

District I
1625 N. French Dr. Hobbs, NM 88240
District II
811 S. First St. Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr. Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 21, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Encana Oil and Gas (USA), Inc.	OGRID 282327
Contact Name Paul Buck	Contact Telephone 720-876-3513
Contact email paul.buck@encana.com	Incident # (assigned by OCD) NVF-1821833715
Contact mailing address 370 17th St., Ste 1700 Denver, CO 80202	

Location of Release Source

Latitude 36.247118°

Longitude 107.411890°

(NAD83 in decimal degrees to 5 decimal places)

Site Name Lybrook A12-2306 01H
Date Release Discovered 7/28/2018

Site Type Tank Battery
API# (if applicable) 30-039-31219

Unit Letter	Section	Township	Range	County
A	12	23N	6W	Rio Arriba

DENIED

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name)

BY: Cory Smith
DATE: 10/16/18 (505) 334-6178 Ext. 115
**Incomplete Report See Email.*

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 5.7	Volume Recovered (bbls) 5.0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 80	Volume Recovered (bbls) 70
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume Weight Released (provide units)	Volume Weight Recovered (provide units)
Cause of Release Lightning Strike		

NMOC

SEP 20 2018

DISTRICT III

59

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Tuesday, October 16, 2018 1:59 PM
To: 'Buck, Paul R.'
Cc: 'Merrell, Steven E.'; Fields, Vanessa, EMNRD
Subject: RE: Lybrook A12 2306 Final C141 and attachments

Paul,

OCD has reviewed the final C-141 for the Lybrook A12 (Incident # nVF1821833715) received on September 20, 2018 and has Denied the Final C-141 for the following reasons

- Per 19.15.29.12 The closure report needs to include a scaled site and sampling diagram. For a more detailed explanation of a site map reference 19.15.29.11.A(1)
- C-141 is photocopied and the details some details are illegible.

As previously mentioned on September 5, "the site map and impacted areas need to be redone. Encana needs to provide a Detailed site map that include impacted areas, sample area, has a scale, northing etc. Please see 19.15.29.12 NMAC for the requirements of the closure report. "

Please correct the above issues and submit a new C-141 closure report. If you have any additional questions please give me a call.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Smith, Cory, EMNRD
Sent: Monday, September 24, 2018 8:04 AM
To: Buck, Paul R. <Paul.Buck@encana.com>
Cc: Merrell, Steven E. <Steven.Merrell@encana.com>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Subject: RE: Lybrook A12 2306 Final C141 and attachments

Paul,

Per the rule OCD has 60 days to review the closure report and approve or deny it.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 115
cory.smith@state.nm.us

From: Buck, Paul R. <Paul.Buck@encana.com>
Sent: Thursday, September 20, 2018 10:36 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Merrell, Steven E. <Steven.Merrell@encana.com>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Subject: RE: Lybrook A12 2306 Final C141 and attachments

Hi Cory,

Understood, thank you. Roughly how long do you think it will take to approve after the complete submittal? Thank you,

Paul

Paul Buck
Manager, Field Environmental, Western Operations
t 720.876.3513
c 303.882.5868

Encana Services Company Ltd.
Encana.com

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From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, September 20, 2018 10:32 AM
To: Buck, Paul R. <Paul.Buck@encana.com>
Cc: Merrell, Steven E. <Steven.Merrell@encana.com>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Subject: RE: Lybrook A12 2306 Final C141 and attachments

Paul,

Encana will need to send the complete and correct Final C-141 Closure report via hardcopy to include all the necessary documents as required by 19.15.29 NMAC.

Once it has been approved the signed copy will be located on the Lybrook A12 2306 well file.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Buck, Paul R. <Paul.Buck@encana.com>
Sent: Tuesday, September 18, 2018 9:30 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Merrell, Steven E. <Steven.Merrell@encana.com>
Subject: RE: Lybrook A12 2306 Final C141 and attachments

Hi Cory,

The attached complete report from Envirotech includes all required mapping. Additionally, I've attached pictures of the areas sampled prior to back fill. I think that this completes the final C141 submittal. Does this email meet the requirements or would you prefer that I send via hard copy? Lastly, for next steps, will you send back the C141 with your signature approving the closure? If so, roughly when can we expect this? Thank you for your help moving us through this new process.

Paul

Paul Buck
Manager, Field Environmental, Western Operations
t 720.876.3513
c 303.882.5868

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Encana.com

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From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Wednesday, September 5, 2018 7:10 AM
To: Buck, Paul R. <Paul.Buck@encana.com>
Cc: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Subject: RE: Lybrook A12 2306 Final C141 and attachments

Paul,

Taking a quick glance I think the site map and impacted areas need to be redone. Encana needs to provide a Detailed site map that include impacted areas, sample area, has a scale, north arrow etc. Please see 19.15.29.12 NMAC for the requirements of the closure report.

Encana also need to include pictures of the remediation prior to backfill.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Buck, Paul R. <Paul.Buck@encana.com>
Sent: Friday, August 31, 2018 2:20 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: Lybrook A12 2306 Final C141 and attachments

Hi Cory,

The final C141 and all (I hope) required documents for the Lybrook A12 2306 release are attached. Please let me know if you have any questions or need more detail. Thank you and have a good long weekend.

Paul

Paul Buck
Manager, Field Environmental, Western Operations
t 720.876.3513
c 303.882.5868

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Encana.com

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State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC?

☒ Yes ☐ No

If YES, for what reason(s) does the responsible party consider this a major release?

This was a release of greater than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Yes, by Paul Buck with Encana to Cory Smith of the OCD by phone on 7/28/2018 at 2:02 pm

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

- ☐ The source of the release has been stopped.
- ☐ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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Site Assessment/Characterization*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>51-100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate OCD District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Paul Buck

Title: Manager, Field Environmental

Signature: 

Date: 8/31/2018

email: paul.buck@encana.com

Telephone: 720-876-3513

OCD OnlyReceived by: 

Date: 10/16/18

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

DENIED

Clo

Date:

Pri

Title:

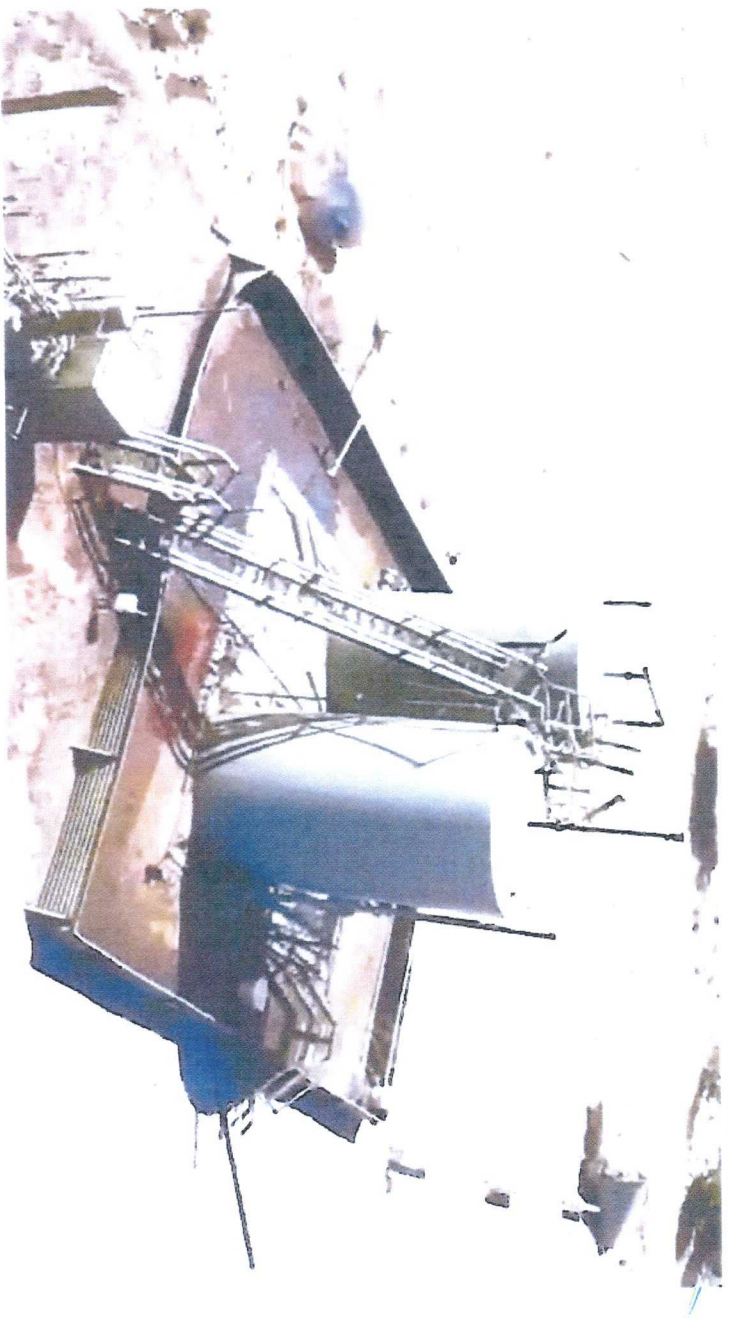


Site and and Sampling Diagram (included in Envirotech report located in Lab Analysis Below)



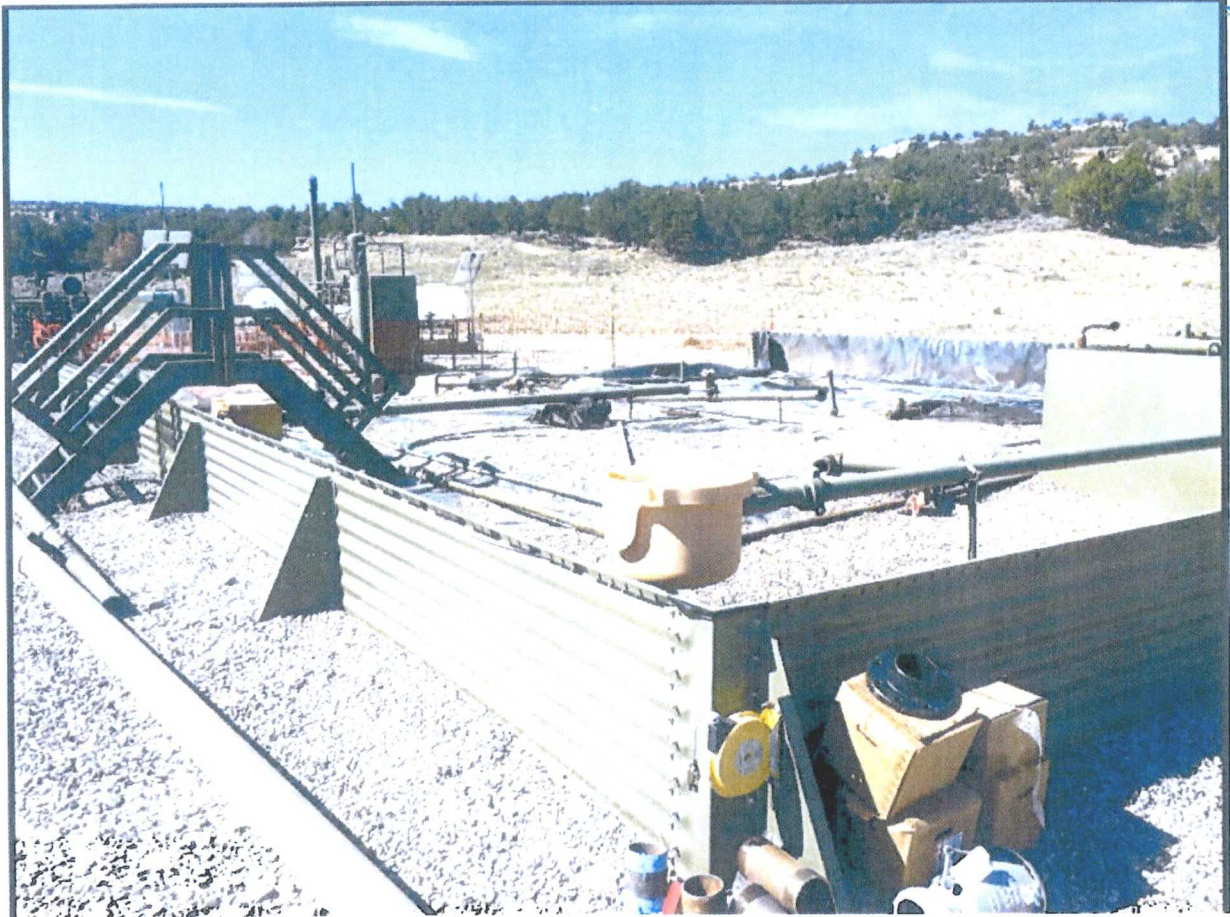
Photographs of Remediated Site prior to Clean Up

encana











Laboratory Analysis



September 17, 2018

Project Number: 11195-0228

Mr. Steven Merrell
Encana Oil & Gas (USA) Inc.
6584 E. Main Street
Farmington, NM 87402

Email: steven.merrell@encana.com
Phone: (505) 634-6490

RE: CONFIRMATION SAMPLING DOCUMENTATION FOR THE LYBROOK A12 2306 01H UNIT A WELL SITE, RIO ARRIBA COUNTY, NEW MEXICO

Dear Mr. Merrell:

Enclosed please find the *Vicinity Map*, *Site Map*, *Sitting Criteria Map*, *Field Notes*, *Summary of Analytical Results*, and *Analytical Results* for confirmation sampling activities performed at the Lybrook A12 2306 01H Unit: A well site located in Section 12, Township 23 North, Range 6 West, Rio Arriba County, New Mexico (Site); see *Vicinity Map*. Upon Envirotech personnel's arrival on August 16, 2018, a brief site assessment was conducted. A wash was visualized to the east of the site and depth to groundwater is estimated to be between 51-100 feet below ground surface (bgs) at the wash. Based on groundwater being between 51-100 feet below the area of release and the area of release not being with in the sitting criteria referenced in the New Mexico Administrative Code (NMAC) 19.15.29.12(4)(a-h). The regulatory standards for the site were determined to be 2,500 mg/Kg total petroleum hydrocarbons (TPH), 50 mg/Kg BTEX, 10 mg/Kg benzene, and 10,000 mg/Kg chlorides pursuant to *Table I* of 19.15.12 NMAC.

Prior to Envirotech's arrival on August 16, 2018, the affected area had been hydroexcavated. The hydroexcavation was divided into three (3) sections identified as: *Inside Containment*, *East of Ladder*, and *South of Ladder*. The *Inside Containment* section measured approximately six (6) feet by four (4) feet by two (2) inches to three (3) feet below ground surface (bgs). The *East of Ladder* section measured approximately four (4) feet by three (3) feet by one (1) foot to three (3) feet bgs. The *South of Ladder* section measured approximately five (5) feet by four (4) feet by one (1) foot to two (2) feet bgs. One (1) five (5) point composite sample was collected from the three (3) sections of the excavation. After visually inspecting the liner, a hole was found. The liner was peeled back, and the contaminated soil was removed using a hand shovel. One (1) three (3) point composite sample was collected (*Under Liner*). The samples were screened in the field for organic vapors using a photoionization detector (PID). The *Inside Containment* sample returned results of 2.5 ppm OV, the *East of Ladder* sample returned results of 0.0 ppm OV, the *South of Ladder* sample returned results of 9.7 ppm OV, the *Inside Containment* sample returned results of 2.5 ppm OV, and the *Under Liner* sample returned results of 41.4 ppm OV; see *Field Notes*. Encana elected to postpone confirmation sampling until further excavation of the impacted area and additional work to the site was completed.


Envirotech returned to the site on August 29, 2018 to perform confirmation sampling activities. Prior to Envirotech's arrival, the affected area had been further hydroexcavated. The excavation was divided into two (2) sections: *Section 1* and *Section 2*. *Section 1* measured approximately

twelve (12) feet by four (4) feet by one (1) foot to three (3) feet bgs. *Section 2* measured approximately eight (8) feet by three (3) feet by two (2) feet bgs. The area under the liner (*Under Liner*) was also excavated to the extents of approximately two (2) feet by one (1) foot by six (6) inches bgs. One (1) five (5) point composite sample was collected from *Section 1*, *Section 2*, *under the liner*, and along the western edge of the location (*Bladed Area*) due to splatter from the tank and the manifold located on top of the tanks when they broke apart with New Mexico Oil Conservation Division (NMOCD), Mr. Cory Smith, and Bureau of Land Management (BLM) representative, Mr. Abiodun "Emanuel" Adeloje, as witnesses; see *Field Notes* and *Site Map*. The samples were screened in the field for organic vapors using a PID. All four samples returned results of 0.0 ppm OV. The samples were placed into individual laboratory provided four (4) ounce jars, capped headspace free, and transported on ice under strict chain of custody to Envirotech's Analytical Laboratory to be analyzed for TPH (DRO/GRO/ORO) using USEPA Method 8015D, benzene and total BTEX using USEPA Method 8260B, and chlorides using USEPA Method 300.0. The samples returned results below the regulatory standards all constituents analyzed; see enclosed *Analytical Results* and *Summary of Analytical Results*. Envirotech, Inc. recommends *No Further Action* in regards to this incident.

A total of 196 barrels of hydrocarbon contaminated gravel and soil from within the lined containment and the impacted soil outside the containment was disposed of at Envirotech's New Mexico Oil Conservation Division (NMOCD) permitted facility, Landfarm #2; see enclosed *Bills of Lading*.

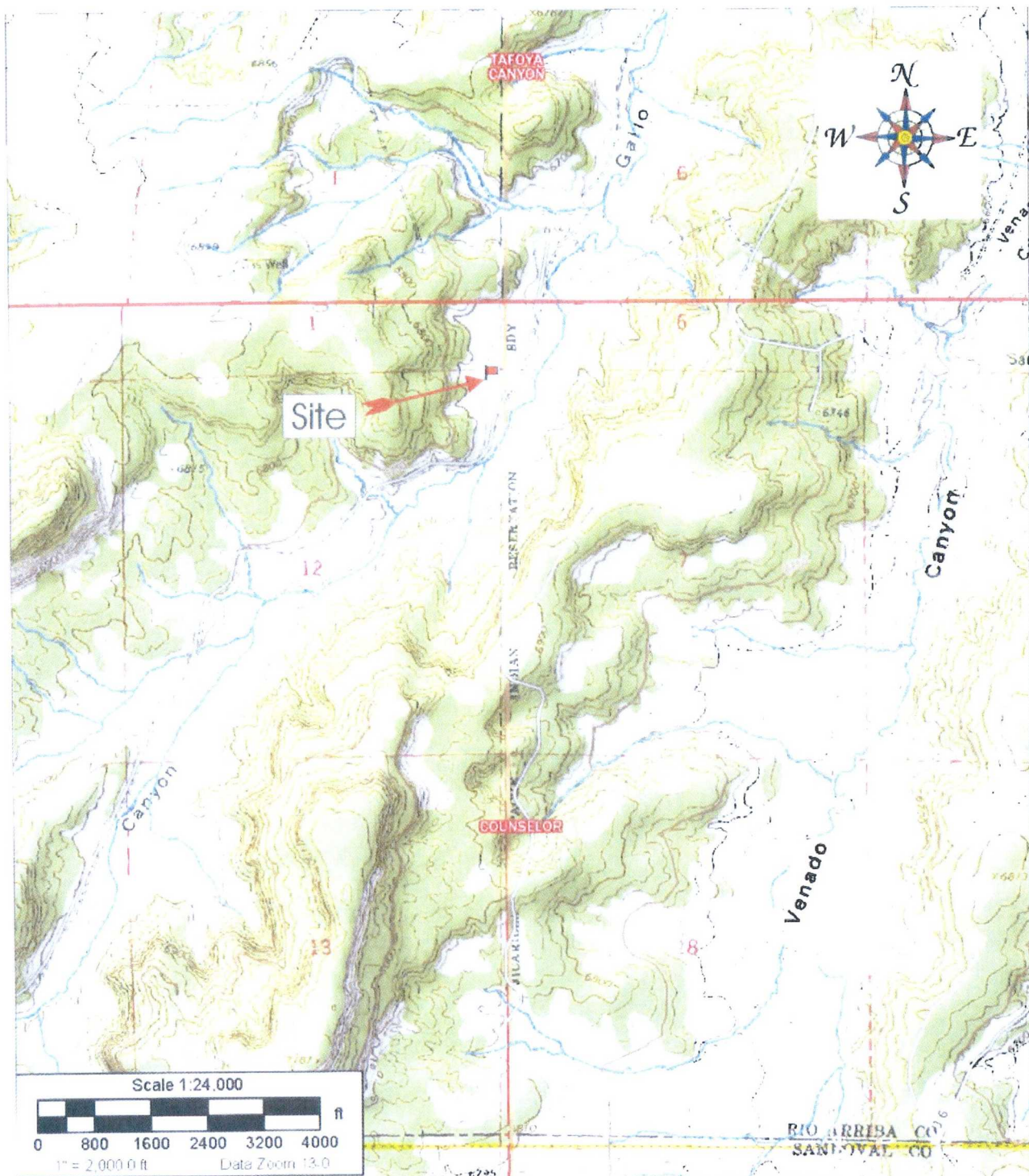
We appreciate the opportunity to be of service. Should you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,
ENVIROTECH, INC.


Brittany Hall
Environmental Field Technician
bhall@envirotech-inc.com

Enclosure(s): *Vicinity Map*
Water Well Map
Site Map
Siting Criteria Map
Field Notes
Summary of Analytical Results
Analytical Results
Site Photography
Bills of Lading

Cc: Client File Number 11195



Encana
 Lybrook A12 2306 Well Site
 36.24702951 N, -107.4118638 W
 Rio Arriba County, New Mexico

Project Number: 11195-0228 Date Drawn: 08/20/18



5796 U.S. HIGHWAY 64
 Farmington, New Mexico 87401
 505.632.0615

Vicinity Map

Figure #1

DRAWN BY:
 Brittany Hall

PROJECT MANAGER:
 Felipe Aragon



LEGEND

- Section 1
- Section 2
- Under Liner
- Sample Locations

SITE MAP

Encana

Lybrook A12 2306

SECTION 12, TWP 23 NORTH, RANGE 6 WEST
RIO ARriba COUNTY, NEW MEXICO

SCALE: NTS

PROJECT NO. 11195-0228

FIGURE NO. 2

REV

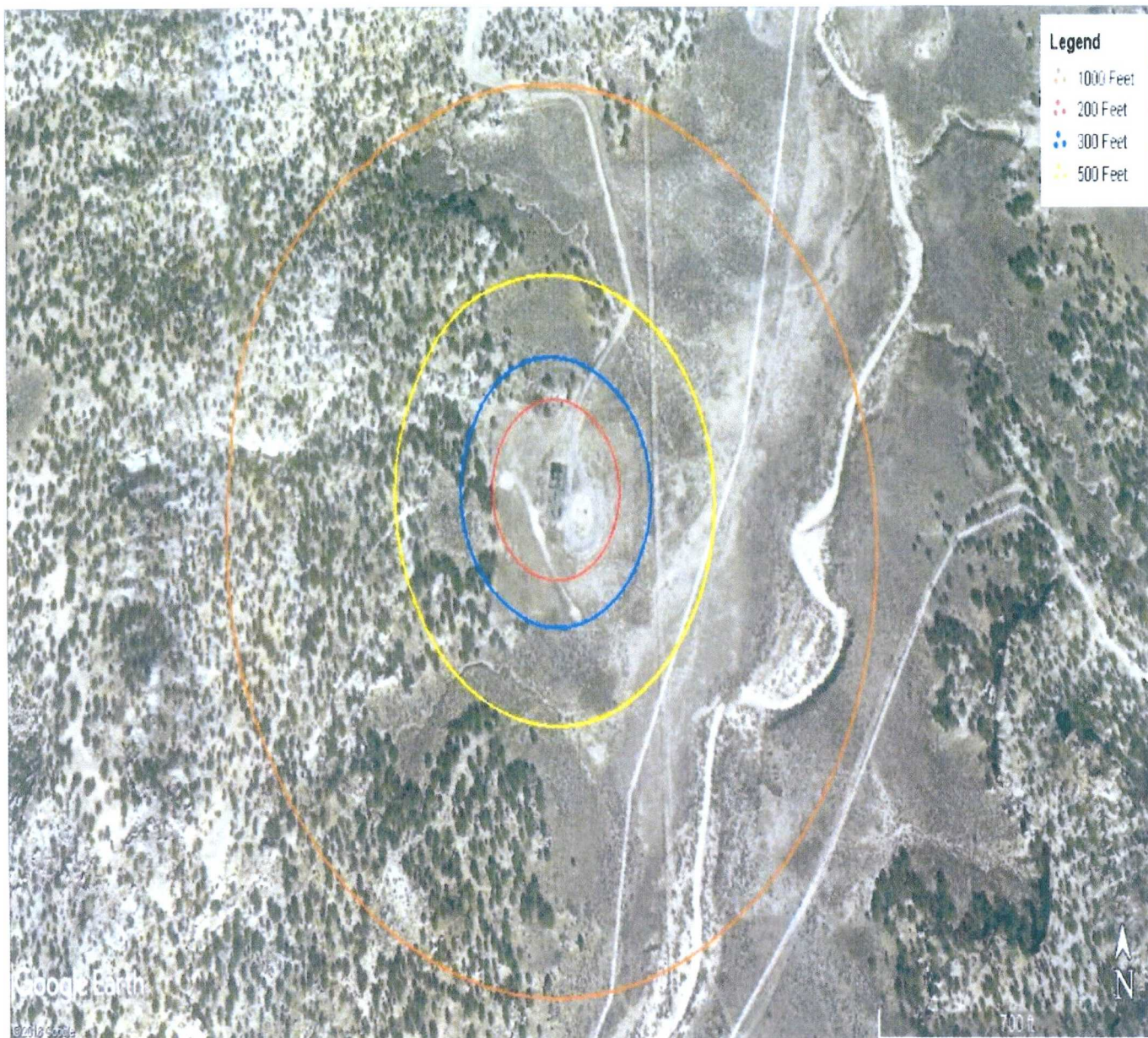
REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP DRWN	BH	8/30/18	BASE DRWN BH 8/30/18



envirotech

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615



LEGEND

- 200 Feet
- 300 Feet
- 500 Feet
- 1,000 Feet

SITTING CRITERIA MAP Encana

Lybrook A12 2306

SECTION 12, TWP 23 NORTH, RANGE 6 WEST
RIO ARriba COUNTY, NEW MEXICO

SCALE:

PROJECT NO J1195-0228

FIGURE NO. 3

REV

REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP DRWN	BH	8/30/18	BASE DRWN BH 8/30/18



5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

CLIENT:	<u>Encana</u>	 envirotech (505) 632-0615 (800) 362-1879 5796 U.S. Hwy 64, Farmington, NM 87401	Envmtl. Spelst:	<u>K1611</u>
CLIENT/JOB #:	<u>11195-0228</u>		C.O.C. No:	
START DATE:	<u>2/26/8</u>		LAT	<u>36.247029S</u>
FINISH DATE:			LONG	<u>-107.4118638</u>
Page #	of			

Field Report: Spill Closure Verification

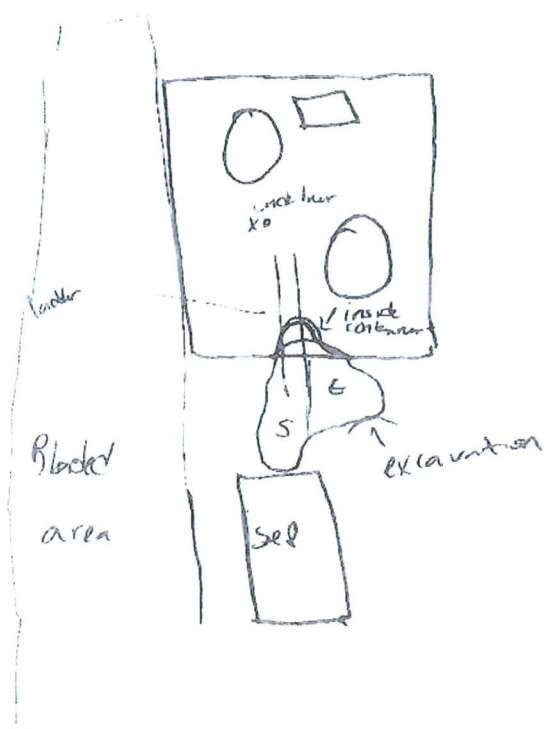
FIELD 418.1 ANALYSIS

OVM Results

Sample ID	Field Headspace PID (ppm)	Sample ID	Field Headspace PID (ppm)	Sample ID	Analysis Type	Time
Ext of Stairs	0.00				POIS + ORO / ORO / CI	
Soft Stairs	9.7					
Tribe Contaminant	2.5					
Upper liner	41.4					

Ap over

NT



8/16/18 - Closure falls under new rule.

- Spt composite taken from east of ladder
- Spt composite taken from South of ladder
- Spt composite taken from inside containment
- Spt composite taken from blocker area
- 2pt composite from under liner (where hole was found)

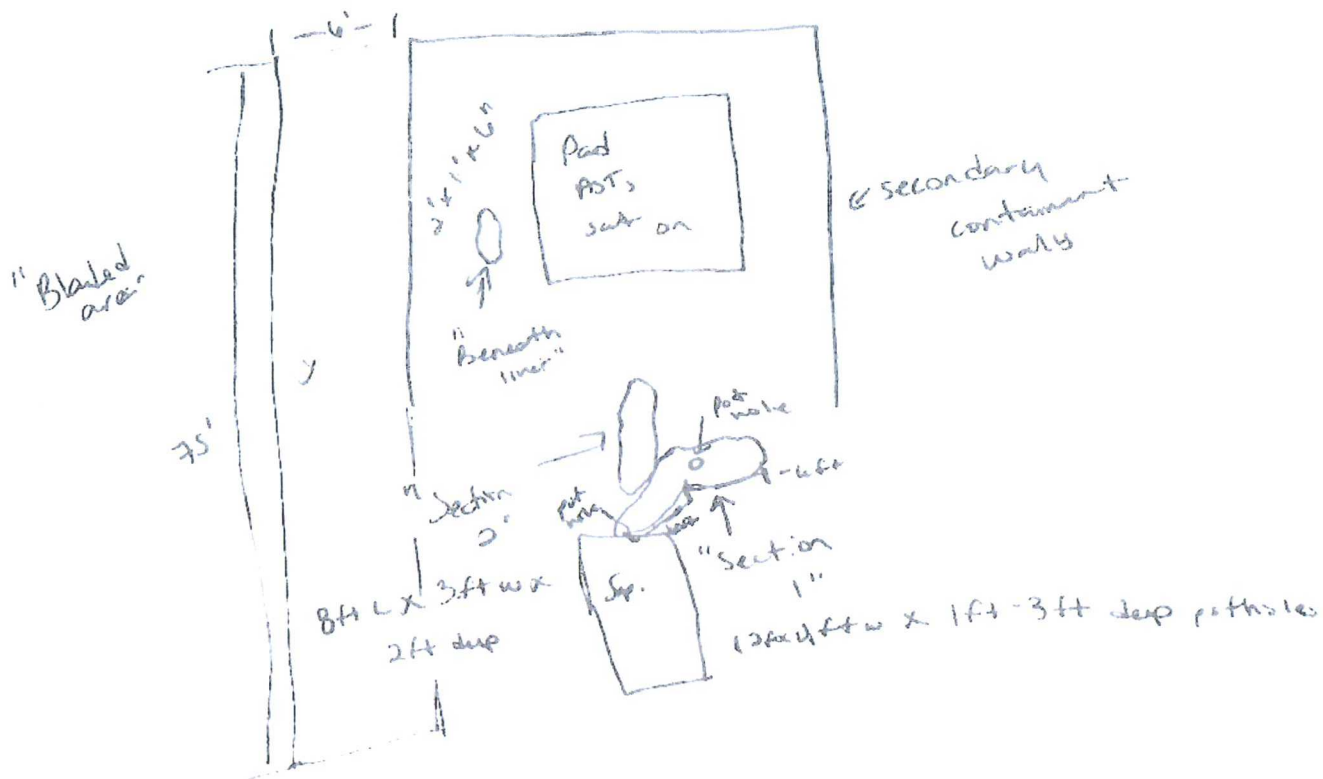
1730 - Encana elected to cancel samples today and will resample when work (additional) is complete. Per Steven Merrill.

Plans to be digging out piping to separator & removing/repairing damaged liner probably early next week

East of ladder ~ 4' x 3' w x 1 foot to 3 feet deep

S of ladder ~ 5' x 4' w x 1' to 2' deep

Inside containment ~ 6' long x 4' wide x 2" to 3' deep



1- 36° 14.8371
107° 24.7312

2- 36° 14.8377
107° 24.7311

3- 36° 14.8373
107° 24.7316

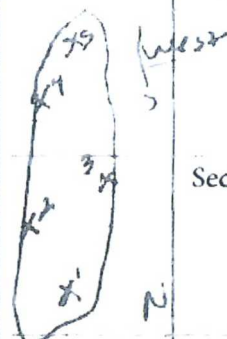
4- 36° 14.8368
107° 24.7316

5- 36° 14.8354
107° 24.7314

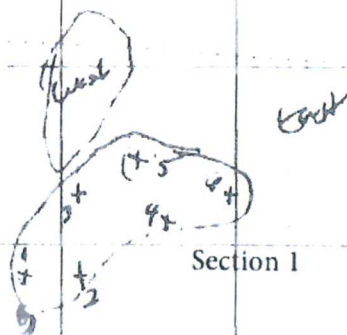
1- 36° 14.8336
107° 24.7340

2- 36° 14.8337
107° 24.7322

3- 36° 14.8347
107° 24.7330



Section 2



Section 1

4- 34° 14.8360
107° 24.7316

5- 36° 14.8367
107° 24.7319

6- 36° 14.8358
107° 24.7308

SIGNATURE:

[illegible]

Table 1, Summary of Analytical Results

Encana

Lybrook A12 2306 01H Unit A

Spill Confirmation Sampling Report

Project Number 11195-0228

Date	Sample Description	Sample Number	PID OV (ppm)	USEPA Method 8015 TPH (mg/Kg)	USEPA Method 8260		USEAP Method 300.0 Chloride (mg/Kg)
					Benzene (mg/Kg)	BTEX (mg/Kg)	
NA	New Mexico Oil Conservation Division Standards	NA	NA	2,500	10	50	10,000
8/29/2018	Under Liner	1	0	44.8	ND	ND	62.1
8/29/2018	Section 1	2	0	ND	ND	ND	1000
8/29/2018	Section 2	3	0	87.4	ND	ND	229
8/29/2018	Bladed Area	4	0	41.8	ND	ND	79.9

*NS= Not Sampled

*ND= Analyte below detection limit



Analytical Report

Report Summary

Client: Encana Oil & Gas USA

Chain Of Custody Number:

Samples Received: 8/29/2018 12:27:00PM

Job Number: 11195-0228

Work Order: P808054

Project Name/Location: Soil Sampling Lybrook
A12-2306 01 Unit A

Report Reviewed By:

Date: 8/31/18

Walter Hinchman, Laboratory Director

Date: 8/31/18

Tim Cain, Project Manager



Envirotech Inc. certifies the test results meet all requirements of TNi unless footnoted otherwise.

Statement of Data Authenticity: Envirotech, Inc. attests the data reported has not been altered in any way.

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Envirotech, Inc. currently holds the appropriate and available Utah TNi certification NM009792018-1 for the data reported.



Encana Oil & Gas USA
370 17th Street
Denver CO, 80202

Project Name: Soil Sampling Lybrook A12-2306 01 Unit A
Project Number: 11195-0228
Project Manager: Felipe Aragon

Reported:
08/31/18 13:59

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Under Liner	P808054-01A	Soil	08/29/18	08/29/18	Glass Jar, 4 oz.
Section 1	P808054-02A	Soil	08/29/18	08/29/18	Glass Jar, 4 oz.
Section 2	P808054-03A	Soil	08/29/18	08/29/18	Glass Jar, 4 oz.
Bladed Area	P808054-04A	Soil	08/29/18	08/29/18	Glass Jar, 4 oz.

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Encana Oil & Gas USA	Project Name:	Soil Sampling Lybrook A12-2306 01 Unit A	Reported: 08/31/18 13:59
370 17th Street	Project Number:	11195-0228	
Denver CO, 80202	Project Manager:	Felipe Aragon	

**Under Liner
P808054-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Toluene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Ethylbenzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
p,m-Xylene	ND	50.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
o-Xylene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Total Xylenes	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		104 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Toluene-d8		89.8 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Bromofluorobenzene		103 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1835008	08/29/18	08/30/18	EPA 8015D	
Diesel Range Organics (C10-C28)	44.8	25.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		97.4 %		50-150	1835008	08/29/18	08/30/18	EPA 8015D	
Surrogate: n-Nonane		120 %		50-200	1835009	08/29/18	08/29/18	EPA 8015D	

Anions by 300.0/9056A

Chloride	62.1	20.0	mg/kg	1	1835011	08/29/18	08/29/18	EPA 300.0/9056A	
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Encana Oil & Gas USA	Project Name:	Soil Sampling Lybrook A12-2306 01 Unit A	Reported: 08/31/18 13:59
370 17th Street	Project Number:	11195-0228	
Denver CO, 80202	Project Manager:	Felipe Aragon	

Section 1
P808054-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Toluene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Ethylbenzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
p,m-Xylene	ND	50.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
o-Xylene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Total Xylenes	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		100 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Toluene-d8		89.7 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Bromofluorobenzene		103 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1835008	08/29/18	08/30/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		96.9 %		50-150	1835008	08/29/18	08/30/18	EPA 8015D	
Surrogate: n-Nonane		115 %		50-200	1835009	08/29/18	08/29/18	EPA 8015D	

Anions by 300.0/9056A

Chloride	1000	20.0	mg/kg	1	1835011	08/29/18	08/29/18	EPA 300.0/9056A	
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Encana Oil & Gas USA	Project Name:	Soil Sampling Lybrook A12-2306 01 Unit A	Reported: 08/31/18 13:59
370 17th Street	Project Number:	11195-0228	
Denver CO, 80202	Project Manager:	Felipe Aragon	

Section 2
P808054-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Toluene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Ethylbenzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
p,m-Xylene	ND	50.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
o-Xylene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Total Xylenes	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Toluene-d8		89.1 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Bromofluorobenzene		103 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1835008	08/29/18	08/30/18	EPA 8015D	
Diesel Range Organics (C10-C28)	87.4	25.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		95.2 %		50-150	1835008	08/29/18	08/30/18	EPA 8015D	
Surrogate: n-Nonane		112 %		50-200	1835009	08/29/18	08/29/18	EPA 8015D	
Anions by 300.0/9056A									
Chloride	229	20.0	mg/kg	1	1835011	08/29/18	08/29/18	EPA 300.0/9056A	

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Encana Oil & Gas USA	Project Name:	Soil Sampling Lybrook A12-2306 01 Unit A	Reported: 08/31/18 13:59
370 17th Street	Project Number:	11195-0228	
Denver CO, 80202	Project Manager:	Felipe Aragon	

**Bladed Area
P808054-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Toluene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Ethylbenzene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
p,m-Xylene	ND	50.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
o-Xylene	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Total Xylenes	ND	25.0	ug/kg	1	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Toluene-d8		89.0 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	
Surrogate: Bromofluorobenzene		102 %		70-130	1835008	08/29/18	08/29/18	EPA 8260B	

Nonhalogenated Organics by 8015

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1835008	08/29/18	08/30/18	EPA 8015D	
Diesel Range Organics (C10-C28)	41.8	25.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1835009	08/29/18	08/29/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		95.8 %		50-150	1835008	08/29/18	08/30/18	EPA 8015D	
Surrogate: n-Nonane		132 %		50-200	1835009	08/29/18	08/29/18	EPA 8015D	

Anions by 300.0/9056A

Chloride	79.9	20.0	mg/kg	1	1835011	08/29/18	08/29/18	EPA 300.0/9056A	
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Encana Oil & Gas USA
370 17th Street
Denver CO, 80202

Project Name: Soil Sampling Lybrook A12-2306 01 Unit A
Project Number: 11195-0228
Project Manager: Felipe Aragon

Reported:
08/31/18 13:59

Volatile Organic Compounds by 8260 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1835008 - Purge and Trap EPA 5030A

Blank (1835008-BL.K1)

Prepared & Analyzed: 08/29/18 1

Benzene	ND	25.0	ug/kg							
Toluene	ND	25.0	"							
Ethylbenzene	ND	25.0	"							
p,m-Xylene	ND	50.0	"							
o-Xylene	ND	25.0	"							
Total Xylenes	ND	25.0	"							
Surrogate: 1,2-Dichloroethane-d4	532		"	500		106	70-130			
Surrogate: Toluene-d8	453		"	500		90.5	70-130			
Surrogate: Bromofluorobenzene	525		"	500		105	70-130			

LCS (1835008-BS1)

Prepared & Analyzed: 08/29/18 1

Benzene	2550	25.0	ug/kg	2500		102	70-130			
Toluene	2110	25.0	"	2500		84.6	70-130			
Ethylbenzene	2180	25.0	"	2500		87.2	70-130			
p,m-Xylene	4400	50.0	"	5000		88.1	70-130			
o-Xylene	2240	25.0	"	2500		89.5	70-130			
Total Xylenes	6640	25.0	"	7500		88.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	526		"	500		105	70-130			
Surrogate: Toluene-d8	449		"	500		89.8	70-130			
Surrogate: Bromofluorobenzene	513		"	500		103	70-130			

Matrix Spike (1835008-MS1)

Source: P808049-01

Prepared & Analyzed: 08/29/18 1

Benzene	2690	25.0	ug/kg	2500	ND	108	48-131			
Toluene	2220	25.0	"	2500	ND	88.8	48-130			
Ethylbenzene	2270	25.0	"	2500	ND	91.0	45-135			
p,m-Xylene	4600	50.0	"	5000	ND	91.9	43-135			
o-Xylene	2340	25.0	"	2500	ND	93.5	43-135			
Total Xylenes	6930	25.0	"	7500	ND	92.5	43-135			
Surrogate: 1,2-Dichloroethane-d4	523		"	500		105	70-130			
Surrogate: Toluene-d8	448		"	500		89.6	70-130			
Surrogate: Bromofluorobenzene	506		"	500		101	70-130			

Matrix Spike Dup (1835008-MSD1)

Source: P808049-01

Prepared & Analyzed: 08/29/18 1

Benzene	2660	25.0	ug/kg	2500	ND	107	48-131	1.01	23	
Toluene	2190	25.0	"	2500	ND	87.8	48-130	1.16	24	
Ethylbenzene	2270	25.0	"	2500	ND	90.7	45-135	0.374	27	
p,m-Xylene	4590	50.0	"	5000	ND	91.8	43-135	0.131	27	
o-Xylene	2340	25.0	"	2500	ND	93.5	43-135	0.0428	27	
Total Xylenes	6930	25.0	"	7500	ND	92.4	43-135	0.101	27	
Surrogate: 1,2-Dichloroethane-d4	515		"	500		103	70-130			
Surrogate: Toluene-d8	447		"	500		89.3	70-130			

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Encana Oil & Gas USA	Project Name:	Soil Sampling Lybrook A12-2306 01 Unit A	Reported: 08/31/18 13:59
370 17th Street	Project Number:	11195-0228	
Denver CO, 80202	Project Manager:	Felipe Aragon	

Volatile Organic Compounds by 8260 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1835008 - Purge and Trap EPA 5030A

Matrix Spike Dup (1835008-MSD1)

Source: P808049-01

Prepared & Analyzed: 08/29/18 1

Surrogate, Bromofluorobenzene	505		ng/kg	500		101	70-130			
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Encana Oil & Gas USA	Project Name:	Soil Sampling Lybrook A12-2306 01 Unit A	Reported: 08/31/18 13:59
370 17th Street	Project Number:	11195-0228	
Denver CO, 80202	Project Manager:	Felipe Aragon	

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1835009 - DRO Extraction EPA 3570										
Blank (1835009-BLK1)				Prepared & Analyzed: 08/29/18 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40+)	ND	50.0	"							
Surrogate: n-Nonane	54.1		"	50.0		108	50-200			
LCS (1835009-BS1)				Prepared & Analyzed: 08/29/18 1						
Diesel Range Organics (C10-C28)	464	25.0	mg/kg	500		92.8	38-132			
Surrogate: n-Nonane	55.3		"	50.0		111	50-200			
Matrix Spike (1835009-MS1)				Source: P808049-01 Prepared & Analyzed: 08/29/18 1						
Diesel Range Organics (C10-C28)	7650	250	mg/kg	500	7600	9.68	38-132			SPK2
Surrogate: n-Nonane	69.3		"	50.0		139	50-200			
Matrix Spike Dup (1835009-MSD1)				Source: P808049-01 Prepared & Analyzed: 08/29/18 1						
Diesel Range Organics (C10-C28)	7610	250	mg/kg	500	7600	2.31	38-132	0.483	20	SPK2
Surrogate: n-Nonane	69.3		"	50.0		139	50-200			

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Encana Oil & Gas USA	Project Name:	Soil Sampling Lybrook A12-2306 01 Unit A	
370 17th Street	Project Number:	11195-0228	Reported:
Denver CO, 80202	Project Manager:	Felipe Aragon	08/31/18 13:59

Notes and Definitions

SPK2	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to native analyte concentration at 4 times or greater than the spike concentration.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

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**SITE PHOTOGRAPHY
SPILL ASSESSMENT AND CLOSURE REPORT
ENCANA OIL AND GAS INC.
LYBROOK A12 2306 01H UNIT A
PROJECT NUMBER 11195-0228
AUGUST 2018**



Picture 1: View of Wellsite Sign



Picture 2: View of Tank Struck by Lightning

**SITE PHOTOGRAPHY
SPILL ASSESSMENT AND CLOSURE REPORT
ENCANA OIL AND GAS INC.
LYBROOK A12 2306 01H UNIT A
PROJECT NUMBER 11195-0228
AUGUST 2018**



Picture 3: View of *Section 1*



Picture 4: View of Sampling Locations (Orange Flags) in *Section 1*

**SITE PHOTOGRAPHY
SPILL ASSESSMENT AND CLOSURE REPORT
ENCANA OIL AND GAS INC.
LYBROOK A12 2306 01H UNIT A
PROJECT NUMBER 11195-0228
AUGUST 2018**



Picture 5: View of *Section 2*



Picture 6: View of Sampling Locations (Yellow Flags) in *Section 2*

**SITE PHOTOGRAPHY
SPILL ASSESSMENT AND CLOSURE REPORT
ENCANA OIL AND GAS INC.
LYBROOK A12 2306 01H UNIT A
PROJECT NUMBER 11195-0228
AUGUST 2018**



Picture 7: View of *Under Liner* Excavation



Picture 8: View of Sampling Locations (Yellow Flags) in *Under Liner*

**SITE PHOTOGRAPHY
SPILL ASSESSMENT AND CLOSURE REPORT
ENCANA OIL AND GAS INC.
LYBROOK A12 2306 01H UNIT A
PROJECT NUMBER 11195-0228
AUGUST 2018**



Picture 9: View of *Bladed Area* and Sampling Locations (View 1)



Picture 10: View of *Bladed Area* and Sampling Locations (View 2)



MANIFEST # 61217

GENERATOR *Excuse*

POINT OF ORIGIN Lybrook AIZ (see notes)

TRANSPORTER Kelley oil Field

DATE 7-29-18 JOB # 11195-0227

[illegible]

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

Generator Onsite Contact	Phone
--------------------------	-------

Signatures required prior to distribution of the legal document.

DISTRIBUTION

White - Company Records.

Yellow - Billing

Pink - Customer.

Goldenrod - LF Copy

BOL# 61217

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 7-29-18TIME 1450

Attach test strip here

CUSTOMER _____

SITE

Lybrook A12-2306-014

DRIVER

Alden Arthur

SAMPLE

Soil Straight _____ With Dirt ☒

CHLORIDE TEST

695 mg/Kg

ACCEPTED

YES ☒

NO _____

PAINT FILTER TEST

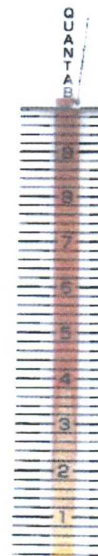
Time started 1450Time completed 1505

PASS

YES ☒

NO _____

SAMPLER/ANALYST

Gary Robinson



MANIFEST # 61226

GENERATOR Encana

POINT OF ORIGIN Lybrook A12-2306-01H

TRANSPORTER Kelley oil field

DATE 7-30-18 JOB # ~~30250112~~

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

Generator Onsite Contact

Phone

Signatures required prior to distribution of the legal document.

DISTRIBUTION

White - Company Records.

Yellow - Billing.

Pink - Customer.

Goldenrod - LF Copy

BOL# 61226

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 7-30-18TIME 1522Attach tes preCUSTOMER EncanaSITE Cybrook A12 2306-01HDRIVER Alden A. HauerSAMPLE Soil Straight With Dirt CHLORIDE TEST 530 mg/KgACCEPTED YES NO PAINT FILTER TEST Time started 1522 Time completed 1537PASS YES NO SAMPLER/ANALYST Gary Palsson



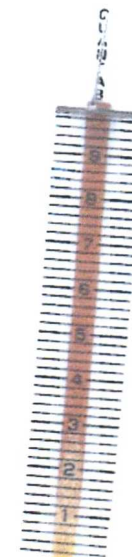
MANIFEST # 61250
GENERATOR Encana
POINT OF ORIGIN LYBROOK A12-2306-01H
TRANSPORTER Kellogg Oil Field
DATE 8-2-18 JOB # 11195-0227

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

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BOL# 61250

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 8-2-18 TIME 1518 Attach test strip hereCUSTOMER EnconcoSITE Cybrook R12-230W-01HDRIVER Alden ArthurSAMPLE Soil Straight With Dirt —CHLORIDE TEST 482 mg/KgACCEPTED YES — NO PAINT FILTER TEST Time started 1518 Time completed 1530PASS YES — NO SAMPLER/ANALYST Garry Robinson



MANIFEST # 61277
GENERATOR
POINT OF ORIGIN
TRANSPORTER
DATE JOB # 11195-0227

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

Signatures required prior to distribution of the legal document. DISTRIBUTION **White** - Company Records, **Yellow** - Billing, **Pink** - Customer, **Goldenrod** - LF Copy



BOL# 61277

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 5-6-15 TIME 1330 Attach test strip here

CUSTOMER Snow

SITE Cybernetic A12-2300-01H

DRIVER Adenirther

SAMPLE Soil ☒ Straight ☐ With Dirt ☐

CHLORIDE TEST -270 mg/Kg

ACCEPTED YES ☐ NO ☐

PAINT FILTER TEST Time started 1530 Time completed 1545

PASS YES ☐ NO ☐

SAMPLER/ANALYST Gary Robinson





MANIFEST # 61413

GENERATOR Encasa

POINT OF ORIGIN Lybrook A12-2306-01H

TRANSPORTER Kelley Oil Field

DATE 8-20-18 JOB # 11195-0227

[illegible]

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

Generator Onsite Contact

Phone

Signatures required prior to distribution of the legal document.

DISTRIBUTION

White - Company Records.

Yellow - Billing.

Pink - Customer.

Goldenrod - LF Copy



BOL# 61413

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 8-20-18 TIME 1150 Attach test: e

CUSTOMER Encon

SITE Lybrook A12-2306-01H

DRIVER Michael M

SAMPLE Soil Straight With Dirt ✓

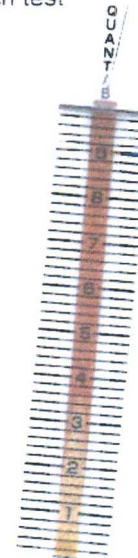
CHLORIDE TEST 582 mg/Kg

ACCEPTED YES ✓ NO

PAINT FILTER TEST Time started 1150 Time completed 1201

PASS YES ✓ NO

SAMPLER/ANALYST Gary Robinson





Description of Remediation Activities



When the operator arrived at the Lybrook A12 facility on July 28 it appeared that there had been a lightning strike because the produced water tank was blown out of the containment and roughly 100 feet north of the containment. A vac truck was dispatched to the site the next day to recover liquid in the containment. The area of greatest impact was also bladed to turn the soil and ensure that impacted soil could volatilize clean. Additionally, Encana is working to repair the secondary containment that was blown out of shape due to the lightning.