

**Application for Oil Battery Permit 12-16-016-27W1M**

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**Vermilion Energy Inc**

520 3 Ave SW Suite 3500,  
Calgary, AB T2P 0R3  
(403) 269-4884

**February 21, 2020**

**Manitoba Growth, Enterprise and Trade  
Petroleum Branch  
Box 1359, 590 Wellington Street East  
Virden, MB R0M 2C0**

**Attention: Petroleum Inspectors****RE: Application for an Oil Battery Permit 12-16-016-27W1M**

Vermilion Energy Inc. (Vermilion) is submitting a request for an oil battery permit for 12-16-016-27W1M; as part of the requirements the following information is submitted with the application.

- a. the application fee of \$1,000.00 (payable to the Minister of Finance)
- b. the performance deposit;
- c. one copy of a survey plan of the battery location;
- d. the names and addresses of all landowners and occupants within 1.5 km of the proposed site of the battery and a description of the applicant's consultations with those landowners and occupants, including summary of any concerns raised during the consultation and all actions taken or proposed to be taken by the applicant to address the concerns of the landowners and occupants;
- e. an estimate of the production rates of oil, water and gas for the battery, including the estimated volume of gas.
  - i. used for fuel,
  - ii. flared, or
  - iii. vented;
- f. representative gas analysis for the battery;
- g. the specifications of any process vessel to be used, including the name of the manufacturer, dimensions, Canadian Registration Number (CRN), minimum and maximum flow capacity and design and estimated operating pressure and temperature;
- h. details of well testing facilities associated with the battery, including the method, frequency, and duration of well testing;

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- i. details of the flare and vapour recovery systems for the battery;
- j. where the applicant proposes to vent gas containing hydrogen sulphide (H<sub>2</sub>S),
  - i. reasons why the gas cannot be flared,
  - ii. specific actions to be taken to minimize the volume of gas vented, and
  - iii. the method of controlling off-lease odours;
- k. air dispersion modeling for the battery where gas production will contain hydrogen sulphide;
- l. a plot drawing on a scale of not less than 1:125 and showing the location of:
  - i. each process vessel, tank, and salt water disposal facility;
  - ii. any pit, dyke, flare, or pop tank and its size; and
  - iii. any associated equipment;
- m. a copy of a schematic process flow diagram showing:
  - i. process vessels, meters, tanks, and salt water disposal equipment;
  - ii. valves, pumps, and piping; and
  - iii. pressure relief valves and settings, emergency shut down systems and any other equipment intended to prevent a spill or to mitigate the amount of spill;
- n. plans or facilities for the disposal of produced water.

For any questions please contact me at 587-707-8332.

Sincerely,

Suddha Sircar, P. Eng

Facilities Engineer



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a. [Application fee and levy](#)

A cheque for the application fee (\$750) and levy (\$250) will be mailed, payable to the Manitoba Minister of Finance.

b. [Performance deposit](#)

No additional performance deposit is required to obtain this battery operating permit.

c. [Survey plan of battery location](#)

See next page for the survey; **Caltech Surveys Drawing Number 419-2565W02-R0:**

Plan Showing Survey of  
**VERMILION BIRDTAIL HZNTL A10-17-16-27**  
 Pad Site  
 Surface Location In  
**L.S.12B SEC.16 TWP.16 RGE.27 WPM**  
 To Bottom Hole In  
**L.S.10C SEC.17 TWP.16 RGE.27 WPM**  
 Prairie View Municipality

**COORDINATE TABLE**

	LOCAL COORDINATES	GEOGRAPHIC COORDINATES				UTM COORDINATES (ZONE 14)	
		NAD 83		NAD 27		NAD 83	NAD 27
<b>SURFACE 12B-16</b>	665.00 S/N 70.00 E/W } SEC. 16	50°22'01.581" N 101°09'09.200" W	50.3671057° N 101.1525556° W	50°22'01.580" N 101°09'07.565" W	50.3671055° N 101.1521014° W	5 581 663.60 N 346 917.18 E	5 581 443.88 N 346 944.43 E
<b>INT CASING 9-17</b>	445.00 S/N 94.91 W/E } SEC. 17	50°22'08.694" N 101°09'19.091" W	50.3690817° N 101.1553030° W	50°22'08.693" N 101°09'17.455" W	50.3690815° N 101.1548487° W	5 581 888.94 N 346 728.18 E	5 581 669.22 N 346 755.43 E
<b>BOTTOM HOLE 10C-17</b>	445.00 S/N 695.24 W/E } SEC. 17	50°22'08.667" N 101°09'49.466" W	50.3690741° N 101.1637405° W	50°22'08.666" N 101°09'47.829" W	50.3690739° N 101.1632860° W	5 581 905.52 N 346 128.19 E	5 581 685.80 N 346 155.43 E

**DRILL PATH INFORMATION**

**RECTANGULAR COORDINATES**

<b>SURFACE TO INT CASING</b>	294.16 @ 318°21'10" (332.3 ALONG DRILL PATH)	<b>SURFACE 12B-16</b>	0.00 NORTH 0.00 WEST
<b>INT CASING TO BOTTOM HOLE</b>	600.33 @ 269°55'25"	<b>INT CASING 9-17</b>	219.81 NORTH 195.48 WEST
		<b>BOTTOM HOLE 10C-17</b>	219.01 NORTH 795.81 WEST

**WELL CENTRE MOVEMENT**

GIVEN	665.00 S of N 70.00 E of W	SEC. 16	SURVEYED	665.00 S of N 70.00 E of W	SEC. 16
W/C SURVEYED ON REQUESTED COORDINATES					

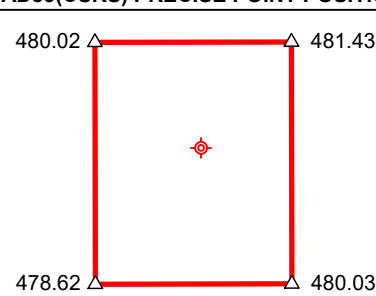
**AREA INFORMATION**

**LANDOWNER INFORMATION**

	1/4	HECTARES	ACRES	LEGAL DESCRIPTION	TITLE NO.	LANDOWNER(S)
				N.W.1/4 SEC.16-16-27 WPM	1696121/5	WILLIAM ROGER WILSON
PAD SITE	NW16	2.080	5.14			
<b>TOTAL</b>		<b>2.080</b>	<b>5.14</b>			

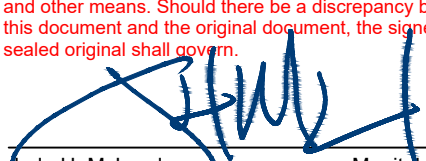

**LICENCING INFORMATION**

**ELEVATION INFORMATION**

<p>The proposed well centre:</p> <p>Is at least 45m from any surveyed road. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Is at least 75m from any surface improvement (MB Hydro O/H Powerline) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>Is at least 100m from any water covered area. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Is at least 200m from any occupied dwelling, public facility or urban centre. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Is at least 6.0 km from the centre of an aerodrome. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p><b>DATUM: CGVD2013 / NAD83(CSRS) PRECISE POINT POSITIONING</b></p> <p style="text-align: center;">480.02 </p> <p>CE 481</p>
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**MANITOBA LAND SURVEYOR'S CERTIFICATION**

**OPERATOR INFORMATION**

<p>I certify that the survey represented by this plan is correct and true to the best of my knowledge and was completed on the 5th day of December, 2019.</p> <p>This is a copy of an original plan, signed and sealed by Jade H. McLeod, Manitoba Land Surveyor, on December 11, 2019. The original plan is held on file in the office of Caltech Surveys Manitoba Land Surveying Ltd. This copy has been prepared for distribution via electronic and other means. Should there be a discrepancy between this document and the original document, the signed, sealed original shall govern.</p> <p>          Jade H. McLeod          Manitoba Land Surveyor</p>	<p style="text-align: center;"><b>VERMILION ENERGY</b></p> 			
<b>REVISION TABLE</b>				
REV.	DATE	DESCRIPTION	BY	CK'D
0	2019.12.11	ISSUED	ML	AJB



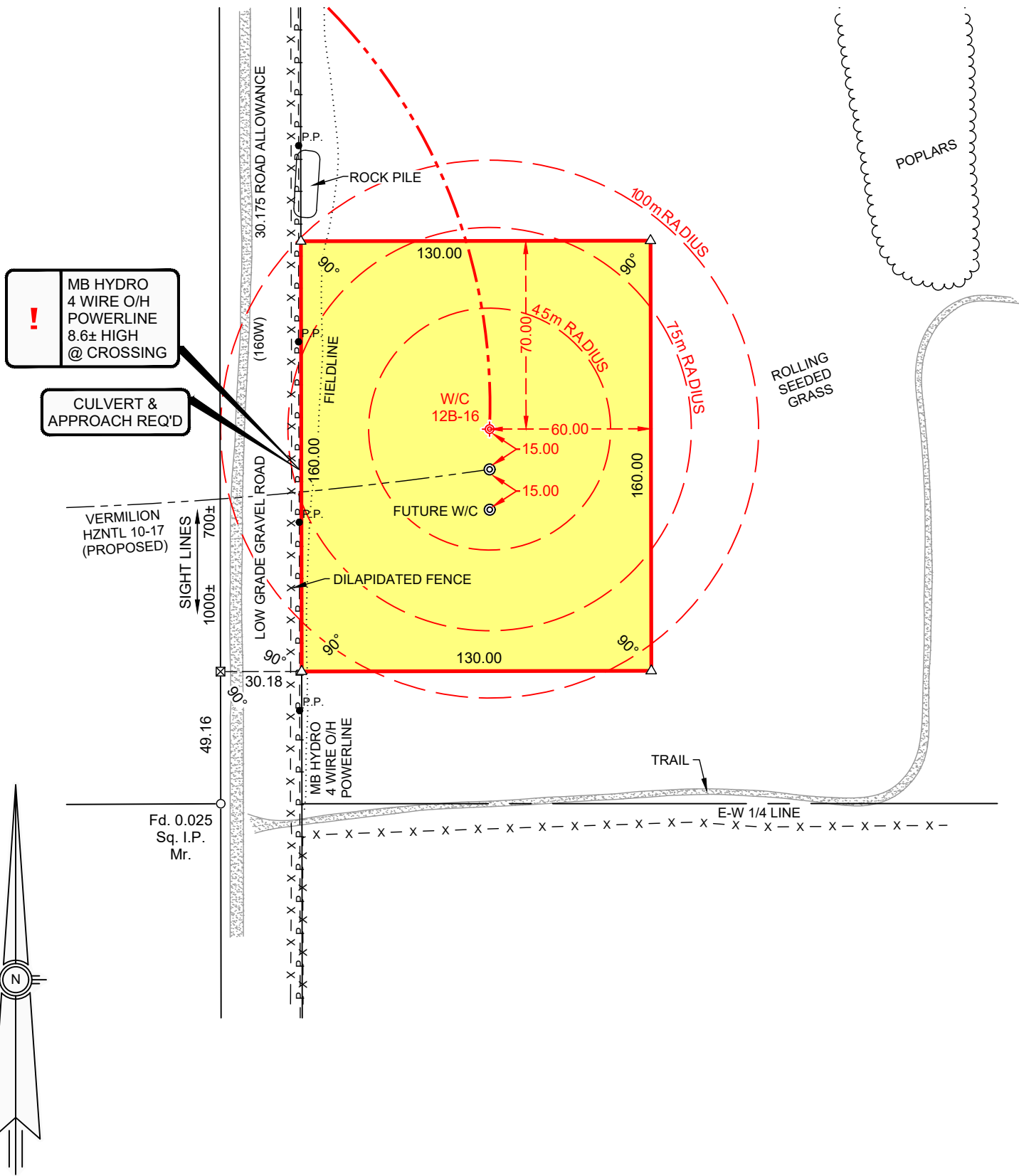
ALBERTA  
BRITISH COLUMBIA  
MANITOBA  
SASKATCHEWAN

1-888-263-8055  
www.caltechsurveys.com

VERMILION FILE NO.:		VERMILION AFE NO.:	
CALTECH FILE NO.: 419-2565-2		BROKER FILE NO.: VET 596	
419-2565W02-R0.DWG	DN:ML	CK:AJB	PC:JW
PAGE: 1 OF 4		<b>0</b> REVISION	

**PAD SITE DETAIL**

SCALE: 1:2000



**!**  
MB HYDRO  
4 WIRE O/H  
POWERLINE  
8.6± HIGH  
@ CROSSING

CULVERT &  
APPROACH REQ'D

VERMILION  
HZNTL 10-17  
(PROPOSED)

SIGHT LINES  
700±  
1000±

30.175 ROAD ALLOWANCE

ROCK PILE

FIELDLINE

130.00

4.5m RADIUS

100m RADIUS

75m RADIUS

W/C  
12B-16

FUTURE W/C

DILAPIDATED FENCE

130.00

160.00

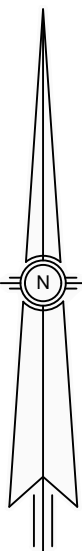
ROLLING  
SEEDED  
GRASS

POPLARS

TRAIL

E-W 1/4 LINE

F.d. 0.025  
Sq. I.P.  
Mr.



**LEGEND**

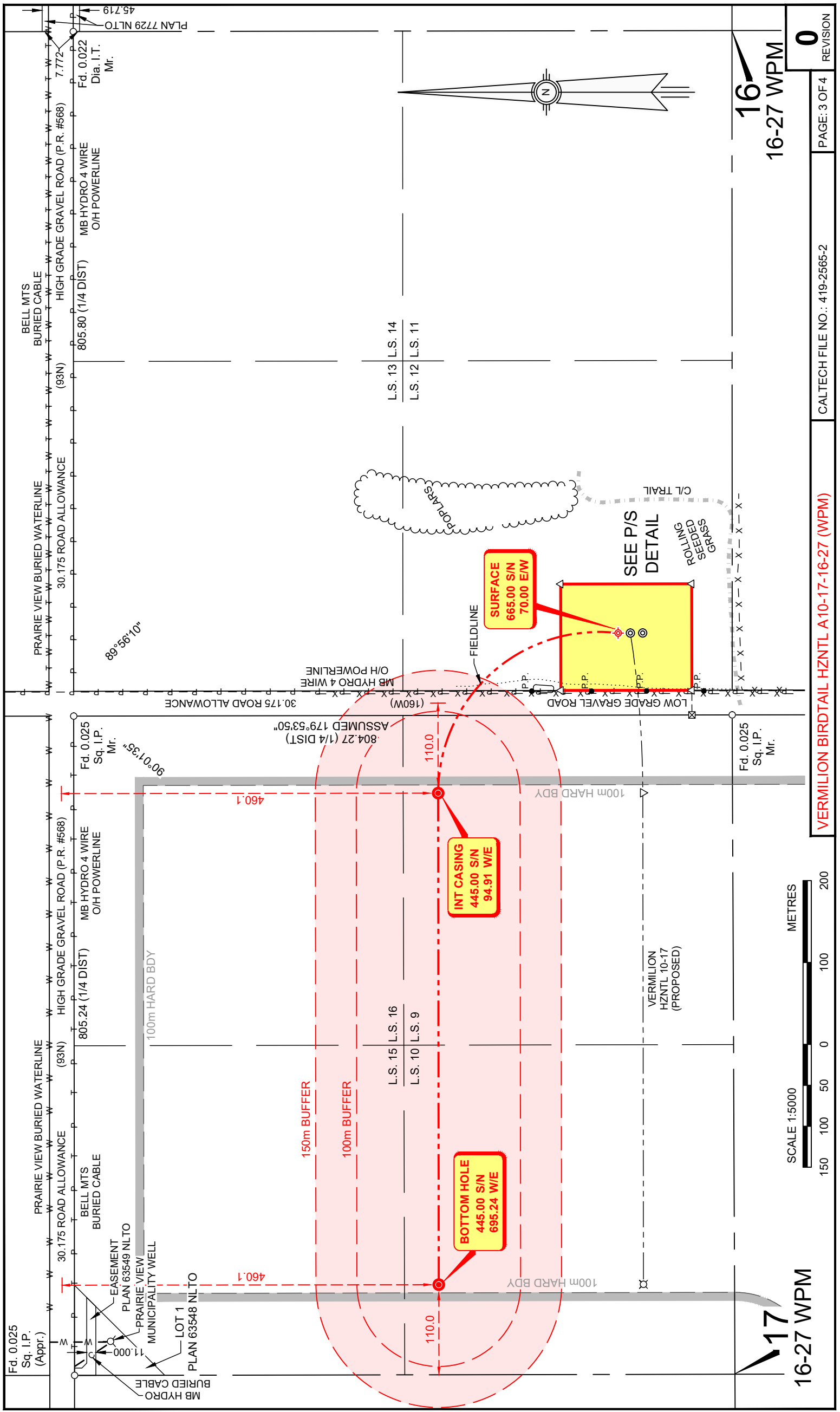
- Proposed well centre shown thus. . . . .
  - Proposed int casing, landing & target entry points shown thus. . . . .
  - Proposed end horizontals & bottom holes shown thus. . . . .
  - Proposed drilling location shown thus. . . . .
  - Existing Wells shown thus. . . . .
  - Existing int casing, landing & target entry points shown thus. . . . .
  - Existing end hz / bottom holes shown thus. . . . .
  - Abandoned wells shown thus. . . . .
  - Legal survey monuments found shown thus. . . . .
  - Legal survey monuments planted shown thus. . . . .
  - Survey marks (0.013 Iron Bar) planted shown thus. . . . .
  - Survey marks (Hubs) planted shown thus. . . . .
  - Survey marks (0.013 Iron Bar) found shown thus. . . . .
  - Temporary points shown thus. . . . .
  - New portions referred to shown thus. . . . .
  - Existing portions referred to shown thus. . . . .
  - Temporary workspaces shown thus. . . . .
- Bearings shown are True North and are derived from GPS measurements.  
Local coordinates shown are perpendicular to the referenced boundary.  
Distances are in metres.

**BURIED FACILITIES INFORMATION**

Due to the limitations of the electronic devices used to locate underground facilities, it should not be assumed that the locations and/or depths shown on this plan of survey are exact or that all underground facilities are shown. Caltech Surveys and any of its employees take no responsibility for the accuracy of the underground facilities shown and all underground facilities should be located by the respective authorities prior to construction.

Manitoba Hydro: 1-800-940-3447  
Bell MTS: 1-800-940-3447  
Flowlines: Individual Operator

Municipality Contact Info.:  
Prairie View Municipality  
Birtle, MB  
Ph. (204) 842-3403



**17**

**16-27 WPM**

**16**

**16-27 WPM**

**0**  
REVISION

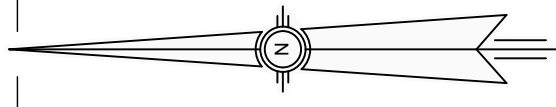
PAGE: 3 OF 4

CALTECH FILE NO.: 419-2565-2

**VERMILION BIRDTAIL HZNTL A10-17-16-27 (WPM)**

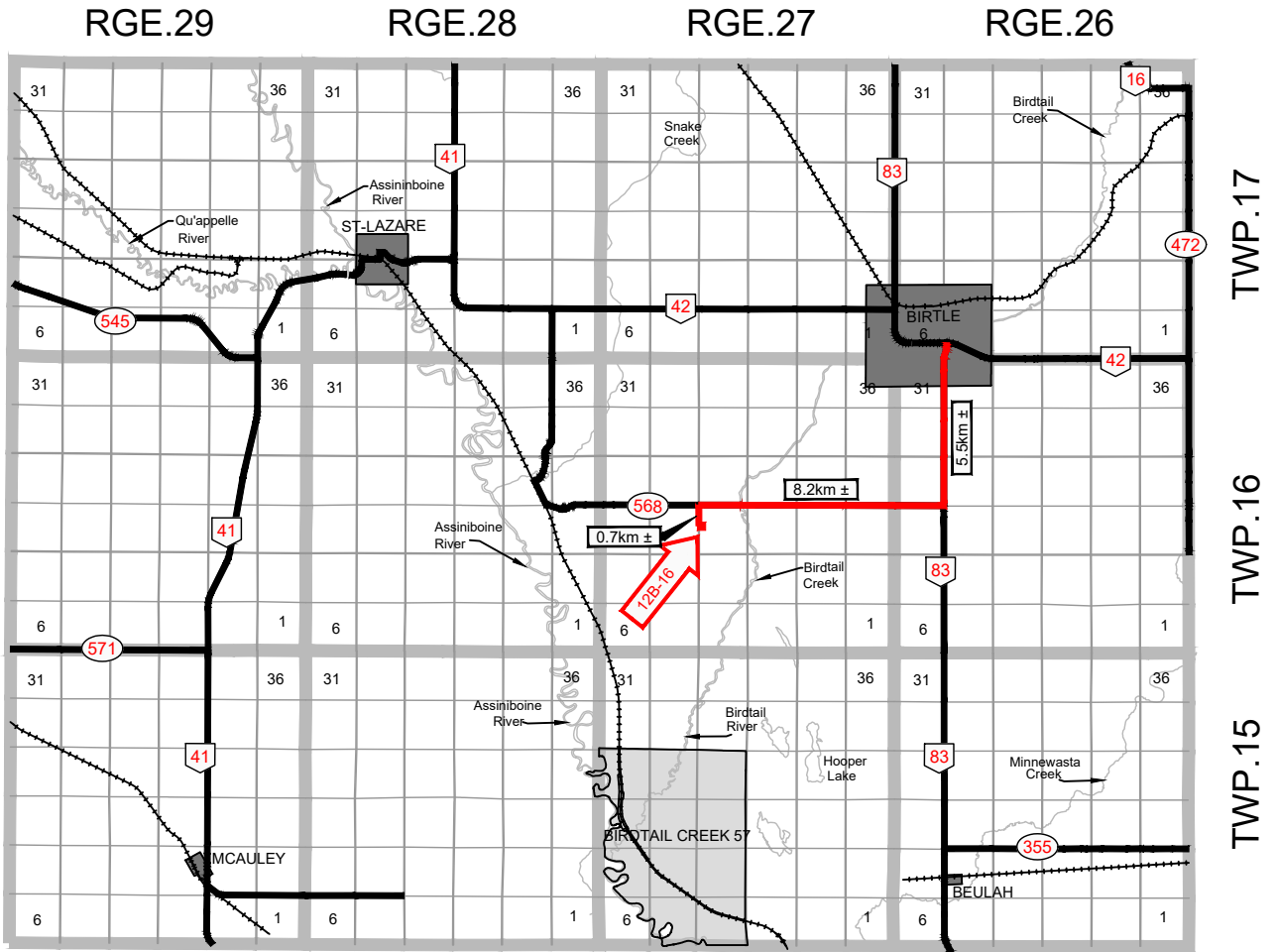
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METRES  
150 100 50 0 100 200

PLAN 7729 NLTO  
45.719



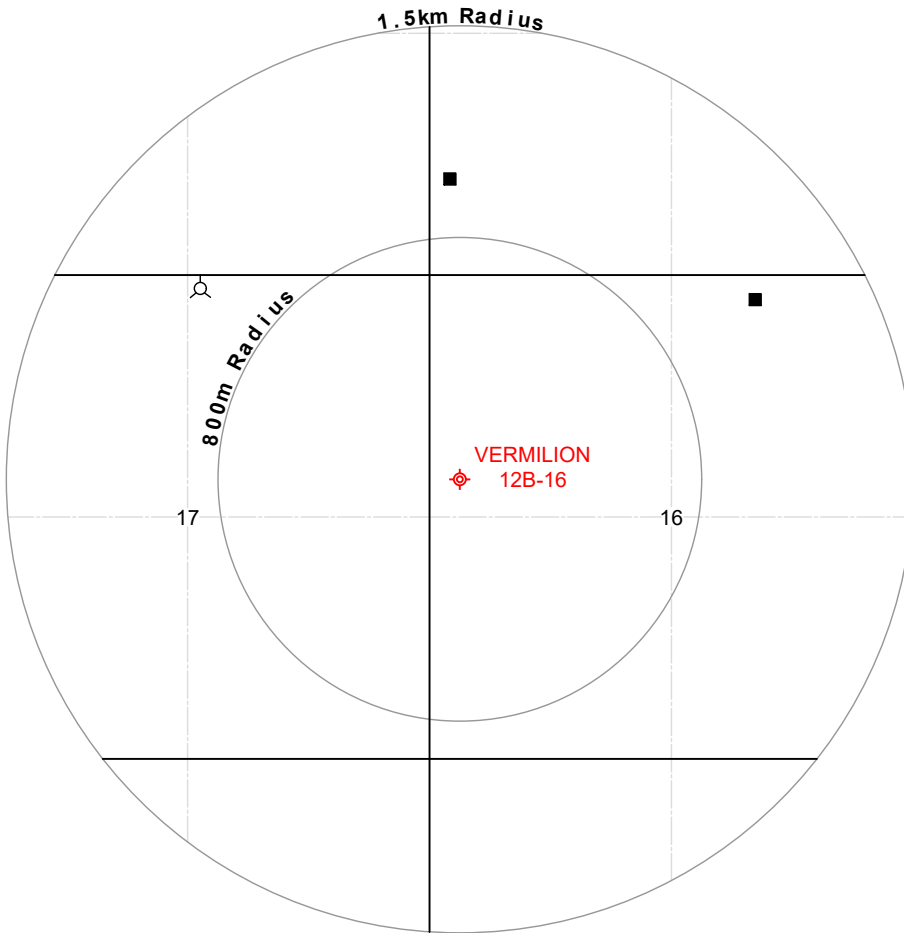
**ACCESS ROUTE INFORMATION**

SCALE: 1:25000

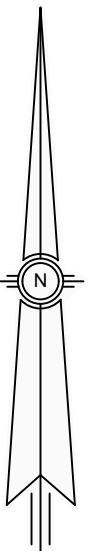


**PUBLIC FACILITY & DWELLING SKETCH**

SCALE: 1:25000



OCCUPIED DWELLINGS SHOWN THUS: ■  
 UNOCCUPIED DWELLINGS SHOWN THUS: □  
 PUBLIC FACILITIES SHOWN THUS: ▲  
 WATER WELL SHOWN THUS: ⊕  
 NEAREST OCCUPIED RESIDENCE 0.9km± NORTH OF WELL CENTRE  
 NEAREST URBAN CENTRE IS BIRTLÉ 9.1km± N.E. OF WELL CENTRE





# VERMILION ENERGY INC.

## PHOTO MOSAIC PLAN

SHOWING

### VERMILION BIRDTAIL HZNTL A10-17-16-27

Surface Location In

**L.S.12B SEC.16 TWP.16 RGE.27 WPM**

To Bottom Hole In

**L.S.10C SEC.17 TWP.16 RGE.27 WPM**

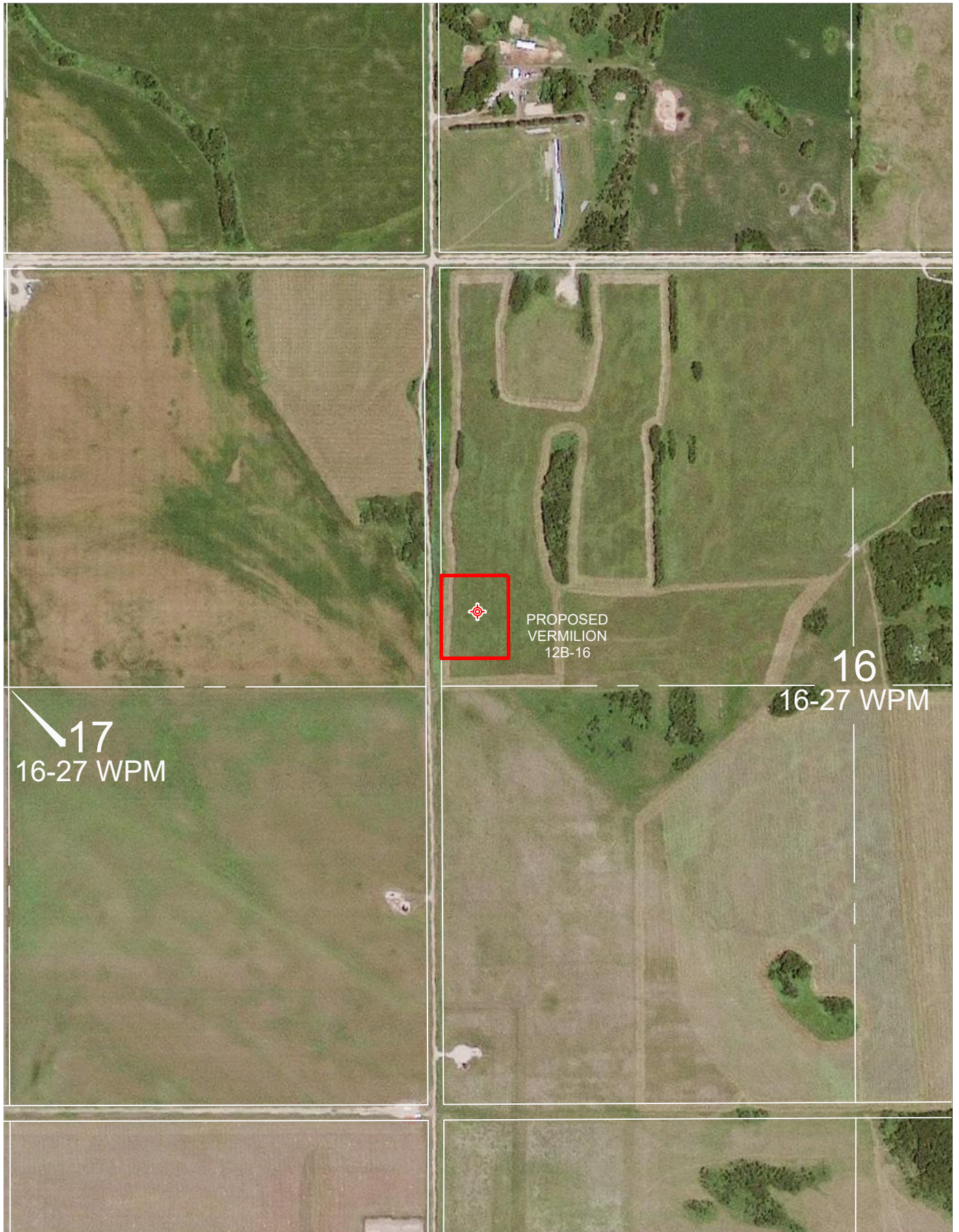
SCALE: 1:10000



ALBERTA  
BRITISH COLUMBIA  
MANITOBA  
SASKATCHEWAN

1-888-263-8055  
[www.caltechsurveys.com](http://www.caltechsurveys.com)

CALTECH FILE NO.: 419-2565-2		VERMILION FILE NO.:	PHOTO DATE: 2018	
REV.	DATE	DESCRIPTION	BY	CK'D
0	2019.12.11	ISSUED	ML	AJB







**Application for Oil Battery Permit 12-16-016-27W1M**

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- d. The names and addresses of all landowners and occupants within 1.5 km of the proposed site of the battery and the applicant's consultations with those landowners and occupants, any concerns raised during the consultation process and all actions taken or proposed to be taken by the applicant to address the concerns of the landowners and occupants;

Attachments detailing public consultation will be sent soon at a later date.



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- e. An estimate of the production rates of oil, water and gas for the battery, including the estimated volume of gas.

The anticipated daily volumes entering the proposed 12-16 battery:

Flow Rate Oil	Flow Rate Water	Flow Rate Gas
7.95 m <sup>3</sup> /day	22.23 m <sup>3</sup> /day	991 m <sup>3</sup> /day

Gas Usages		
Fuel gas rate: 0 m <sup>3</sup> /day	Flared gas rate: 0 m <sup>3</sup> /day	Vented gas rate: 991 m <sup>3</sup> /day Gas Composition ~92% Nitrogen

- f. Representative gas analysis for the battery;

See next page for typical gas analysis; **Bodycote Testing Group, Report Number 1222745:**

**Gas Analysis**

Lot Number: **684337**  
 Report Number: 1222745  
 Reference Sample ID: 3050580

Well License No. 09-05-016-27 Prairie Petro-Chem Ltd. Operator Tundra 9-5-16-27 Tedlar X 2/NWL32461 Container Identity

Location 09-05-016-27 Well Name Ram KB Elev, m GR Elev, m

Field/Area Prairie Petro-Chem Pool/Zone Sampler Company

Test Recovery:   
 Test Type No Multiple Recovery n/a

Test Interval, m 2" Annulus Meter # / Sample ID

Type of Production: Pumping Flowing Gas Lift Swab  
 Production Rates: Water m<sup>3</sup>/d Oil m<sup>3</sup>/d Gas 10<sup>3</sup> m<sup>3</sup>/d

Gauge Pressure, kPa 6  
 Temperature, °C 20

Source Sampled Received Date On Date Off

Date Sampled (Y-M-D) 2009-05-22 Time Sampled 2009-05-27 Date Received (Y-M-D) 2009-06-02 Date Reported (Y-M-D) 2009-06-02 Other Information

Comp.	Mole Fraction (Air Free)		Petroleum Liquid Content mL/m <sup>3</sup>
	As Received	Acid Gas Free	
H2	0.0302	0.0302	
He	0.0477	0.0477	
N2	0.9193	0.9201	
CO2	0.0008	0.0000	
H2S	0.0000	0.0000	
C1	0.0009	0.0009	
C2	0.0001	0.0001	0.4
C3	0.0002	0.0002	0.7
iC4	0.0002	0.0002	0.9
nC4	0.0002	0.0002	0.8
iC5	0.0003	0.0003	1.5
nC5	0.0001	0.0001	0.5
C6	Trace	Trace	0.0
C7	Trace	Trace	0.0
C8	Trace	Trace	0.0
C9	Trace	Trace	0.0
C10+	Trace	Trace	0.0
Total	1.000	1.000	4.8

**Gross Heating Value - Moisture Free**  
 MJ/m<sup>3</sup> @ 15°C, 101.325 kPa

AGA #5 As Received	AGA #5 Acid Gas Free	GPA 2172 As Received	Pressure, kPa	Temperature, K
0.53	0.53	0.53	3186	118.1

**Density - Moisture Free, As Sampled**

Ideal Gas (AGA #5)		Real Gas (GPA 2172)	
Absolute, kg/m <sup>3</sup>	Relative	Absolute, kg/m <sup>3</sup>	Relative
1.103	0.901	1.103	0.901

**Relative Molecular Mass**

Total Gas	C7+	Hydrogen Sulfide g/m <sup>3</sup>	Vapour Pressure Pentanes Plus, kPa
26.09		0.00	143

\* H2S was determined by GC/SCD: <0.1 ppm (mol/mol)

*S Montgomery*

Approved by: Sara Montgomery, B.Sc. Quality Officer  
 Note: Physical constants used in calculations from GPA Standard 2145-09

**Methodology and Notes**

Bill To: Prairie Petro-Chem Ltd.	Project:	Lot ID: <b>684337</b>
Report To: Prairie Petro-Chem Ltd.	ID:	Control Number:
738 - 6 Street	Name: Tundra 9-5-16-27	Date Received: May 27, 2009
Estevan, SK, Canada	Location:	Date Reported: Jun 2, 2009
S4A 1A4	LSD: 09-05-016-27	Report Number: 1222745
Attn: Brent Frehlick	P.O.:	
Sampled By: Ram	Acct code:	
Company: Prairie Petro-Chem		

**Method of Analysis**

Method Name	Reference	Method	Date Analysis Started	Location
Natural Gas - C7/10 Composition	GPA	* Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography, GPA 2261-00	29-May-09	BTG Edmonton
Total Reduced Sulfur Analysis of Natural Gas	ASTM	* Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, D 5504-05	29-May-09	BTG Edmonton

\* Bodycote method(s) based on reference method

**References**

GPA	Gas Processors Association
ASTM	Annual Book of ASTM Standards

**Comments:**

- Sample 684337-1; 3050580 H2S was determined by GC/SCD: <0.1 ppm (mol/mol)

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

Bill To: Prairie Petro-Chem Ltd.	Project:	Lot ID: <b>684337</b>
Report To: Prairie Petro-Chem Ltd.	ID:	Approval Status: Approved
738 - 6 Street	Name: Tundra 9-5-16-27	Invoice Frequency: by Lot
Estevan, SK, Canada	Location:	COD Status:
S4A 1A4	LSD: 09-05-016-27	Control Number:
Attn: Brent Frehlick	P.O.:	Date Received: May 27, 2009
Sampled By: Ram	Acct code:	Date Reported: Jun 2, 2009
Company: Prairie Petro-Chem		Report Number: 1222745

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Contact & Affiliation	Address	Delivery Commitments
Brent Frehlick Prairie Petro-Chem Ltd.	738 - 6 Street Estevan, Saskatchewan S4A 1A4 Phone: (306) 634-5808 Fax: (306) 634-6694 Email: brent.frehlick@petrochem.ca	On [Lot Verification] send (COA) by Email - Single Report On [Report Approval] send (Test Report) by Email - Merge Reports On [Lot Approval and Final Test Report Approval] send (Test Report, Invoice) by Post
Jocelyn Schappert Prairie Petro-Chem Ltd.	738 - 6 Street Estevan, Saskatchewan S4A 1A4 Phone: (306) 634-5808 Fax: (306) 634-6694 Email: jocelyn.schappert@petrochem.ca	On [Report Approval] send (Test Report) by Email - Merge Reports

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**Notes To Clients:**

- Sample 684337-1; 3050580 H2S was determined by GC/SCD: <0.1 ppm (mol/mol)

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- g. The specifications of any process vessel to be used, including the name of the manufacturer, dimensions, Canadian Registration Number (CRN), minimum and maximum flow capacity and design and estimated operating pressure and temperature;

There are no process vessels in the battery proposed for 12-16, only atmospheric tanks will be storing fluid at the facility.

- h. Details of well testing facilities associated with the battery, including the method, frequency, and duration of well testing;

The well and future well flow rates are recorded continuously with the accuracy of production reporting quality flow meters.

- i. Details of the flare and vapour recovery systems for the battery;

This gas contains mostly nitrogen at almost 92% of the total gas composition, methane accounts for 0.09% of the total volume. A flare is not proposed to be installed at this facility, the methane gas volume is low and it is not economically practical to collect the small gas volume and flare it.

The gas contains 0% H<sub>2</sub>S and is therefore a sweet gas, any gas entrained is vented off the tanks to atmosphere.

- j. Where the applicant proposes to vent gas containing hydrogen sulphide (H<sub>2</sub>S),
- i. reasons why the gas cannot be flared,
  - ii. specific actions to be taken to minimize the volume of gas vented, and
  - iii. the method of controlling off-lease odours;

The design of the site is not proposing to vent gas containing hydrogen sulphide, the gas is sweet gas, primarily nitrogen.

- k. Air dispersion modeling for the battery where gas production will contain hydrogen sulphide;

Air dispersion modeling is not required since there will not be associated H<sub>2</sub>S or SO<sub>2</sub> with the gas.

A flare is not proposed to be installed at this facility, since the gas is not being flared there will not be production of SO<sub>2</sub> associated with the gas. The gas also does not contain H<sub>2</sub>S which would necessitate dispersion modeling, any gas entrained is vented off the tanks.



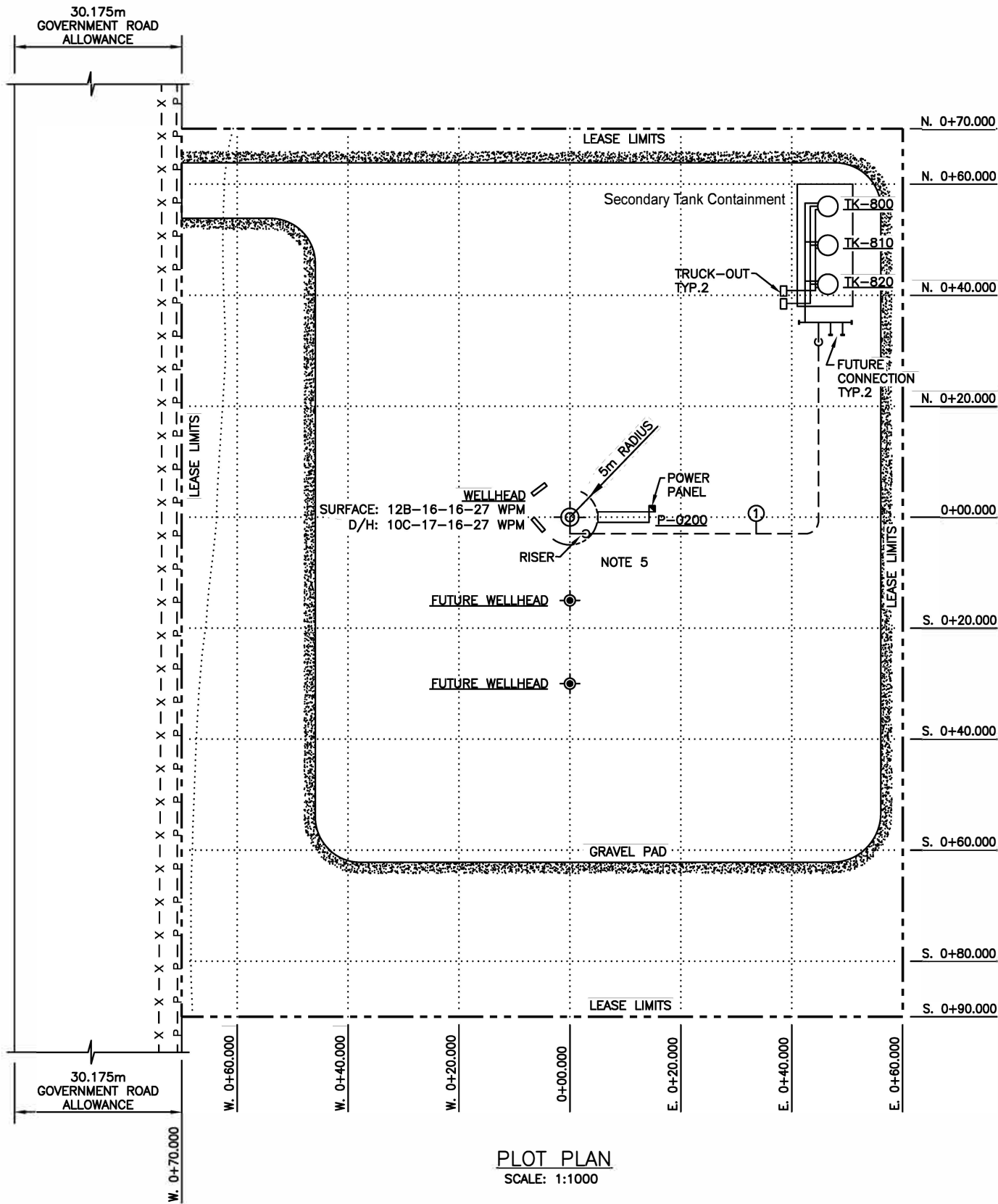
**Application for Oil Battery Permit 12-16-016-27W1M**

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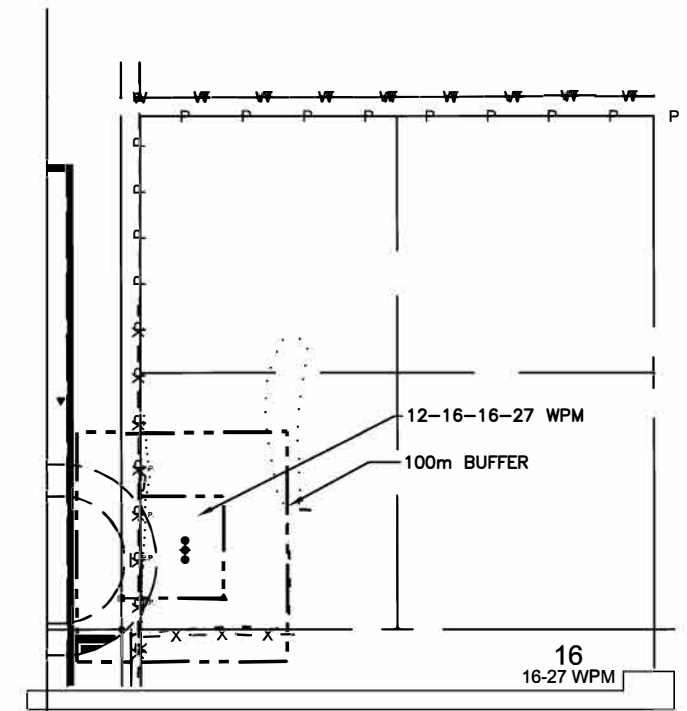
- I. A plot drawing on a scale of not less than 1:125 and showing the location of:
- i. each process vessel, tank, and salt water disposal facility;
  - ii. any pit, dyke, flare, or pop tank and its size; and
  - iii. any associated equipment;

See next page for plot plan; **Vermilion Drawing Number VET-DV-010-0401 01:**

The Plot Plan shows secondary containment in the tank area to contain spills from the tanks.



**PLOT PLAN**  
SCALE: 1:1000



**SITE PLAN**  
SCALE: 1:12000

① 3" FIBREGLASS 81mm OD x 2.8mm WT  
SERIES/RATING: HANWEI 1000  
MOP: 4,960 kPag  
H<sub>2</sub>S: TBC mol/kmol (TBC%) (NOTE 7)  
OPERATING PRESSURE: 700 kPag  
DESIGN PRESSURE: 4,960 kPag  
TEST PRESSURE: 6,200 kPag HOLD  
TEST DURATION: MIN 8 Hrs  
TEST MEDIUM: HYDROTEST FLUIDS

EQUIPMENT SCHEDULE	
DESCRIPTION	
P-0200	PUMPJACK
TK-0800	PRODUCTION TANK
TK-0810	OIL TANK
TK-0820	WATER TANK

- NOTES:**
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
  2. MINIMUM DEPTH OF PIPELINE INSIDE LEASE TO BE 2.0m.
  3. PIPELINES TRENCHED UNDER GRAVELED AREA TO BE COVERED WITH STYROFOAM SHEETING.
  4. ACCURACY OF PLOT PLAN IS BASED ON SURVEY PROVIDED BY CALTECH SURVEYS. SEE DRAWING 419-2565W02-RO.
  5. CONCRETE JERSEY BARRIERS TO BE PLACED ON LEASE TO PROTECT WELLHEAD, PIPELINE RISER AND ANY OTHER ABOVE-GROUND PIPING AND EQUIPMENT AT RISK OF VEHICLE CONTACT.
  6. FINAL WELLSITE GRAVEL PAD SHALL ALLOW FOR ENTRY AND TRAVEL OF ALL VEHICLES TO BE MINIMUM 7.0m FROM WELLHEAD, ABOVE GROUND PIPING AND ALL BUILDINGS/EQUIPMENT.
  7. MAXIMUM H<sub>2</sub>S CONCENTRATION OF 5% IN WET GAS SERVICE.

								<b>VERMILION ENERGY</b>		BIRDTAIL 12-16-16-27 WPM PLOT PLAN - OIL BATTERY			
A	20 02 21	ISSUED FOR APPROVAL (TAP20044)		DKD	AD	LAK	RY			CONTRACTOR NAME	SCALE	DRAWING NUMBER	SHEET
NO.	DATE	REVISIONS		DRAWN	CHECK	DESIGN	APPR	DRAWING NUMBER	TITLE	CONTRACTOR DRAWING NUMBER	REV.	VET-DV-010-0401 01	
				DRAFTING		ENGINEERING		REFERENCE DRAWINGS		TAP20044	0		



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- m. [A copy of a schematic process flow diagram showing:](#)
- i. process vessels, meters, tanks, and salt water disposal equipment;
  - ii. valves, pumps, and piping; and
  - iii. pressure relief valves and settings, emergency shut down systems and any other equipment intended to prevent a spill or to mitigate the amount of spill;

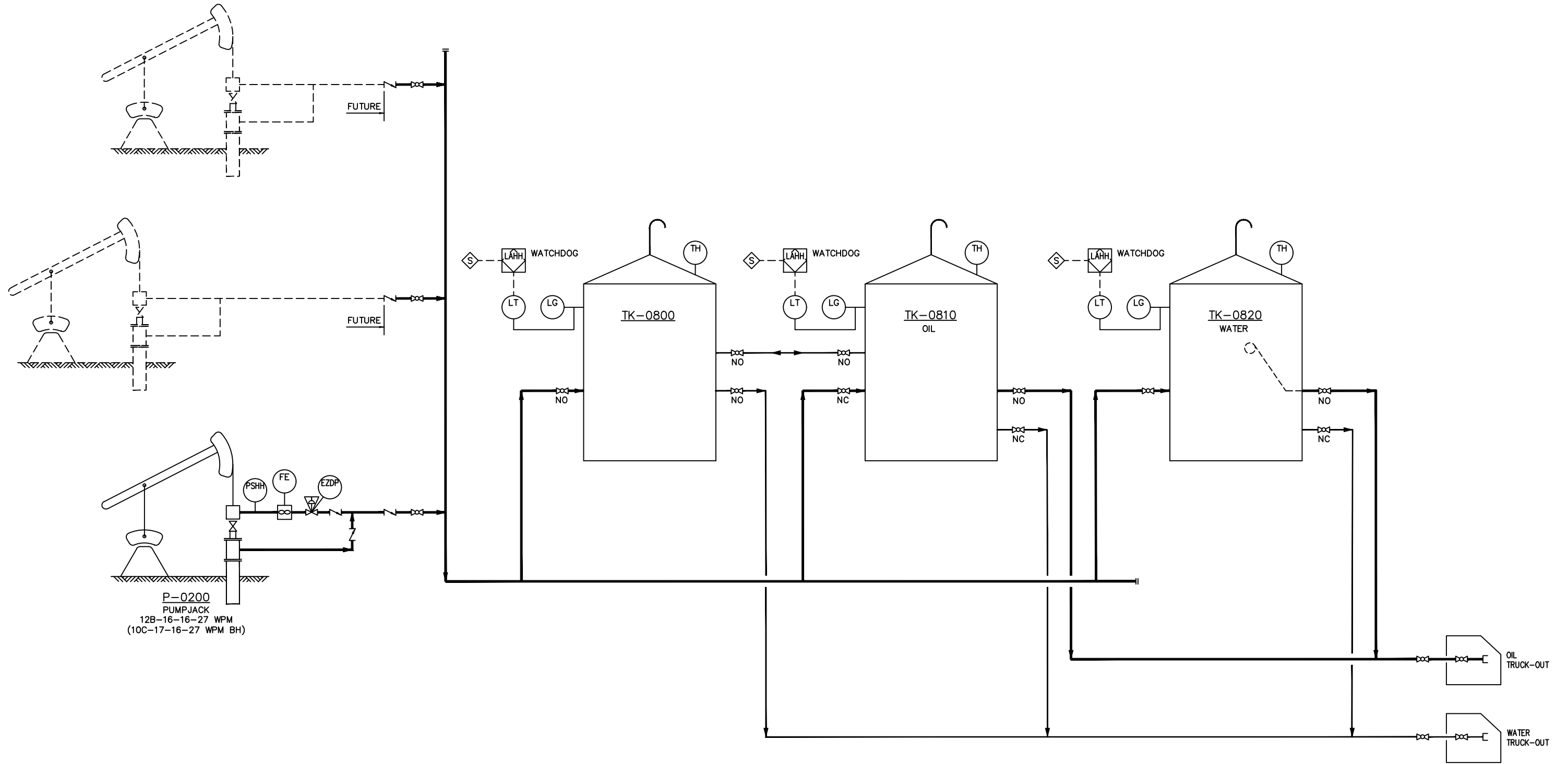
See next page for process flow diagram; **Vermilion Drawing Number VET-DV-015-0058 01:**


P-0200  
PUMPJACK

TK-0800  
PRODUCTION TANK  
CAPACITY: 400 BBL

TK-0810  
OIL TANK  
CAPACITY: 400 BBL

TK-0820  
WATER TANK  
CAPACITY: 400 BBL



												BIRDTAIL 12-16-16-27 WPM PLOT PLAN - PFD		
A	20 02 21	ISSUED FOR APPROVAL (TAP20044)		DKD	AD	LAK	RY			CONTRACTOR NAME		SCALE	DRAWING NUMBER	SHEET
NO.	DATE	REVISIONS		DRAWN	CHECK	DESIGN	APPR	DRAWING NUMBER		CONTRACTOR DRAWING NUMBER		NTS	REV.	
				DRAFTING	ENGINEERING		REFERENCE DRAWINGS		SEAL/STAMP-REV.---	SEAL/STAMP-REV.0	PERMIT	A	VET-DV-015-0088 01	





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n. Plans or facilities for the disposal of produced water.

The plan for the produced water is to ship the water off-site for disposal at another facility.