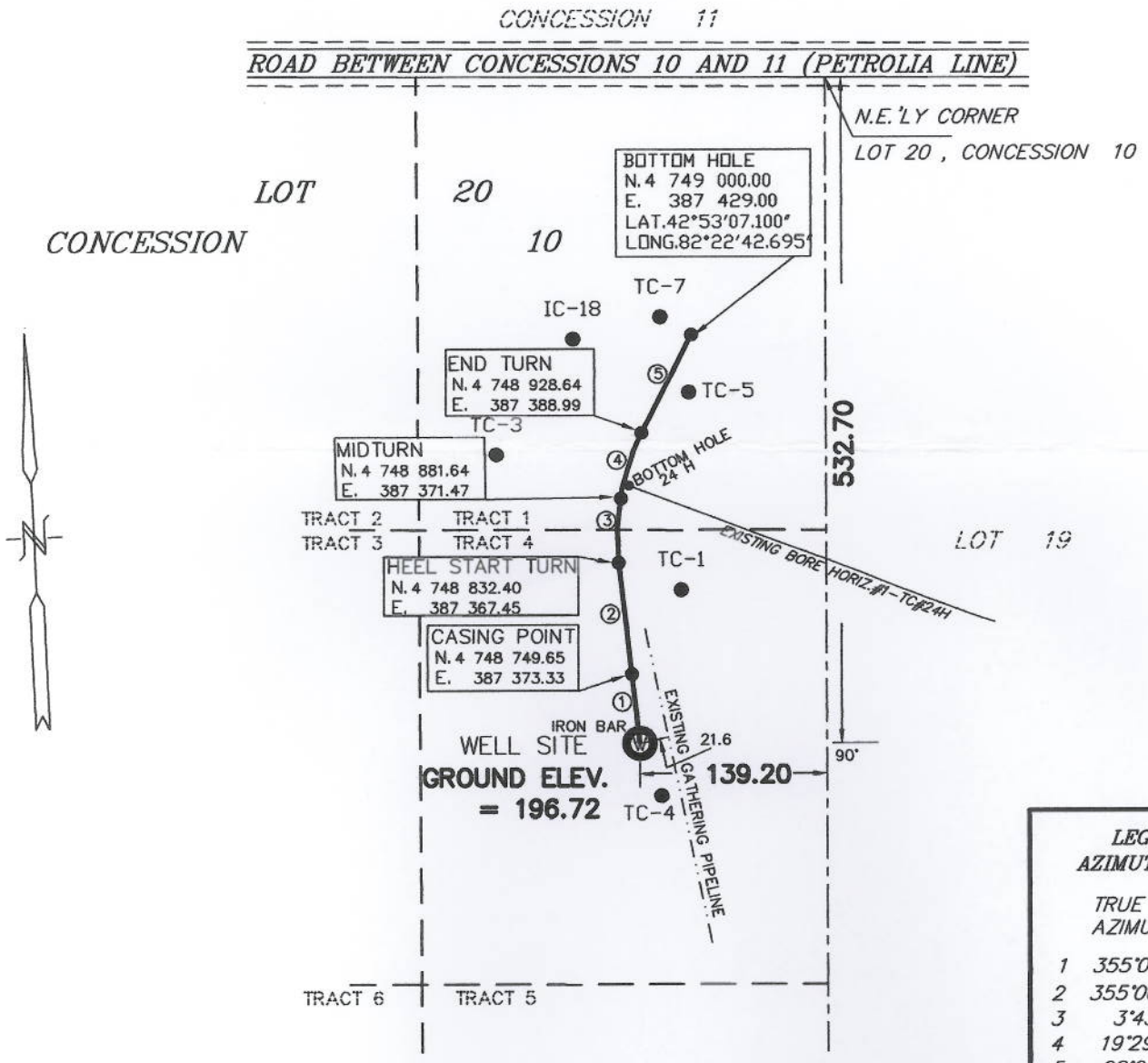
DENOTES
EXISTING DESIGNATED STORAGE AREA

PLAN OF PROPOSED WELL
LOT 20
CONCESSION 10
GEOGRAPHIC TOWNSHIP OF MOORE
TOWNSHIP OF ST. CLAIR
COUNTY OF LAMBTON

SCALE 1:5000

NOTE (WELL SITE) CO-ORDINATES
LATITUDE N.42°52'57.285" LONGITUDE W.82°22'44.769"
U.T.M. N.4 748 698.00 E.387 377.00

WELL NAME
TC 9H (HORIZ. #1) – MOORE – 4 – 20 –10



LEGEND FOR BORES AZIMUTHS AND DISTANCES

	TRUE NORTH AZIMUTH	DIST.	
1	355°00'00"	51.78	(CASING POINT)
2	355°00'00"	82.96	(HEEL AND START TURN)
3	3°43'45"	49.40	
4	19°29'20"	50.20	
5	28°20'40"	81.80	BOTTOM HOLE

NOTE GEODETIC HORIZONTAL CONTROL
U.T.M. CO-ORDINATES ARE GEODETIC (DATUM NAD 83 ORIGINAL) AND REFERRED TO MONUMENTS No.S 693749 AND 693767

NOTE METRIC
DISTANCES SHOWN ON THIS PLAN ARE IN METERS AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

PREPARED BY
BRISCO AND O'ROURKE
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NOTE BENCH MARK
ELEVATIONS ARE REFERRED TO GEODETIC DATUM AND REFERENCE BENCH MARK BEING
NO. 81U138 SARNIA
ELEVATION = 180.512

PREPARED FOR
ENBRIDGE GAS DISTRIBUTION INC.

FILE NO. 14-5068 | PLAN NO. ENB6804.DWG

OCT. 26, 2015

TIMOTHY J. O'ROURKE C.S.T. A.C.E.T.

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