

JUL 08 2016

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

Farmington Field Office
Bureau of Land Management

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

6. If Indian, Allottee or Tribe Name
N/A

SUBMIT IN TRIPLICATE - Other instructions on page 2

7. If Unit of CA/Agreement, Name and/or No.
N/A

1. Type of Well

Oil Well Gas Well Other

8. Well Name and No.
Lybrook B14-2206 02H

2. Name of Operator
Encana Oil & Gas (USA) Inc.

9. API Well No.
TBD **30-043-21174**

3a. Address
370 17th Street, Suite 1700, Denver, CO 80202

3b. Phone No. (include area code)
(720) 876-3533

10. Field and Pool or Exploratory Area
Lybrook Gallup

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1247' FNL and 2248' FEL, Section 14, T22N, R6W

11. Country or Parish, State
Sandoval, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Withdraw APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Encana Oil & Gas (USA) Inc. requests to withdraw the Application for Permit to Drill for the Lybrook B14-2206 02H well, which was submitted to the BLM on September 13, 2013

OIL CONS. DIV DIST. 3

JUL 08 2016

Please submit within 30-days confirming no surface disturbance.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Katie Wegner

Title Senior Regulatory Analyst

Signature

Date

06/29/2016

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title LLE

Date 6-30-16

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office FFO

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

CONFIDENTIAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER SEP 13 2013

5. Lease Serial No. NMNM 117562		6. If Indian, Allottee or Tribe Name N/A	
7. If Unit or CA Agreement, Name and No. PENDING		8. Lease Name and Well No. Lybrook B14-2206 02H	
9. API Well No. 30-043-21174		10. Field and Pool, or Exploratory Lybrook Gallup	
11. Sec., T. R. M. or Blk. and Survey or Area Section 14, T22N, R6W NMPM		12. County or Parish Sandoval	
13. State NM		14. Distance in miles and direction from nearest town or post office* +/- 59.3 miles southeast of the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) BHL is 2120' from north lease line Section 15, T22N, R6W		16. No. of acres in lease NMNM 117562-2240.00 acres	
17. Spacing Unit dedicated to this well 160 acres - S2NW Section 14, T22N, R6W S2NE Section 15, T22N, R6W		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Silver 1 is +/- 788' northeast of wellbore	
19. Proposed Depth 5,359' TVD/10,891' MD		20. BLM/BIA Bond No. on file COB-000235	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7108' GL, 7124' KB		22. Approximate date work will start* 03/23/2014	
23. Estimated duration 25 days		24. Attachments	

Farmington Field Office
Bureau of Land Management

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature <i>Holly Hill</i>	Name (Printed Typed) Holly Hill	Date 9/10/13
Title Regulatory Analyst		
Approved by (Signature)	Name (Printed Typed)	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

NMOCD

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

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

AMENDED REPORT
RECEIVED

SEP 13 2013

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 42289	³ Pool Name LYBROOK GALLUP
⁴ Property Code 316510		⁵ Property Name LYBROOK B14-2205	
⁶ GRID No. 282327		⁷ Operator Name ENCANA OIL & GAS (USA) INC.	⁸ Well Number 02H
			⁹ Elevation 7108'

Farmington Field Office
Bureau of Land Management

¹⁰ Surface Location

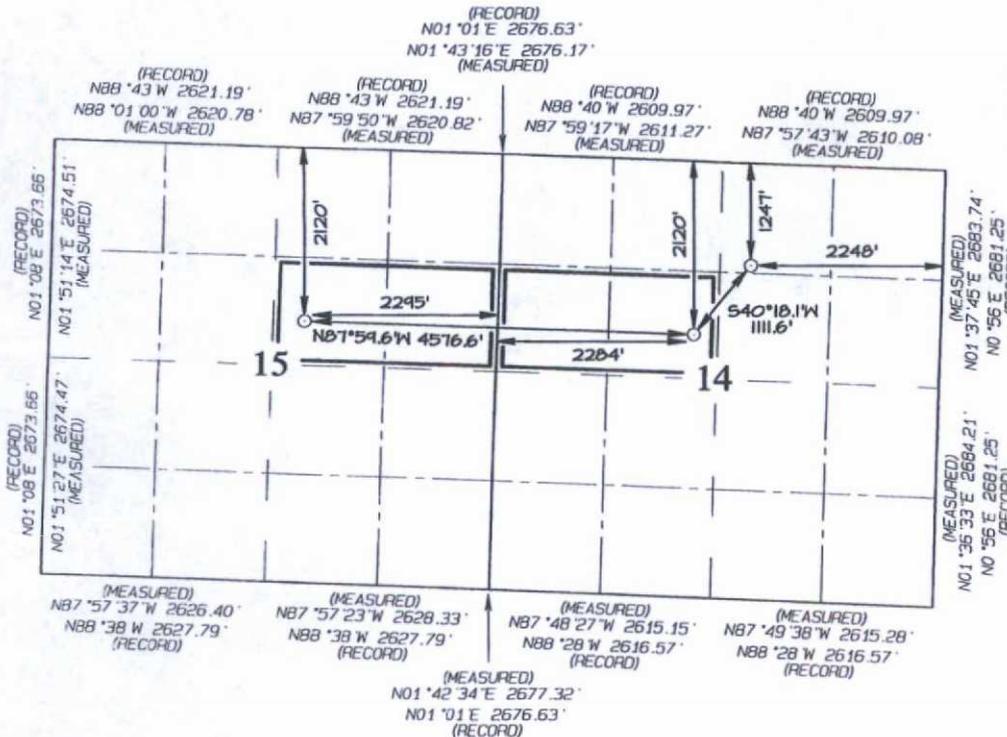
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	14	22N	6W		1247	NORTH	2248	EAST	SANDOVAL

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	15	22N	6W		2120	NORTH	2295	EAST	SANDOVAL

¹² Dedicated Acres 160.0 Acres	S/2 NW/4 - Section 14 S/2 NE/4 - Section 15	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Holly Hill
Signature
Date: 9/11/13

Holly Hill
Printed Name
holly.hill@encana.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: JULY 10, 2013
Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

END-OF-LATERAL
2120' FNL 2295' FEL
SECTION 15, T22N, R6W
LAT: 36.13941°N
LONG: 107.45439°W
DATUM: NAD1927

LAT: 36.13943°N
LONG: 107.45499°W
DATUM: NAD1983

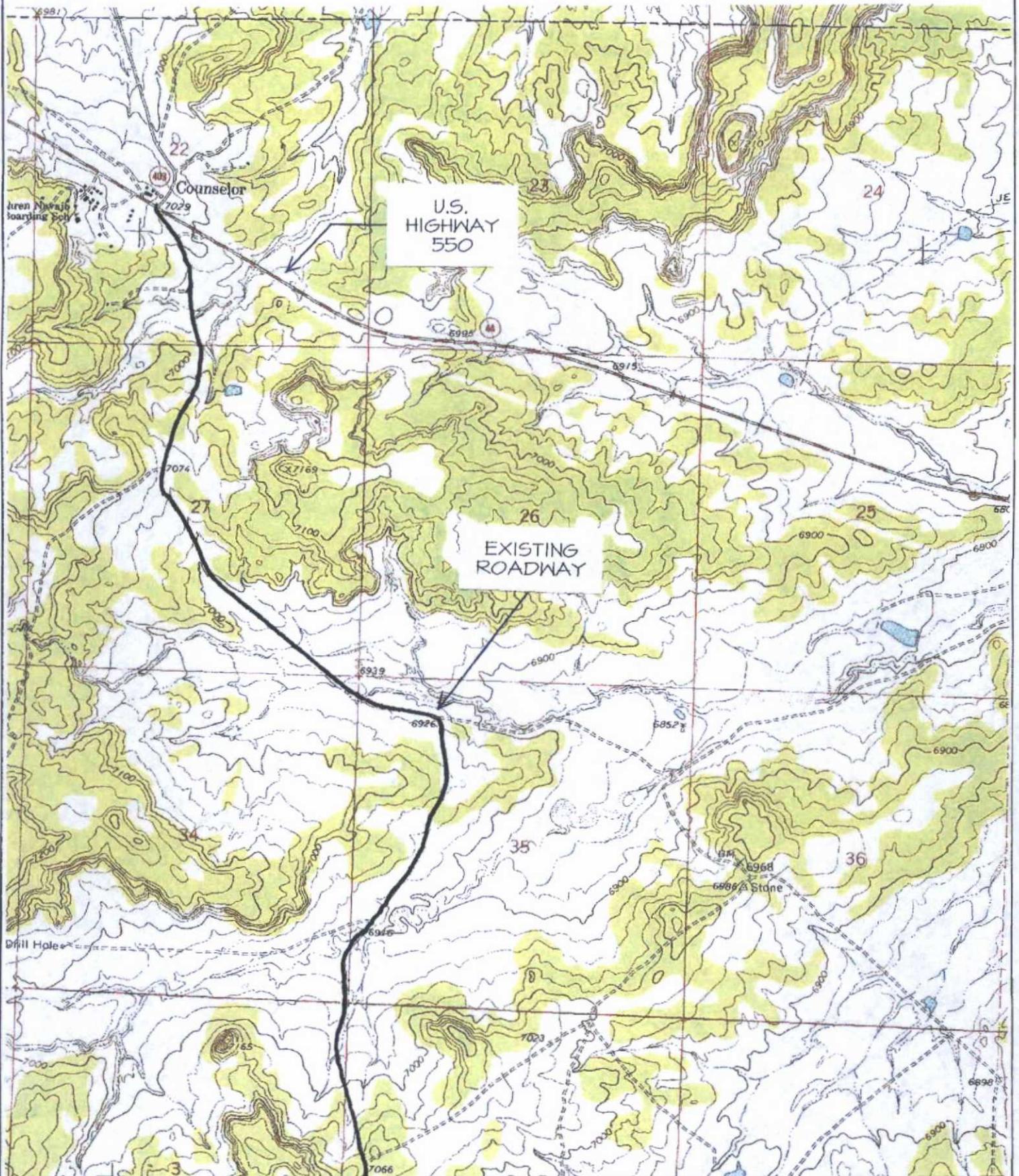
POINT-OF-ENTRY
2120' FNL 2284' FWL
SECTION 14, T22N, R6W
LAT: 36.13913°N
LONG: 107.43890°W
DATUM: NAD1927

LAT: 36.13914°N
LONG: 107.43950°W
DATUM: NAD1983

SURFACE LOCATION
1247' FNL 2248' FEL
SECTION 14, T22N, R6W
LAT: 36.14148°N
LONG: 107.43650°W
DATUM: NAD1927

LAT: 36.14150°N
LONG: 107.43710°W
DATUM: NAD1983

ENCANA OIL & GAS (USA) INC. LYBROOK B14-2206 02H
1247' FNL & 2248' FEL, SECTION 14, T22N, R6W, N.M.P.M.
SANDOVAL COUNTY, NEW MEXICO



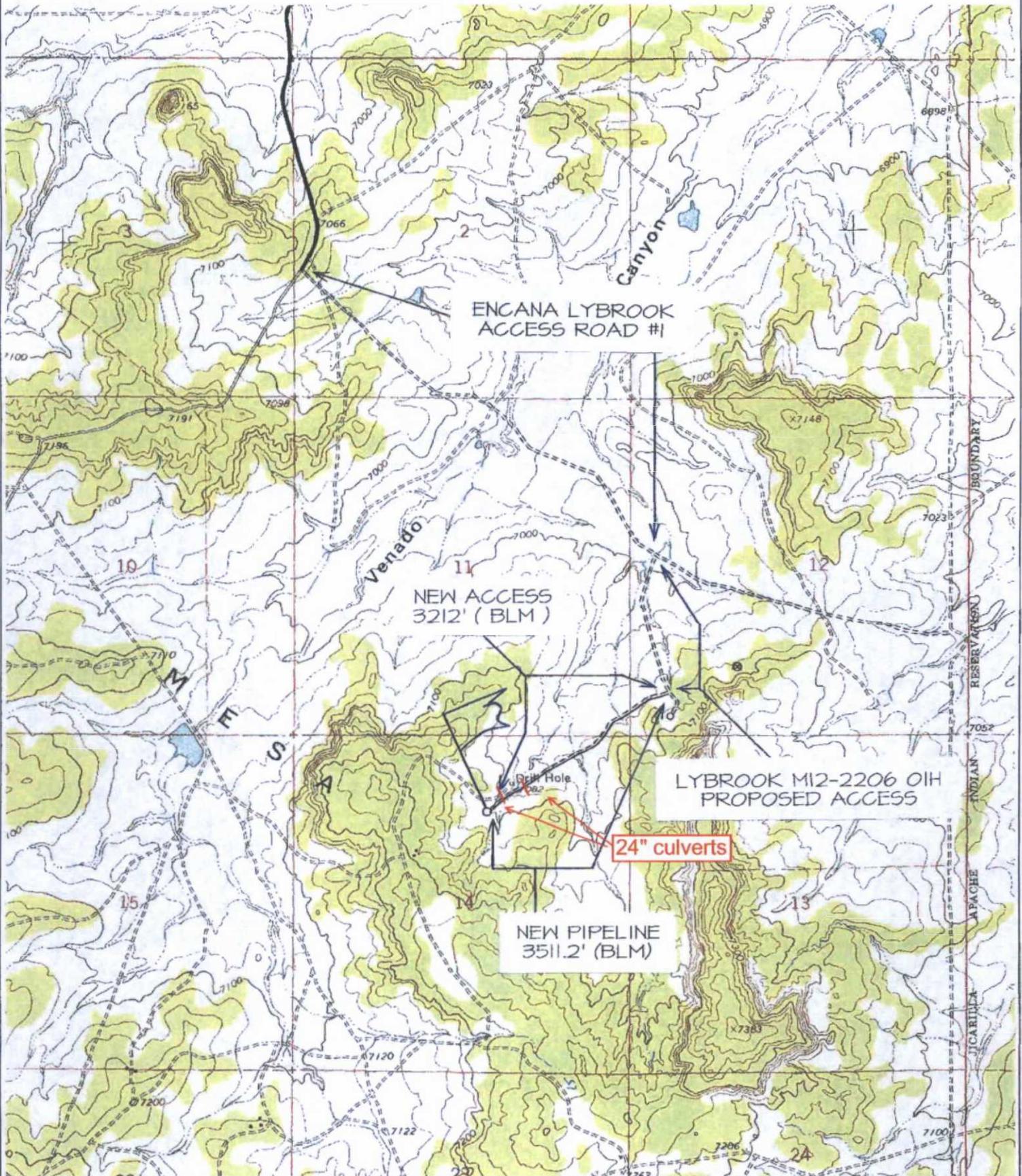
NAME OF TOPO MAP : COUNSELOR

⊕ PRODUCING WELL

⊗ PLUGGED & ABANDONED WELL

SHEET B-1

ENCANA OIL & GAS (USA) INC. LYBROOK B14-2206 02H
 1247' FNL & 2248' FEL, SECTION 14, T22N, R6W, N.M.P.M.
 SANDOVAL COUNTY, NEW MEXICO



NAME OF TOPO MAP : COUNSELOR

⊕ PRODUCING WELL

⊗ PLUGGED & ABANDONED WELL

SHEET B-2

Directions from the Intersection of US Hwy 550 & US Hwy 64
in Bloomfield, NM to Encana Oil & Gas (USA) Inc. Lybrook B14-2206 02H
1247' FNL & 2248' FEL, Section 14, T22N, R6W, N.M.P.M., Sandoval County, NM

Latitude: 36.14150°N Longitude: 107.43710°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 53.6 miles to Mile Marker 97.7;

Go right (South-Easterly) for 3.3 miles to an unimproved roadway referred to as Lybrook Access Road #1;

Go left (South-Easterly) along Lybrook Access Road #1 for 1.4 miles to proposed roadway for Lybrook M12-2206 01H on right-hand side which continues South for 2,279' to fork in proposed roadway;

Go right (South-Westerly) along proposed roadway for an additional 3,212' to staked Encana Lybrook B14-2206 02H location.

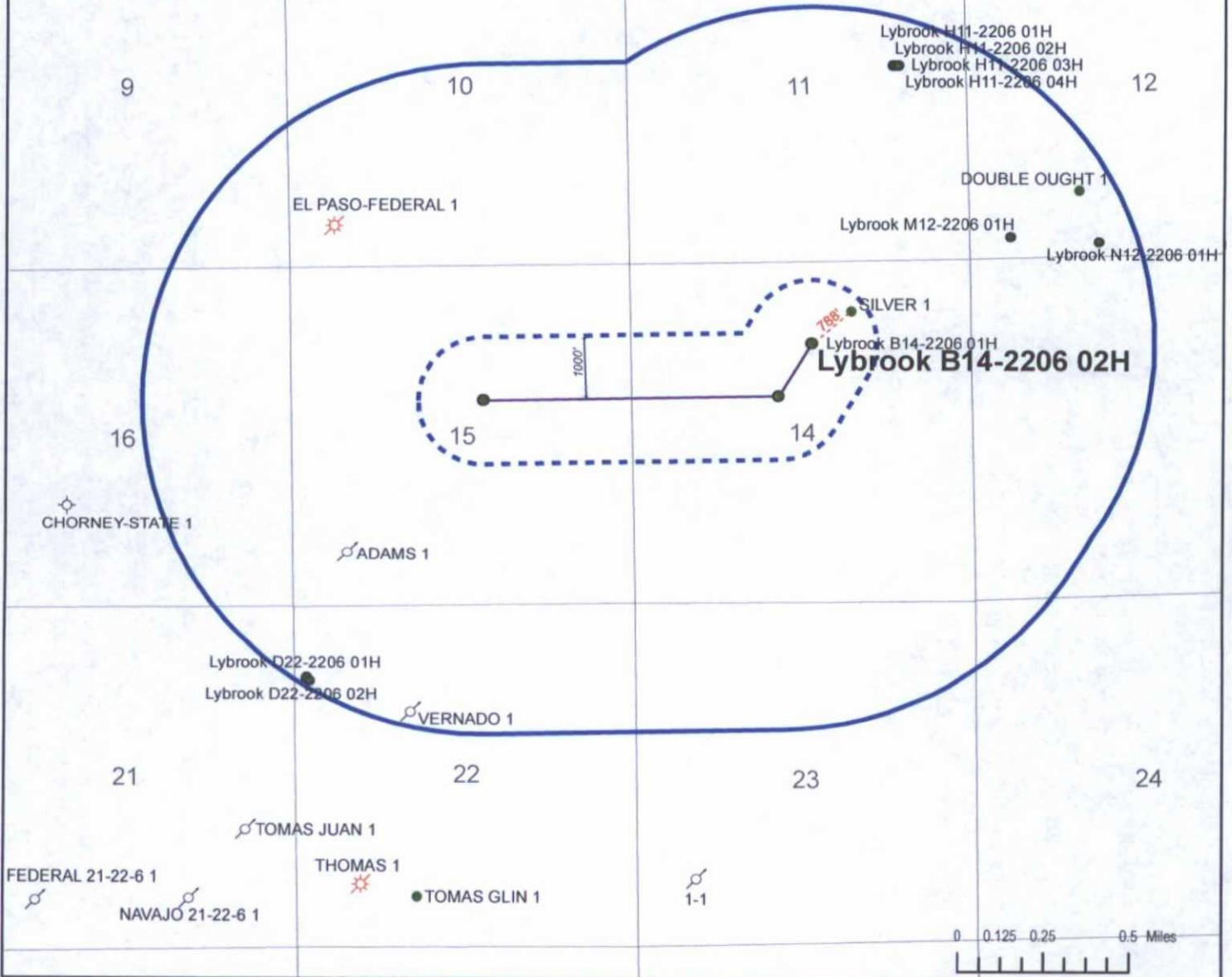
encana.

natural gas

SANDOVAL COUNTY,
NEW MEXICO

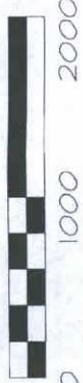
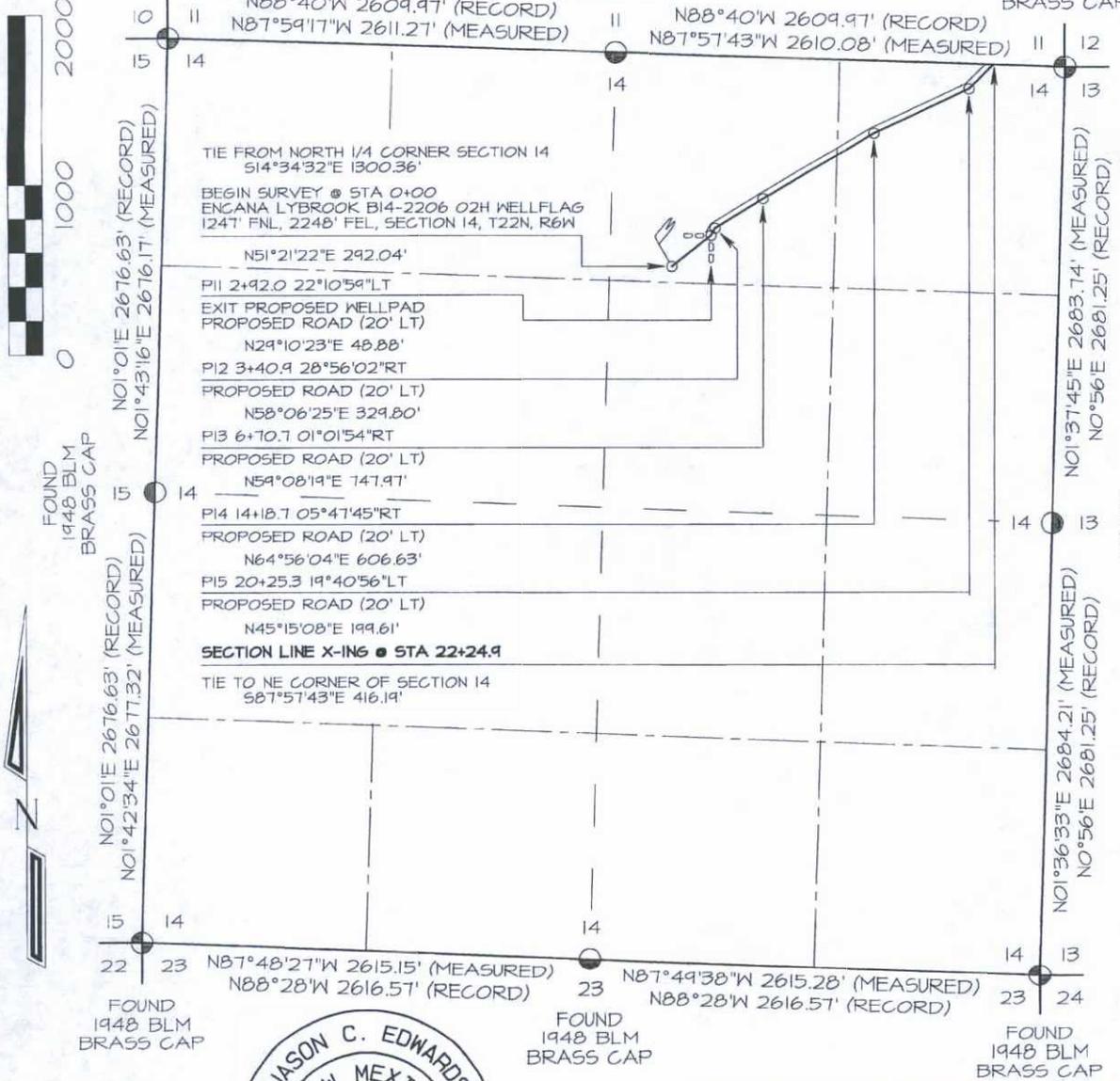
-  Abandoned
 -  Abandoned Gas
 -  Abandoned Oil
 -  Dry Hole
 -  GAS
 -  Injection
 -  OIL
-  Basin Mancos Gas Pool
- 1 inch = 2,333 feet

22N
6W



**ENCANA OIL & GAS (USA) INC. LYBROOK B14-2206 02H
PROPOSED PIPELINE SURVEY LOCATED IN THE
N/2 NE/4 OF SECTION 14, T22N, R6W, NMPM
SANDOVAL COUNTY, NEW MEXICO**

GRAPHIC SCALE 1"=1000'



I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

JASON C. EDWARDS Date: July 27, 2013
Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

BASIS OF BEARING:

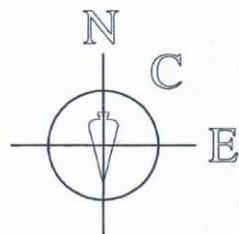
REAL-TIME KINEMATIC GPS SURVEY SOLUTION OBTAINED FROM SATELLITES TRACKED ON JULY 18, 2013 FROM A REFERENCE STATION POSITIONED IN SW4 NW4 OF SECTION 2, T22N, R6W

PLAT NOTE:

BEFORE ANY CONSTRUCTION BEGINS, CONTRACTOR IS ADVISED TO CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED PIPELINES OR CABLES IN THE AREA OF THE PROJECT

~ SURFACE OWNERSHIP ~ Bureau of Land Management	
0+00 TO 22+24.9	2224.9 FT / 134.8 RODS

Prepared for:
ENCANA OIL & GAS (USA)
370 17th ST, SUITE 1700
DENVER, CO 80202

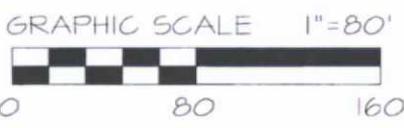
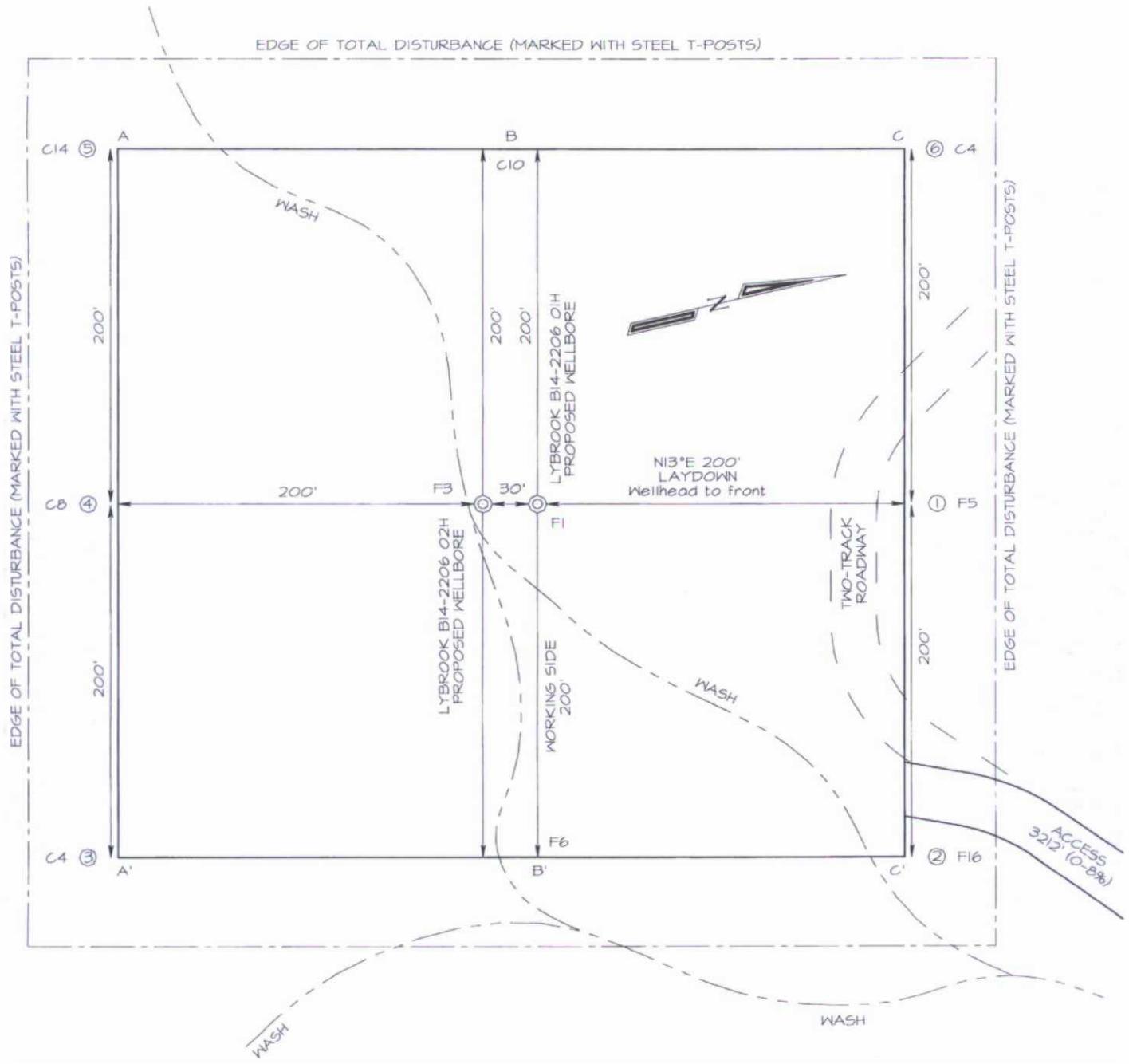


Land Surveyor:
Jason C. Edwards
Mailing Address:
Post Office Box 6612
Farmington, NM 87499
Business Address:
111 East Pinon Street
Farmington, NM 87402
(505) 325-2654 (Office)
(505) 326-5650 (Fax)

SURVEYS, INC.

CHECKED BY: JCE
DRAWN BY: SLE
SHEET 4 OF 9
FILENAME: 22614B31

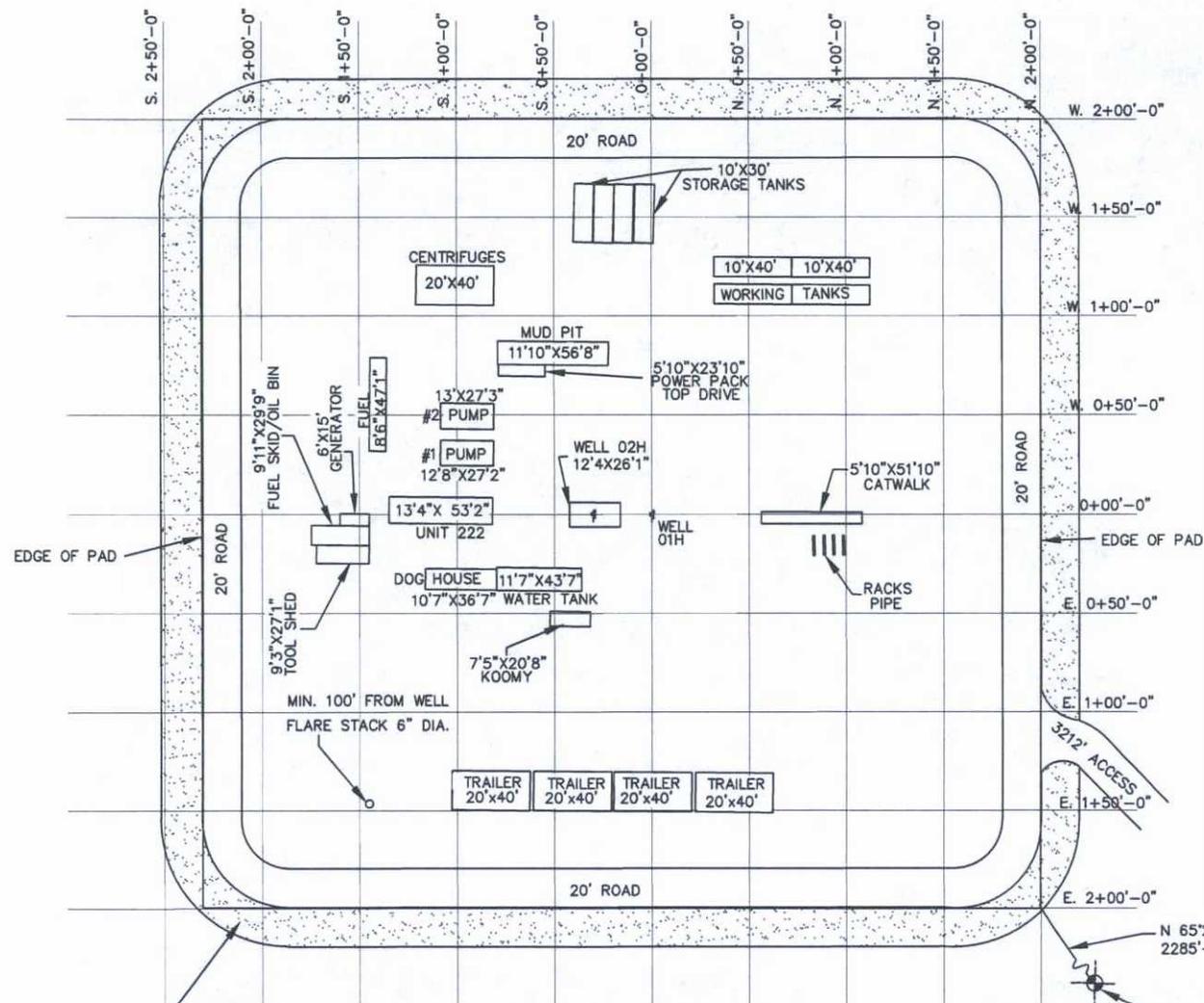
ENCANA OIL & GAS (USA) INC. LYBROOK B14-2206 02H
1247' FNL & 2248' FEL, SECTION 14, T22N, R6W, NMPM
SANDOVAL COUNTY, NEW MEXICO ELEVATION: 7108'
LAT: 36.14150°N LONG: 107.43710°W DATUM: NAD1983



~ SURFACE OWNER ~
 Bureau of Land Management

Steel T-Posts have been set to define the Edge of Disturbance limits which are 50' offset from the edge of the staked wellpad.

Date and Time Saved: 2012-03-06, 8:15 AM



SURFACE LOCATION
 LAT: 36.14150 N
 LONG: 107.43710 W
 NAD 1983

POINT OF ENTRY
 LAT: 36.13914 N
 LONG: 107.43950 W
 NAD 1983

BOTTOM HOLE
 LAT: 36.13943 N
 LONG: 107.45499 W
 NAD 1983

THE NORTHEAST CORNER
 SEC. 14, T.22N., R.06W.

TOP SOIL STOCKPILE
 AREA 20' SURROUNDING PAD

PLANT: 271 2/11/2012 2:58:05 PM BY: MMS, DMS
 LAST SAVE: 2/22/2012 11:42:00 AM BY: MMS

REFERENCE DRAWING	DRG. NO.	NO.	DATE	PROJECT DESCRIPTION	PROD.	AFE	EPON CA	EPON NO.	APPL.	REUSE STAGE	DATE	BY	CHKD.	APPL.	PERMIT STAMP	CHECKER'S STAMP
		A	2012-03-07	ISSUED FOR REVIEW	-	-	URS LLC	1303258	-	Permit (S)	2012-03-07	SAI	MLE	-		
		A1	2012-03-07	ISSUED FOR CLOSE CLOSURE	-	-	URS LLC	1303258	-	Per (S)	-	-	-	-		
		-	-	ISSUED FOR CLOSE CLOSURE	-	-	-	-	-	Design (S)	-	-	-	-		
		-	-	-	-	-	-	-	-	As-Built (S)	-	-	-	-		

NOTE: TYPICAL LAYOUT THAT MAY BE CHANGED
 BASED ON SITE-SPECIFIC CONDITIONS AND
 EQUIPMENT AVAILABILITY.

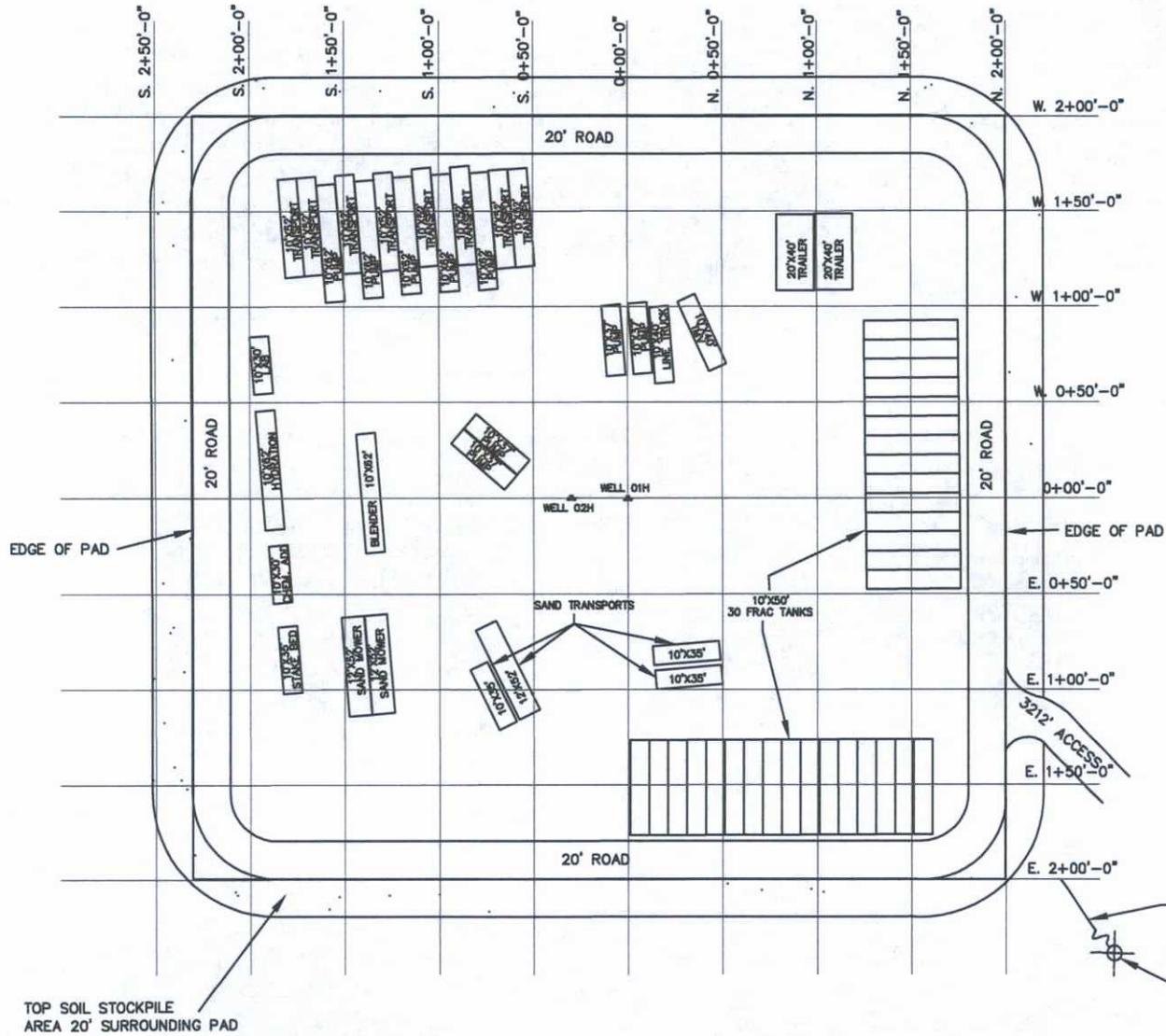
encana.
 natural gas

ENC LYSBROOK 814-2308-02H
 SEC S14-T22N-R06W
 WELLS PAD
 SEC S14-T22N-R06W
 SCALE 1"=40'-0"

LDIS LLC.
 TYPICAL DRILLING LAYOUT

NEW MEXICO
 A LB-NV-A-3000A

Drawings Must Comply with Encana Drafting Standards (ECA-004-S-01)
 12: 6/16/12 1:00:00 PM BY: MMS, DMS



THE NORTHEAST CORNER
 SEC. 14, T.22N., R.06W.

REFERENCE DRAWING	DATE	NO.	DATE	PROJECT DESCRIPTION	PROJ.	APP.	EPCH	CA	EPCH	NO.	APPL.	ISSUE	EDGE	DATE	BY	CHKD.	APPL.	POINT STAMP	ENGINEER'S STAMP
		1	2012-02-07	ISSUED FOR REVIEW	-	-	LEE	USA	UNREVIEWED	-	-	01	01	2012-02-07	LEE	USA	-		
		2	2012-02-07	ISSUED FOR CLIENT REVIEW	-	-	LEE	USA	UNREVIEWED	-	-	02	02	-	-	-	-		
		3	-	-	-	-	-	-	-	-	-	03	03	-	-	-	-		
		4	-	-	-	-	-	-	-	-	-	04	04	-	-	-	-		
		5	-	-	-	-	-	-	-	-	-	05	05	-	-	-	-		
		6	-	-	-	-	-	-	-	-	-	06	06	-	-	-	-		
		7	-	-	-	-	-	-	-	-	-	07	07	-	-	-	-		
		8	-	-	-	-	-	-	-	-	-	08	08	-	-	-	-		
		9	-	-	-	-	-	-	-	-	-	09	09	-	-	-	-		
		10	-	-	-	-	-	-	-	-	-	10	10	-	-	-	-		

NOTE: TYPICAL LAYOUT THAT MAY BE CHANGED
 BASED ON SITE-SPECIFIC CONDITIONS AND
 EQUIPMENT AVAILABILITY.

encana.
 natural gas

REVISED BY: LVS/BOB
 DATE: 01-4-2009-0000
 FOR WELL PAD
 NO. 014-T22N-R06W
 SCALE: 1"=50'-0"

LDIS LLC.
 TYPICAL COMPLETIONS LAYOUT

NEW MEXICO
 A1
 LB-NV-A-3001A

Lybrook B14-2206 02H
 SHL: NWNE Section 14, T22N, R6W
 1247 FNL and 2248 FEL
 BHL: SWNE Section 15, T22N, R6W
 2120 FNL and 2295 FEL
 Sandoval County, New Mexico
 Lease Number: NMNM 117562

**Encana Oil & Gas (USA) Inc.
 Drilling Plan**

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS (TVD)

The estimated tops of important geologic markers are as follows:

Formation	Depth (TVD) units = feet
Ojo Alamo Ss.	1,316
Kirtland Shale	1,443
Fruitland Coal	1,567
Pictured Cliffs Ss.	1,895
Lewis Shale	2,005
Cliffhouse Ss.	2,687
Menefee Fn.	3,403
Point Lookout Ss.	4,158
Mancos Shale	4,354
Mancos Silt	4,911
Gallup Fn.	5,167

The referenced surface elevation is 7,108', KB 7,124'

2. ESTIMATED DEPTH OF POTENTIAL WATER, OIL, GAS, & OTHER MINERAL BEARING FORMATIONS

Substance	Formation	Depth (TVD) units = feet
Water/Gas	Fruitland Coal	1,567
Oil/Gas	Pictured Cliffs Ss.	1,895
Oil/Gas	Cliffhouse Ss.	2,687
Gas	Menefee Fn.	3,403
Oil/Gas	Point Lookout Ss.	4,158
Oil/Gas	Mancos Shale	4,354
Oil/Gas	Mancos Silt	4,911
Oil/Gas	Gallup Fn.	5,167

All shows of fresh water and minerals will be reported and protected.

3. PRESSURE CONTROL

- a) Pressure control equipment and configuration will be designed to meet 2M standards.
- b) Working pressure on rams and BOPE will be 3,000 psi
- c) Function test and visual inspection of the BOP will be conducted daily and noted in the IADC Daily Drilling Report.

Lybrook B14-2206 02H

SHL: NWNE Section 14, T22N, R6W
1247 FNL and 2248 FEL

BHL: SWNE Section 15, T22N, R6W
2120 FNL and 2295 FEL

Sandoval County, New Mexico

Lease Number: NMNM 117562

- d) The Annular BOP will be pressure tested to a minimum of 50 percent of its rated working pressure.
- e) Blind and Pipe Rams/BOP will be tested against a test plug to 100 percent of rated working pressure.
- f) Pressure tests are required before drilling out from under all casing strings set and cemented in place.
- g) BOP controls must be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned.
- h) BOP testing procedures and testing frequency will conform to Onshore Order No. 2.
- i) BOP remote controls shall be located on the rig floor at a location readily accessible to the driller. Master controls shall be on the ground at the accumulator and shall have the capability to function all preventers.
- j) The kill line shall be 2-inch minimum and contain two kill line valves, one of which shall be a check valve.
- k) The choke line shall be a 2-inch minimum and contain two choke line valves (2-inch minimum).
- l) The choke and manifold shall contain two adjustable chokes.
- m) Hand wheels shall be installed on all ram preventers.
- n) Safety valves and wrenches (with subs for drill string connections) shall be available on the rig floor at all times.
- o) Inside BOP or float sub shall also be available on the rig floor at all times.

Proposed BOP and choke manifold arrangements are attached.

4. CASING & CEMENTING PROGRAM

The proposed casing and cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported.

- a) The proposed casing design is as follows:

Casing	Depth	Hole Size	Csg Size	Weight	Grade
Conductor	0-60'	30"	20"	94#	H40, STC New
Surface	0'-500'	12 1/4"	9 5/8"	36#	J55, STC New
Intermediate	0'-5483'MD	8 3/4"	7"	26#	J55, LTC New
Production Liner	5283'-10891'MD	6 1/8"	4 1/2"	11.6#	B80*, LTC New

Casing String				Casing Strength Properties			Minimum Design Factors		
Size	Weight (lb/ft)	Grade	Connection	Collapse (psi)	Burst (psi)	Tensile (1000lb)	Collapse	Burst	Tension
9 5/8"	36	J55	STC	2020	3520	394	1.125	1.1	1.5
7"	26	J55	LTC	4320	4980	367	1.125	1.1	1.5
4 1/2"	11.6	B80	LTC	6350	7780	201	1.125	1.1	1.5

*B80 pipe specifications are attached

Casing design is subject to revision based on geologic conditions encountered.

Lybrook B14-2206 02H

**SHL: NWNE Section 14, T22N, R6W
1247 FNL and 2248 FEL**

**BHL: SWNE Section 15, T22N, R6W
2120 FNL and 2295 FEL**

**Sandoval County, New Mexico
Lease Number: NMNM 117562**

All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1,500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.

b) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

Casing	Depth	Cement Volume (sacks)	Cement Type&Yield	Designed TOC	Centralizers
Conductor	60'	100sk	Type I Neat 14.8 ppg	Surface	None
Surface	500'	178sk	Type III Cement + 1% CaCl + 0.25lb/sk Cello Flake + 0.2% FL, 14.6ppg, 1.38cuf/sk	Surface	1 per joint on bottom 3 joints
Intermediate	5483'MD	30% open hole excess Stage 1 Lead: 192sks Stage 1 Tail: 133sks Stage 2 Lead: 151sks	Lead (Stages 1 and 2): PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuf/sk Tail (Stage 1): Type III Cmt + 1% CaCl + 0.25lb/sk Cello Flake 14.5ppg 1.38cuf/sk	Surface	1 per joint for bottom 3 joints, 1 every 3 joints for remaining joints
Production Liner*	5283'-10891'	None – External casing packers	N/A	N/A	N/A

*Production liner clarification: Utilizing external swell casing packer system for zonal isolation will not use cement in the production liner.

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed above or equivalent slurries depending on service provider selected. Cement yields may change depending on slurries selected.

All waiting on cement times shall be a minimum of 8 hours or adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

Lybrook B14-2206 02H

SHL: NWNE Section 14, T22N, R6W
1247 FNL and 2248 FEL

BHL: SWNE Section 15, T22N, R6W
2120 FNL and 2295 FEL

Sandoval County, New Mexico
Lease Number: NMNM 117562

5. WELL PLAN & DIRECTIONAL DRILLING PROGRAM

The proposed horizontal well will have a kick off point of 4763'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5359'/10891'	Gallup

6. DRILLING FLUIDS PROGRAM

a) Surface through Intermediate Casing Point:

Hole Size (in)	Depth (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
30"	0-60' TVD	Fresh Water	8.3-9.2	38-100	4-28
12 1/4"	0-500' TVD	Fresh Water	8.4-8.6	60-70	NC
8 3/4"	500'TVD- 5308'TVD/5483'MD	Fresh Water LSND	8.5-8.8	40-50	8-10

b) Intermediate Casing Point to TD:

Hole Size (in)	MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6 1/8"	5483'-10891'	Synthetic Oil Based Mud	8.6-9.0	15-25	<15

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals, including fresh water and oil-based operations. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Waste will be disposed of properly at an EPA-approved hazardous waste facility. Fresh water cuttings will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystems, Inc. The location will be lined in accordance with the Surface Use Plan of Operations.

7. TESTING, CORING and LOGGING

- a) Drill Stem Testing – None anticipated
b) Coring – None anticipated.
c) Mud Logging – Mud loggers will be on location from kick off point to TD.
d) Logging – See Below

Cased Hole:

CBL/CCL/GR/VDL will be run as needed for perforating control

Lybrook B14-2206 02H

SHL: NWNE Section 14, T22N, R6W
1247 FNL and 2248 FEL

BHL: SWNE Section 15, T22N, R6W
2120 FNL and 2295 FEL

Sandoval County, New Mexico
Lease Number: NMNM 117562

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The anticipated bottom hole pressure is +/- 2523 psi based on a 9.0 ppg at 5391' TVD of the landing point of the horizontal lateral. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H₂S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on March 23, 2014. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 25 days.

MWD LWD		OPEN HOLE LOGGING	FORM	DEPTH TVD MD		HOLE SIZE	CASING SPECS	MW MUD TYPE	DEVIATION INFORMATION	
LOC: Sec 14-T22N-R6W County: Sandoval WELL: Lybrook B14-2206 02H			Encana Natural Gas WELL SUMMARY						ENG: 9/11/13 RIG: GLE: 7108 RKBE: 7124	
				60	60'	30	20" 94# 100sx Type I Neat 48.8ppg cmt	Fresh wtr 8.3-9.2		
Surveys After csg is run	None			500	500	12 1/4	9 5/8" 36ppf J55 STC TOC @ surface 178 sks Type III Cmt	Fresh wtr 8.4-8.6	Vertical <1°	
Surveys every 500'	No OH logs Mud logger onsite	Ojo Alamo Kirtland Fruitland Coal Pictured Cliffs Ss Lewis Shale Cliffhouse Ss Menefee Fn Point Lookout Ss Mancos Sh KICK OFF PT Mancos Silt Gallup Top 7" csg	1316 1443 1567 1895 2005 2687 3403 4158 4354 4763 4911 5167 5308			8 3/4 Stage tool @1945'	7" 26ppf J55 LTC TOC @ surface 30% OH excess: 476 sksTotal. Stage 1 Lead: 192sks Stage 1 Tail: 133sks. Stage 2 Lead: 151sks	Fresh Wtr 8.5-8.8	Vertical <1° KOP 4763 10 deg/100'	
Surveys every 500' Gyro at CP MWD Gamma Directional	No OH Logs	horz target Base Gallup	5391 5482	6315		6 1/8 4576' Lateral	200' overlap at liner top 4576' Lateral	8.6-9.0 OBM Switch to OBM 8.6-9.0	.25deg updip 5359'TVD TD = 10891' MD	

NOTES:

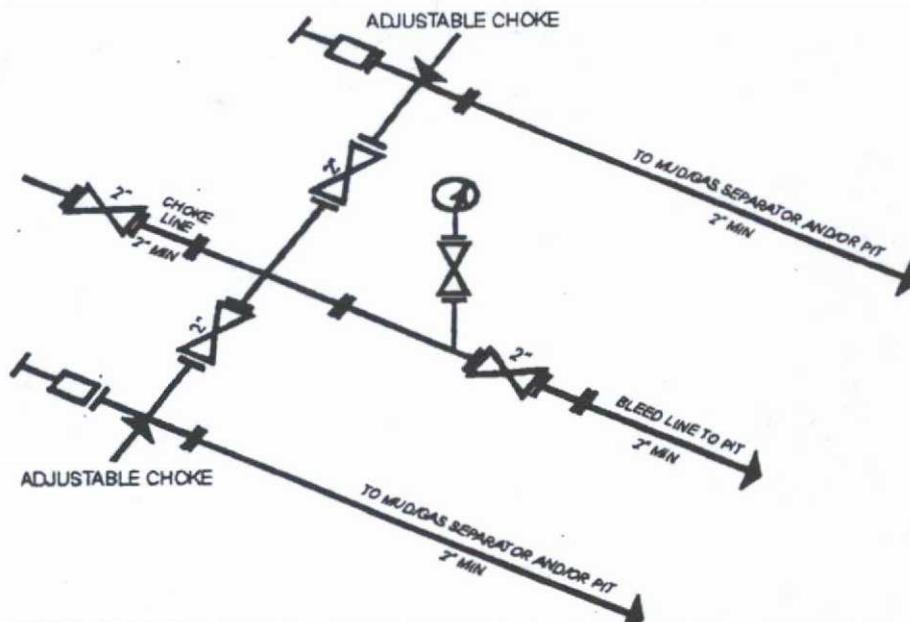
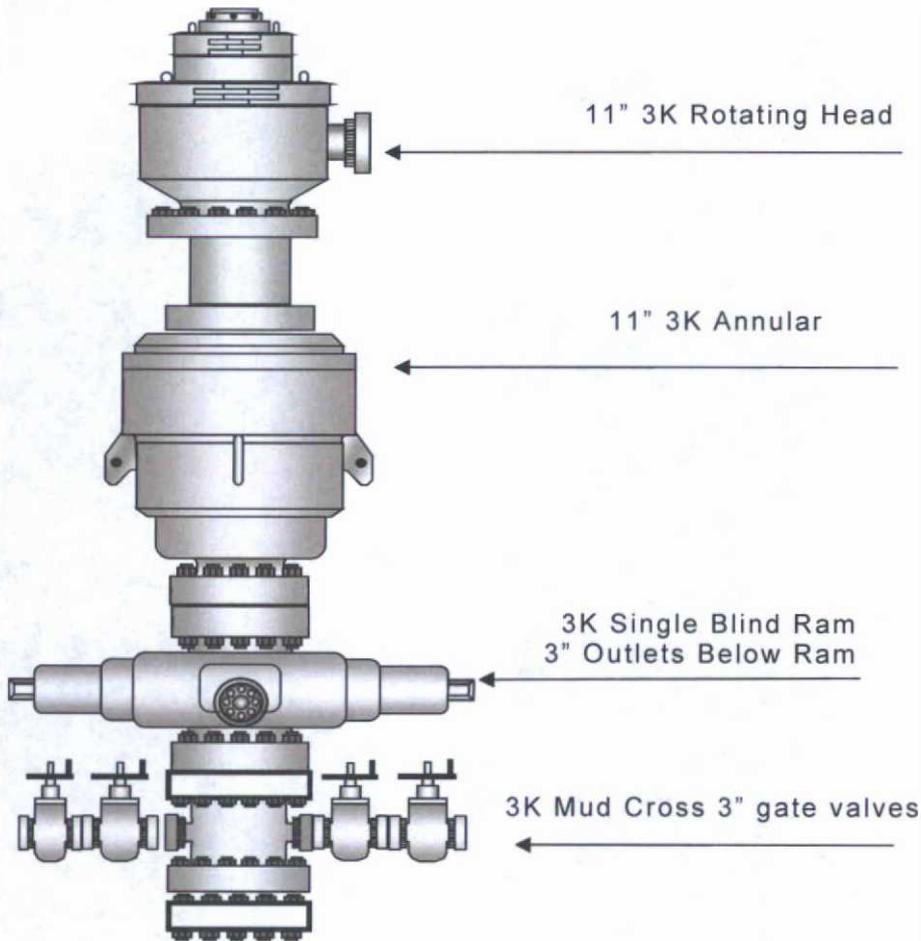
- 1) Drill with 30" bit to 60', set 20" 94# conductor pipe
- 2) Drill surface to 500', R&C 9 5/8" casing
- 3) N/U BOP and surface equipment
- 4) Drill to KOP of 4763', 8 3/4" hole size,
- 5) PU directional tools and start curve at 10deg/100' build rate
- 6) Drill to casing point of 5483' MD
- 7) R&C 7" casing, circ cmt to surface, switch to OBM
- 8) Land at 90deg, drill 4576' lateral to 10891', run 4 1/2" liner with external swellable csg packers

WELLHEAD BLOWOUT CONTROL SYSTEM



Well name and number:

Lybrook B14-2206 02H





Boomerang Tube LLC

CASING (OR) TUBING DESCRIPTION AND PERFORMANCE PROPERTIES

Pipe Outside Diameter (ins)	_____	4.500
Pipe Wall Thickness (ins)	_____	0.250
Nominal Weight Per Foot (lbs)	_____	11.60
Thread Name	_____	Long Thread CSG
Grade Name	_____	SB-80
Pipe Minimum Yield (psi)	_____	80,000
Pipe Minimum Ultimate (psi)	_____	90,000
Coupling Minimum Yield (psi)	_____	80,000
Coupling Minimum Ultimate (psi)	_____	100,000
Coupling or Joint Outside Diameter (ins)	_____	5.000
Drift Diameter (ins)	_____	3.875
Plain End Weight per Foot (lbs)	_____	11.36
Joint Strength (lbs)	_____	201,000
Internal Yield (psi)	_____	7,780
Collapse Rating (psi)	_____	6,350

MAXIMUM DEPTH/LENGTH BASED ON MUD WTS & SAFETY FACTORS

Drilling Mud Weight (ppg)	_____	9.625
Tension Safety Factor	_____	1.80
Maximum Tension Length (ft)	_____	9,630
Internal Yield Safety Factor	_____	1.10
Maximum Depth for Internal Yield (ft)	_____	14,150
Collapse Safety Factor	_____	1.125
Maximum Collapse Depth (ft)	_____	11,290

API RELATED VALUES and INTERMEDIATE CALCULATION RESULTS

Coupling Thread Fracture Strength	_____	464,000
Pipe Thread Fracture Strength (lbs)	_____	201,000
Pipe Body Plain End Yield (lbs)	_____	267,000
Round Thread Pull-Out (lbs)	_____	219,000
Minimum Make-up Torque (ft-lbs)	_____	1,640
Nominal Make-up Torque (ft-lbs)	_____	2,190
Maximum Make-up Torque (ft-lbs)	_____	2,740
Coupling Internal Yield (psi)	_____	10,660
Pipe Body Internal Yield (psi)	_____	7,780
Leak @ E1 or E7 plane (psi)	_____	17,920
Pipe Hydrostatic Test Pressure @ 80 % SMYS	_____	7,100

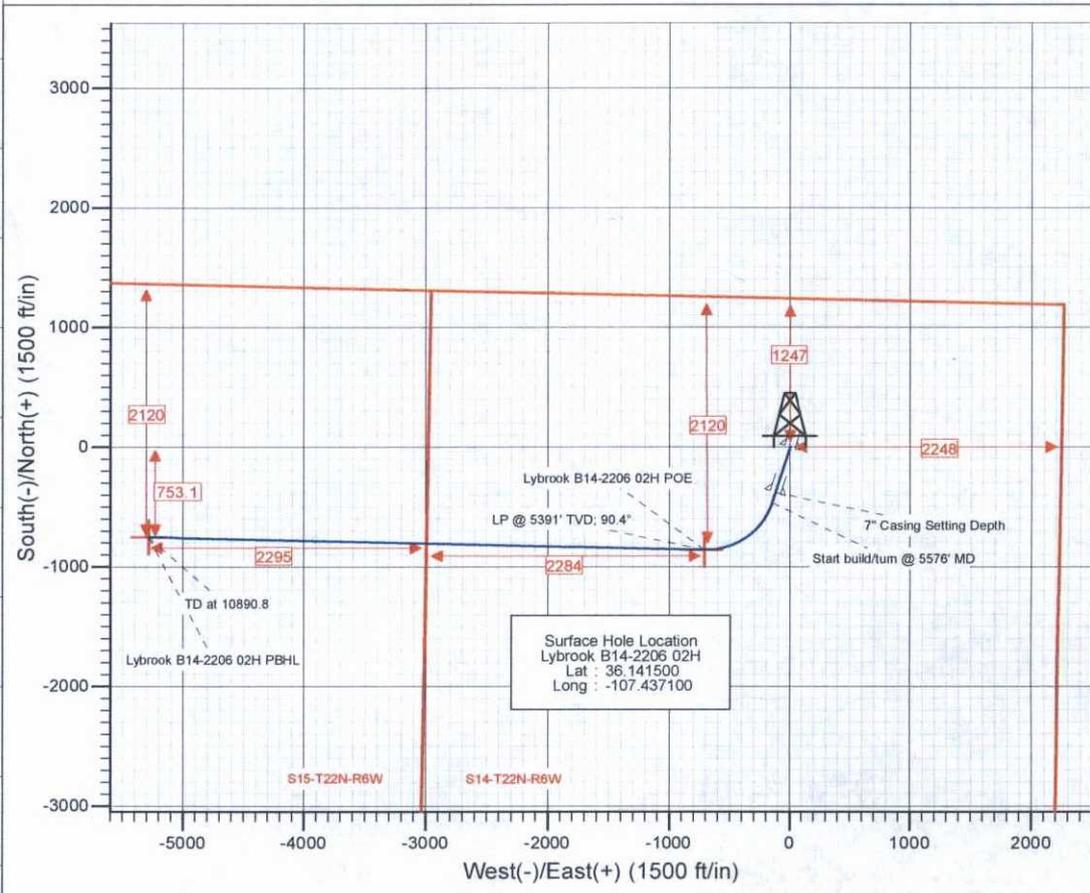
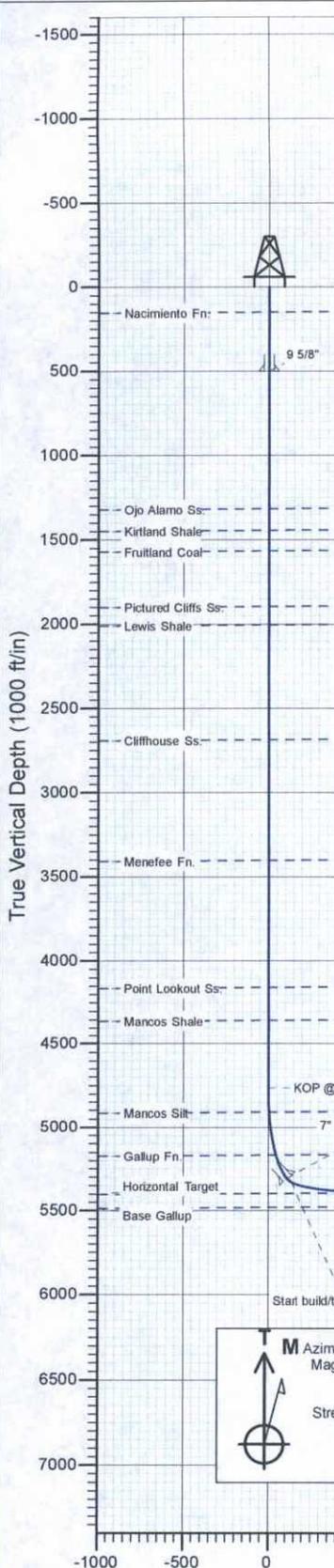


Project: Sandoval County, NM
 Site: Lybrook
 Well: Lybrook B14-2206 02H
 Wellbore: Hz
 Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4763.0	0.00	0.00	4763.0	0.0	0.0	0.00	0.00	0.0	
3	5576.9	81.37	197.76	5329.6	-463.9	-148.6	10.00	197.76	137.8	Lybrook B14-2206 02H POE
4	6315.2	90.40	271.33	5391.2	-859.2	-708.7	10.00	87.05	688.6	Lybrook B14-2206 02H PBHL
5	10890.8	90.40	271.33	5359.2	-753.1	-5283.0	0.00	0.00	5264.1	Lybrook B14-2206 02H PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Lybrook B14-2206 02H PBHL	-753.1	-5283.0	1872228.12	1284624.73	36.139430	-107.454990
Lybrook B14-2206 02H POE	-859.2	-708.7	1872086.17	1289197.35	36.139140	-107.439500

CASING DETAILS

TVD	MD	Name
500.0	500.0	9 5/8"
5308.0	5483.2	7" Casing Setting Depth

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
150.0	150.0	Nacimiento Fn.
1316.0	1316.0	Ojo Alamo Ss.
1443.0	1443.0	Kirtland Shale
1567.0	1567.0	Fruitland Coal
1895.0	1895.0	Pictured Cliffs Ss.
2005.0	2005.0	Lewis Shale
2687.0	2687.0	Cliffhouse Ss.
3403.0	3403.0	Menefee Fn.
4158.0	4158.0	Point Lookout Ss.
4354.0	4354.0	Mancos Shale
4911.0	4912.7	Mancos Silt
5166.7	5210.9	Gallup Fn.

M Azimuths to True North
 Magnetic North: 9.41°

Magnetic Field
 Strength: 50207.9snT
 Dip Angle: 62.95°
 Date: 9/9/2013
 Model: IGRF2010

Plan #1
 Lybrook B14-2206 02H
 13xxx; LR
 WELL @ 7124.0ft (Original Well Elev)
 Ground Elevation @ 7108.0
 North American Datum 1983
 Well Lybrook B14-2206 02H, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Lybrook B14-2206 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7124.0ft (Original Well Elev)
Project:	Sandoval County, NM	MD Reference:	WELL @ 7124.0ft (Original Well Elev)
Site:	Lybrook	North Reference:	True
Well:	Lybrook B14-2206 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project	Sandoval County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site	Lybrook				
Site Position:		Northing:	1,882,676.45 ft	Latitude:	36.168210
From:	Lat/Long	Easting:	1,287,068.90 ft	Longitude:	-107.447150
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-0.71 °

Well	Lybrook B14-2206 02H					
Well Position	+N/-S	0.0 ft	Northing:	1,872,916.63 ft	Latitude:	36.141500
	+E/-W	0.0 ft	Easting:	1,289,916.52 ft	Longitude:	-107.437100
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,108.0 ft

Wellbore	Hz
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/9/2013	9.41	62.95	50,208

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	271.33

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,763.0	0.00	0.00	4,763.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,576.9	81.37	197.76	5,329.6	-463.9	-148.6	10.00	10.00	0.00	197.76	
6,315.2	90.40	271.33	5,391.2	-859.2	-708.7	10.00	1.22	9.96	87.05	Lybrook B14-2206 02
10,890.8	90.40	271.33	5,359.2	-753.1	-5,283.0	0.00	0.00	0.00	0.00	Lybrook B14-2206 02

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Lybrook B14-2206 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7124.0ft (Original Well Elev)
Project:	Sandoval County, NM	MD Reference:	WELL @ 7124.0ft (Original Well Elev)
Site:	Lybrook	North Reference:	True
Well:	Lybrook B14-2206 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	Nacimiento Fn.
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	9 5/8"
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,316.0	0.00	0.00	1,316.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,443.0	0.00	0.00	1,443.0	0.0	0.0	0.0	0.00	0.00	Kirtland Shale
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,567.0	0.00	0.00	1,567.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,895.0	0.00	0.00	1,895.0	0.0	0.0	0.0	0.00	0.00	Pictured Cliffs Ss.
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	
2,005.0	0.00	0.00	2,005.0	0.0	0.0	0.0	0.00	0.00	Lewis Shale
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,687.0	0.00	0.00	2,687.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	
3,403.0	0.00	0.00	3,403.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn.
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	
4,158.0	0.00	0.00	4,158.0	0.0	0.0	0.0	0.00	0.00	Point Lookout Ss.
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Lybrook B14-2206 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7124.0ft (Original Well Elev)
Project:	Sandoval County, NM	MD Reference:	WELL @ 7124.0ft (Original Well Elev)
Site:	Lybrook	North Reference:	True
Well:	Lybrook B14-2206 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	
4,354.0	0.00	0.00	4,354.0	0.0	0.0	0.0	0.00	0.00	Mancos Shale
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	
4,763.0	0.00	0.00	4,763.0	0.0	0.0	0.0	0.00	0.00	KOP @ 4763'
4,800.0	3.70	197.76	4,800.0	-1.1	-0.4	0.3	10.00	10.00	
4,900.0	13.70	197.76	4,898.7	-15.5	-5.0	4.6	10.00	10.00	
4,912.7	14.96	197.76	4,911.0	-18.5	-5.9	5.5	10.00	10.00	Mancos Silt
5,000.0	23.69	197.76	4,993.3	-46.0	-14.7	13.7	10.00	10.00	
5,100.0	33.69	197.76	5,080.9	-91.7	-29.4	27.2	10.00	10.00	
5,200.0	43.69	197.76	5,158.9	-151.1	-48.4	44.9	10.00	10.00	
5,210.9	44.78	197.76	5,166.7	-158.4	-50.7	47.0	10.00	10.00	Gallup Fn.
5,300.0	53.69	197.76	5,224.8	-222.6	-71.3	66.1	10.00	10.00	
5,400.0	63.69	197.76	5,276.7	-303.8	-97.3	90.2	10.00	10.00	
5,483.2	72.00	197.76	5,308.0	-377.2	-120.8	112.0	10.00	10.00	7" Casing Setting Depth
5,500.0	73.68	197.76	5,313.0	-392.4	-125.7	116.6	10.00	10.00	
5,576.9	81.37	197.76	5,329.6	-463.9	-148.6	137.8	10.00	10.00	Start build/turn @ 5576' MD
5,600.0	81.49	200.10	5,333.0	-485.5	-156.0	144.7	10.00	0.54	
5,700.0	82.20	210.17	5,347.3	-575.0	-198.0	184.6	10.00	0.70	
5,800.0	83.13	220.21	5,360.1	-655.9	-255.1	239.8	10.00	0.94	
5,900.0	84.28	230.20	5,371.1	-725.9	-325.5	308.6	10.00	1.15	
6,000.0	85.60	240.15	5,379.9	-782.7	-407.2	388.9	10.00	1.32	
6,100.0	87.04	250.06	5,386.3	-824.6	-497.6	478.3	10.00	1.45	
6,200.0	88.58	259.95	5,390.2	-850.4	-594.0	574.1	10.00	1.54	
6,300.0	90.16	269.82	5,391.3	-859.3	-693.5	673.4	10.00	1.58	
6,315.2	90.40	271.33	5,391.2	-859.2	-708.7	688.6	10.00	1.58	LP @ 5391' TVD; 90.4°
6,400.0	90.40	271.33	5,390.6	-857.2	-793.5	773.3	0.00	0.00	
6,500.0	90.40	271.33	5,389.9	-854.9	-893.4	873.3	0.00	0.00	
6,600.0	90.40	271.33	5,389.2	-852.6	-993.4	973.3	0.00	0.00	
6,700.0	90.40	271.33	5,388.5	-850.3	-1,093.4	1,073.3	0.00	0.00	
6,800.0	90.40	271.33	5,387.8	-847.9	-1,193.3	1,173.3	0.00	0.00	
6,900.0	90.40	271.33	5,387.1	-845.6	-1,293.3	1,273.3	0.00	0.00	
7,000.0	90.40	271.33	5,386.4	-843.3	-1,393.3	1,373.3	0.00	0.00	
7,100.0	90.40	271.33	5,385.7	-841.0	-1,493.3	1,473.3	0.00	0.00	
7,200.0	90.40	271.33	5,385.0	-838.7	-1,593.2	1,573.3	0.00	0.00	
7,300.0	90.40	271.33	5,384.3	-836.4	-1,693.2	1,673.3	0.00	0.00	
7,400.0	90.40	271.33	5,383.6	-834.0	-1,793.2	1,773.3	0.00	0.00	
7,500.0	90.40	271.33	5,382.9	-831.7	-1,893.1	1,873.3	0.00	0.00	
7,600.0	90.40	271.33	5,382.2	-829.4	-1,993.1	1,973.3	0.00	0.00	
7,700.0	90.40	271.33	5,381.5	-827.1	-2,093.1	2,073.3	0.00	0.00	
7,800.0	90.40	271.33	5,380.8	-824.8	-2,193.0	2,173.3	0.00	0.00	
7,900.0	90.40	271.33	5,380.1	-822.4	-2,293.0	2,273.3	0.00	0.00	
8,000.0	90.40	271.33	5,379.4	-820.1	-2,393.0	2,373.3	0.00	0.00	
8,100.0	90.40	271.33	5,378.7	-817.8	-2,493.0	2,473.3	0.00	0.00	
8,200.0	90.40	271.33	5,378.0	-815.5	-2,592.9	2,573.3	0.00	0.00	
8,300.0	90.40	271.33	5,377.3	-813.2	-2,692.9	2,673.3	0.00	0.00	
8,400.0	90.40	271.33	5,376.6	-810.9	-2,792.9	2,773.3	0.00	0.00	
8,500.0	90.40	271.33	5,375.9	-808.5	-2,892.8	2,873.3	0.00	0.00	
8,600.0	90.40	271.33	5,375.2	-806.2	-2,992.8	2,973.3	0.00	0.00	
8,700.0	90.40	271.33	5,374.5	-803.9	-3,092.8	3,073.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Lybrook B14-2206 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7124.0ft (Original Well Elev)
Project:	Sandoval County, NM	MD Reference:	WELL @ 7124.0ft (Original Well Elev)
Site:	Lybrook	North Reference:	True
Well:	Lybrook B14-2206 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.40	271.33	5,373.8	-801.6	-3,192.8	3,173.3	0.00	0.00	
8,900.0	90.40	271.33	5,373.1	-799.3	-3,292.7	3,273.3	0.00	0.00	
9,000.0	90.40	271.33	5,372.4	-797.0	-3,392.7	3,373.3	0.00	0.00	
9,100.0	90.40	271.33	5,371.7	-794.6	-3,492.7	3,473.3	0.00	0.00	
9,200.0	90.40	271.33	5,371.0	-792.3	-3,592.6	3,573.3	0.00	0.00	
9,300.0	90.40	271.33	5,370.3	-790.0	-3,692.6	3,673.3	0.00	0.00	
9,400.0	90.40	271.33	5,369.7	-787.7	-3,792.6	3,773.3	0.00	0.00	
9,500.0	90.40	271.33	5,369.0	-785.4	-3,892.6	3,873.3	0.00	0.00	
9,600.0	90.40	271.33	5,368.3	-783.0	-3,992.5	3,973.3	0.00	0.00	
9,700.0	90.40	271.33	5,367.6	-780.7	-4,092.5	4,073.3	0.00	0.00	
9,800.0	90.40	271.33	5,366.9	-778.4	-4,192.5	4,173.3	0.00	0.00	
9,900.0	90.40	271.33	5,366.2	-776.1	-4,292.4	4,273.3	0.00	0.00	
10,000.0	90.40	271.33	5,365.5	-773.8	-4,392.4	4,373.3	0.00	0.00	
10,100.0	90.40	271.33	5,364.8	-771.5	-4,492.4	4,473.3	0.00	0.00	
10,200.0	90.40	271.33	5,364.1	-769.1	-4,592.3	4,573.3	0.00	0.00	
10,300.0	90.40	271.33	5,363.4	-766.8	-4,692.3	4,673.3	0.00	0.00	
10,400.0	90.40	271.33	5,362.7	-764.5	-4,792.3	4,773.3	0.00	0.00	
10,500.0	90.40	271.33	5,362.0	-762.2	-4,892.3	4,873.2	0.00	0.00	
10,600.0	90.40	271.33	5,361.3	-759.9	-4,992.2	4,973.2	0.00	0.00	
10,700.0	90.40	271.33	5,360.6	-757.6	-5,092.2	5,073.2	0.00	0.00	
10,800.0	90.40	271.33	5,359.9	-755.2	-5,192.2	5,173.2	0.00	0.00	
10,890.8	90.40	271.33	5,359.2	-753.1	-5,283.0	5,264.1	0.00	0.00	TD at 10890.8

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Lybrook B14-2206 02H f - hit/miss target - Shape - Point	0.00	0.00	5,391.2	-859.2	-708.7	1,872,066.17	1,289,197.35	36.139140	-107.439500
Lybrook B14-2206 02H f - plan hits target center - Point	0.00	0.00	5,359.2	-753.1	-5,283.0	1,872,228.12	1,284,624.73	36.139430	-107.454990

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
500.0	500.0	9 5/8"	0.000	0.000	
5,483.2	5,308.0	7" Casing Setting Depth	0.000	0.000	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Lybrook B14-2206 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7124.0ft (Original Well Elev)
Project:	Sandoval County, NM	MD Reference:	WELL @ 7124.0ft (Original Well Elev)
Site:	Lybrook	North Reference:	True
Well:	Lybrook B14-2206 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
150.0	150.0	Nacimiento Fn.		-0.40	271.33	
1,316.0	1,316.0	Ojo Alamo Ss.		-0.40	271.33	
1,443.0	1,443.0	Kirtland Shale		-0.40	271.33	
1,567.0	1,567.0	Fruitland Coal		-0.40	271.33	
1,895.0	1,895.0	Pictured Cliffs Ss.		-0.40	271.33	
2,005.0	2,005.0	Lewis Shale		-0.40	271.33	
2,687.0	2,687.0	Cliffhouse Ss.		-0.40	271.33	
3,403.0	3,403.0	Menefee Fn.		-0.40	271.33	
4,158.0	4,158.0	Point Lookout Ss.		-0.40	271.33	
4,354.0	4,354.0	Mancos Shale		-0.40	271.33	
4,912.7	4,911.0	Mancos Silt		-0.40	271.33	
5,210.9	5,167.0	Gallup Fn.		-0.40	271.33	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
4,763.0	4,763.0	0.0	0.0	KOP @ 4763'	
5,576.9	5,329.6	-463.9	-148.6	Start build/turn @ 5576' MD	
6,315.2	5,391.2	-859.2	-708.7	LP @ 5391' TVD; 90.4°	
10,890.8	5,359.2	-753.1	-5,283.0	TD at 10890.8	

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SHL: NWNE Section 14, T22N, R6W
1247 FNL and 2248 FEL
BHL: SWNE Section 15, T22N, R6W
2120 FNL and 2295 FEL
Sandoval County, New Mexico
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Encana Oil & Gas (USA) Inc. Surface Use Plan of Operations

Please see attached survey package and supporting documents:

Survey Package:

Sheet A - Form C-102
Sheet B-1 and B-2 - Topo Map Depicting Well Site, Access Roads, and Pipeline
Sheet C - Directions to Site
Sheet D - Adjacent Wells
Sheet E-1, E-2 and E-3 - Proposed Pipeline Survey
Sheet F-1 and F-2 - Proposed Well Site Plan and Profile
Sheet G-1 and G-2 - Proposed Well Site Layout

Appendix A - Reclamation Plan

Appendix B - Road Maintenance Plan

1. EXISTING ROADS

- A. Existing access roads are shown on Sheets B-1 and B-2.
- B. Directions to the site are provided on Sheet C.
- C. The existing road that will be used to access the location was identified at the onsite as a Local Road. The road is in good condition and will not need any upgrades. Encana will parallel the existing two-track roadway with a proposed Resource Road.
- D. Roads will be maintained in the same or better condition as existed prior to the commencement of operations and said maintenance will continue until final abandonment and reclamation of the well location. Encana will inspect and maintain the roads as outlined in the attached Road Maintenance Plan (Appendix B).
- E. Dust emissions will be controlled on the roads and locations, as necessary, with the application of dust suppressants (e.g. magnesium chloride) and/or water. Dust control will be implemented when dust plumes become larger than normal road use conditions or when directed by the BLM Authorized Officer.
- F. If the well is commercially viable, Encana will schedule a meeting with the BLM to discuss which portions of the existing roads may require upgrades and/or surfacing to prevent soil erosion and accommodate year-round traffic.

2. NEW OR RECONSTRUCTED ACCESS ROADS

- A. The proposed access road is staked as shown on Sheet B-2. Approximately 3,212 (0.61 mile) feet of new resource road will be constructed entirely on BLM lands.
- B. The proposed well pad access road was defined as a Resource Road during the onsite conducted on September 4, 2013. This road will parallel the two-track roadway. The proposed well pad access road will connect with the proposed access road to the Lybrook M12-2206 01H well pad in SWSW of Section 12, T22N, R6W.

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- C. Maximum width will be a 30-foot overall right-of-way with a 14-foot road running surface. During drilling and subsequent operations, all equipment and vehicles will be confined to the 14-foot driving surface.
- D. Two culverts will be installed. The proposed well pad access road crosses a drainage and will require a 24-inch minimum culvert. A 24-inch minimum culvert will also be installed where the new well pad access road enters the proposed well pad with a silt trap before the culvert. See Sheet B-2.
- E. Maximum grade will be 5 percent.
- F. Construction materials and methods – See Item 6.A.
- G. Encana will be responsible for road maintenance from the beginning of construction to completion of operations and the well is plugged and abandoned. See attached Road Maintenance Plan (Appendix B).
- H. Dust emissions will be controlled on the roads and locations, as necessary, with the application of dust suppressants (e.g. magnesium chloride) and/or water. Dust control will be implemented when dust plumes become larger than normal road use conditions or when directed by the BLM Authorized Officer.

3. LOCATION OF EXISTING WELLS

Please refer to Sheet D.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. Survey Monuments

Encana will protect all survey monuments, witness corners, reference monuments and bearing trees in the affected areas against disturbance during construction, operation, maintenance and termination of the facilities authorized herein.

Encana will immediately notify the BLM Authorized Officer in the event that any corners, monuments or markers are disturbed or are anticipated to be disturbed. If any monuments, corner or accessories are destroyed, obliterated or damaged during construction, operation or maintenance, Encana will secure the services of a Registered Land Surveyor to restore the disturbed monuments, corner or accessories, at the same location, using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands of the United States, latest edition. Encana will ensure that the Registered Land Surveyor properly records the survey in compliance with 12.8.2 NMAC and will send a copy to the BLM.

B. Pipeline

- 1. A 3,511.2 foot (0.66 mile), up to 6-inch outside diameter, steel gas pipeline, is proposed. The entire length of the pipeline will be co-located with the proposed road. This pipeline will connect to the proposed Encana Lybrook M12-2206 01H pipeline in the SWSW of Section 12, T22N R6W. Please refer to Sheets E-1, E-2 and E-3.
- 2. Encana will request a 40-foot right-of-way for the pipeline. Construction width of the pipeline workspace will be restricted to 50 feet of disturbance, including the access road and will be designated as 20 feet of disturbance adjacent to the road and 30 feet of disturbance on the road.

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3. All buried pipelines will be buried to a depth of 3 feet, except at road crossings where they will be buried to a depth of 4 feet.
4. Pipeline location warning signs will be installed within 90 days after construction is completed.
5. The pipeline right-of-way will be conditioned in a manner to preclude vehicular travel upon said right-of-way, except for access to pipeline above-ground appurtenances.

C. Production Facility

1. The production equipment and facility layout will be deferred until the facility and reclamation onsite with the BLM prior to setting any equipment.
2. Production equipment will be placed on location in such a manner to minimize long-term disturbance and maximize interim reclamation. As practical, access will be provided by a teardrop-shaped road through the production area so that the center may be revegetated.
3. A berm will be constructed completely around any production facilities which contain fluids (i.e. production tanks, produced water tanks, etc.) These berms will be constructed of compacted subsoil, corrugated metal, or equivalent, be impervious, and hold 110 percent of the capacity of the largest tank.
4. All permanent (onsite for 6 months or longer) above-ground equipment constructed or installed, including pumping units, will be painted Juniper Green. All production facilities will be painted within 6 months of installation. Facilities that are required to comply with Occupation Health and Safety Act Rules and Regulations will be excluded from this painting requirement.

5. LOCATION AND TYPES OF WATER SUPPLY

- A. Water to be used for the drilling and completing of this well will be hauled by truck over the roads described in Items 1 and 2. The water source will be from an existing private water well located in the SWNE of Section 32, T25N, 9W. The well has been assigned the POD Number SJ 01979-S4 by the New Mexico Office of the State Engineer. To access the well pad from this water well, travel NE on Highway 57 approximately 0.1 miles to Highway 550. This is Mile marker 97.7. Go right (south-easterly) for 3.3 miles to a roadway referred to as the Lybrook Access Road #1. Go left (south-easterly) along the Lybrook Access Road #1 for 1.4 miles to proposed access for the Lybrook M12-2206 01H on right-hand side which continues south for 2,279' to fork in the proposed road. Go right (south-westerly) along proposed roadway for an additional 3,212' to staked Lybrook B14-2206 02H location. Encana does not plan to drill a water well.

6. CONSTRUCTION MATERIALS AND METHODS

A. Access Road

1. The access road will be designed and constructed as a Resource Road in accordance with the BLM Gold Book Standards and BLM 9113-1 (Roads Design Handbook) and BLM 9113-2 (Roads National Inventory and Condition Assessment Guidance and Instructions Handbook). Construction will include ditching, draining, installing culverts, crowning and capping or sloping and dipping the roadbed, as necessary, to provide a well-constructed and safe road.

The proposed access road will not be constructed to all-weather standards prior to drilling and completing the proposed well. If the well is commercially viable, Encana will schedule a meeting with the BLM to discuss which portions of the roads (proposed access road and existing access roads) may require upgrades and/or surfacing to prevent soil erosion, and

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accommodate year-round traffic. All other construction requirements will be completed prior to drilling.

2. An existing fence line will be cut and braced for access road and pipeline installation on the two-track roadway. A cattle guard and gate will be installed on the road. H-braces will be installed prior to cutting the fence. H-braces will be constructed in accordance with the BLM Gold Book standard.
3. Any trees larger than 3-inches in diameter will be cut at ground level and delimbed. The trunks will be stacked whole along the access road, well pad, and/or pipeline for wood gathering. Stumps will be cut as close to the ground as possible. Stumps and root balls will be hauled to an approved disposal site or stockpiled at the edge of the well pad and buried in the cut slopes of the pad during interim reclamation.

Any trees smaller than 3-inches in diameter, slash and brush will be chipped, shredded or mulched and incorporated into the topsoil for later use in interim reclamation.

Remaining brush will be brush-hogged or scalped at ground-level prior to ground disturbance.

4. After removal of vegetation, topsoil will be segregated and windrowed on the edge of the access road. Topsoil will be defined as the top six (6) inches of soil. The stockpiled topsoil will be free of brush and tree limbs, trunks and root balls, but may include chipped or mulched material so long as it is incorporated into the topsoil stockpile.

Topsoil will not be stripped when soils are moisture-saturated or frozen below the stripping depth.

5. All construction materials for the access road will consist of native borrow and subsoil accumulated during road construction. If additional fill or surfacing material is required, it will be obtained from existing permitted or private sources and will be hauled in by trucks over existing access roads to the area.
6. The proposed access road will be crowned and ditched or sloped and dipped, and water turnouts installed as necessary to provide proper drainage. Drainage design will be in accordance with BLM Gold Book standards and BLM 9113-1 (Roads Design Handbook) and BLM 9113-2 (Roads National Inventory and Condition Assessment Guidance and Instructions Handbook).
7. The proposed well pad access road crosses a drainage and will require a 24-inch minimum culvert. A 24-inch minimum culvert will also be installed where the new well pad access road enters the proposed well pad with a silt trap before the culvert. See Sheet B-2. Culverts will be sized and installed in accordance with BLM Gold Book standards and BLM 9113-1 (Roads Design Handbook) and BLM 9113-2 (Roads National Inventory and Condition Assessment Guidance and Instructions Handbook).
8. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and dozer. Construction of the well pad will take approximately 2 to 3 weeks.

B. Well Pad

1. Any trees larger than 3-inches in diameter will be cut at ground level and delimbed. The trunks will be stacked whole along the access road, well pad, and/or pipeline for wood gathering. Stumps will be cut as close to the ground as possible. Stumps and root balls will

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be hauled to an approved disposal site or stockpiled at the edge of the well pad and buried in the cut slopes of the pad during interim reclamation.

Any trees smaller than 3-inches in diameter, slash and brush will be chipped, shredded or mulched and incorporated into the topsoil for later use in interim reclamation.

Remaining brush will be brush-hogged or scalped at ground-level prior to ground disturbance.

2. After removal of vegetation, topsoil will be segregated and windrowed on the edge of the well pad. Topsoil will be defined as the top six (6) inches of soil. The stockpiled topsoil will be free of brush and tree limbs, trunks and root balls, but may include chipped or mulched material so long as it is incorporated into the topsoil stockpile.

Topsoil will be stockpiled separate from subsoil with a noticeable gap left between the stockpiles. Vehicle/equipment traffic will be prevented from crossing topsoil stockpiles.

Topsoil will not be stripped when soils are moisture-saturated or frozen below the stripping depth.

If the location becomes prone to wind or water erosion, Encana will take appropriate measures to prevent topsoil loss from wind. Such measures may include using tackifiers or water to wet the topsoil stockpile so that a crust is created across the exposed soil to prevent soil loss.

3. All construction materials for the well pad will consist of native borrow and subsoil accumulated during well pad construction. If additional fill or surfacing material is required, it will be obtained from existing permitted or private sources and will be hauled in by trucks over existing access roads.

The maximum cut will be approximately 14 feet on the southwest corner (corner 5) and the maximum fill will be approximately 16 feet on the northeast corner (corner 2).

4. As determined during the onsite on September 4, 2013, the following best management practices will be implemented:
 - a. Water will be diverted from corner 3, around corners 5 and 6, to laydown 1 eventually flowing into a natural drainage.
 - b. A silt trap will be installed at corners 3 and 5 to slow water through the drainage.
 - c. Additional silt traps will be installed as needed upon interim reclamation.
5. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and dozer. Construction for the well pad will take approximately 2 to 3 weeks.

C. Pipeline

See the Plan of Development submitted with the final Standard SF-299 Application for authorization to construct, operate, maintain and terminate a 3,511.2 foot, up to 6-inch buried, steel well connect pipeline that was submitted to the BLM concurrently with the APD.

7. METHODS FOR HANDLING WASTE

A. Cuttings

1. A closed-loop system will be used. Cuttings will be moved through a shaker system on the drill rig that separates drilling fluids from the cuttings. Cuttings will be stored onsite in above-ground storage tanks. Cuttings will be pulled from the storage tanks, mixed with saw dust or

Lybrook B14-2206 02H

**SHL: NWNE Section 14, T22N, R6W
1247 FNL and 2248 FEL**

**BHL: SWNE Section 15, T22N, R6W
2120 FNL and 2295 FEL**

Sandoval County, New Mexico

Lease Number: NMNM 117562

similar absorbent material, and disposed of at the Envirotech, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.

2. The closed-loop system storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.
3. A 20-mil liner will be installed under tanks, pumps, ancillary facilities, and truck loading/unloading areas associated with the closed-loop system.

B. Drilling Fluids

1. A closed-loop system will be used. Drilling fluids will be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical. Residual fluids will be vacuumed from the storage tanks and disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.
2. The closed-loop system storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.
3. The closed-loop system storage tanks will be placed in bermed secondary containment sized to accommodate a minimum of 110 percent of the volume of the largest storage tank.
4. A 20-mil liner will be installed under tanks, pumps, ancillary facilities, and truck loading/unloading areas associated with the closed-loop system.

C. Flowback Water

1. The water-based solution that flows back to the surface during and after completion operations will be placed in storage tanks on the location.
2. Flowback water will be confined to a storage tank for a period not to exceed 90 days after initial production and will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.

D. Spills – any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site.

E. Sewage – self-contained, chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped, as needed, and the contents thereof disposed of in an approved sewage disposal facility. The toilets will be onsite during all operations.

F. Garbage and other waste material – garbage, trash and other waste materials will be collected in a portable, self-contained and fully-enclosed trash container during drilling and completion operations. The accumulated trash will be removed, as needed, and will be disposed of at an authorized sanitary landfill. No trash will be buried or burned on location.

G. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash container will be cleaned up and removed from the well location.

H. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing or completing of this well.

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- I. No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

8. ANCILLARY FACILITIES

- A. Standard drilling operation equipment that will be on location includes: drilling rig with associated equipment, temporary office trailers equipped with sleeping quarters for essential company personnel, toilet facilities, and trash containers.

9. WELL SITE LAYOUT

- A. The proposed well pad layout is shown on Sheets F-1 and F-2. Cross sections have been drafted to visualize the planned cuts and fills across the location. Refer to Item 6 for construction materials and methods.
- B. No permanent living facilities are planned. Office trailers equipped with living quarters will be provided on location during drilling and completions operations.
- C. The production facility layout is being deferred until the Facility and Reclamation onsite with the BLM Representative.

10. PLANS FOR SURFACE RECLAMATION

The project falls within the Sagebrush Vegetation Community. During the onsite on September 4, 2013, plant species were picked from the Sagebrush-Grass Community Seed List. These species will be used in the revegetation seed mixture. Please see Reclamation Plan (Appendix A).

The well pad, road and pipeline will fall under the BLM Vegetation Reclamation Procedure B. A site-specific Reclamation Plan is located in Appendix A. The BLM will be contacted 48 hours prior to construction and reclamation.

11. SURFACE OWNERSHIP

Bureau of Land Management

12. OTHER INFORMATION

- A. An amended Standard Form SF-299 Application for authorization to construct, operate, maintain and terminate a 30-foot overall right-of-way access road with a 14-foot road running surface was submitted to the Bureau of Land Management on July 29, 2013. A Surface Use Plan of Operation was submitted to the Bureau of Land Management concurrently with the APD. Issued Serial Number NMNM 130731.
- B. Well pad is on lease and will not require a right-of-way
- C. An amended Standard Form SF-299 Application to construct, operate, maintain and terminate a 3,511.2 foot, up to 6-inch buried, steel well connect pipeline was submitted to the Bureau of Land Management on July 29, 2013. A Plan of Development was submitted to the Bureau of Land Management concurrently with the APD. Issued Serial Number NMNM 103732.
- D. A Class III Cultural Resource Inventory of the proposed well pad, access road, and pipeline route will be conducted and filed with the BLM-Farmington Field Office.
- E. Construction contractors will call New Mexico One-Call (or equivalent) to identify the location of any marked or unmarked pipelines or cables located in proximity to the proposed well pad, access road, and pipeline at least two working days prior to ground disturbance.

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Sandoval County, New Mexico

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- F. All operations will be conducted in such a manner that full compliance is made with the applicable laws and regulations, the approved Application for Permit to Drill, and applicable Notice(s) to Lessees.
- G. Encana will be fully responsible for the actions of its subcontractors. A complete copy of the approved Application for Permit to Drill will be furnished to the field representatives and will be on location during all construction, drilling, and completions operations.

Encana Oil & Gas (USA) Inc.

Reclamation Plan

Lybrook B14-2206 Numbers 01H – 02H

September 2013

encana®

370 17th Street, Suite 1700
Denver, Colorado 80202
303-623-2300

Developed by:



835 East Second Avenue, Suite 250
Durango, Colorado 81301
970-375-9703

600 Reilly Avenue
Farmington, New Mexico 87401
505-327-6331

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1. INTRODUCTION

Encana Oil & Gas (USA) Inc. (Encana) is providing this Lybrook B14-2206 Numbers (Nos.) 01H – 02H Reclamation Plan (Plan) to the Bureau of Land Management – Farmington Field Office (BLM-FFO) as part of their Surface Use Plan of Operations (SUPO). This Plan describes reclamation procedures for the surface disturbance approved by the Lybrook B14-2206 No. 01H and Lybrook B14-2206 No. 02H Applications for Permit to Drill (APDs) and Right-of-Way (ROW) Grants.

Each of the Lybrook B14-2206 Nos. 01H – 02H wells and the well pad are being permitted via APDs. However, the associated access road and pipeline tie are located partially off-lease and are being permitted via two ROW Grants. The staging area/temporary use area (TUA) for the project is also being permitted via a ROW Grant. Therefore, reclamation procedures associated with the well pad will follow those described in Appendix A (Surface Use Plan of Operations [SUPO] Procedures), and reclamation procedures associated with the access road, pipeline tie, and staging area/TUA will follow those described in Appendix B (Rights-of-Way Plan of Development [ROW POD] Procedure) of the BLM-FFO Bare Soil Reclamation Procedures (Procedures).

A pre-disturbance meeting for the project was held with the BLM-FFO, Encana, and an environmental consultant (Nelson Consulting, Inc. [NCI]) on September 4, 2013.

During interim reclamation, subsequent ground-disturbing activities within reclaimed areas, and final reclamation, Encana will meet the reclamation standards provided in this Plan to reestablish vegetation and control noxious weeds. The reclamation standards provided in this Plan are habitat-specific and meet standards established in *The Gold Book: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (Gold Book)*, BLM Manual 9113, and Procedures.

Encana will be responsible for all areas authorized for surface-disturbing activities under the APDs and ROW Grants until Encana transfers the permits or abandons the project and obtains a Final Abandonment Notice (FAN) or relinquishment from the BLM-FFO.

2. SITE DESCRIPTION

New disturbance associated with the project will encompass 10.63 acres. Of the 10.63 acres, 1.43 acres will be considered the Working Area (area necessary for the routine, long-term operation and maintenance of an authorized site [the tear drop]), 2.21 acres will be the long-term access road, and 6.99 acres will be reclaimed during interim reclamation. A depiction of the surface-disturbing activity locations (production facility layout) will be deferred until the facility on-site meeting is held with the BLM-FFO. The surface disturbance dimensions for each project feature (access road, well pad, and pipeline tie) are described further below.

The access road will be 30.00 feet in width and 3212.00 feet in length, or 2.21 acres.

The well pad will measure 430.00 feet by 400.00 feet (3.95 acres). The construction zone of the well pad will be 50.00 feet wide (2.13 acres). Approximately 0.03 acre of the construction zone overlaps the access road. Therefore, the well pad and construction zone will add an additional 6.05 acres of new disturbance to the project.

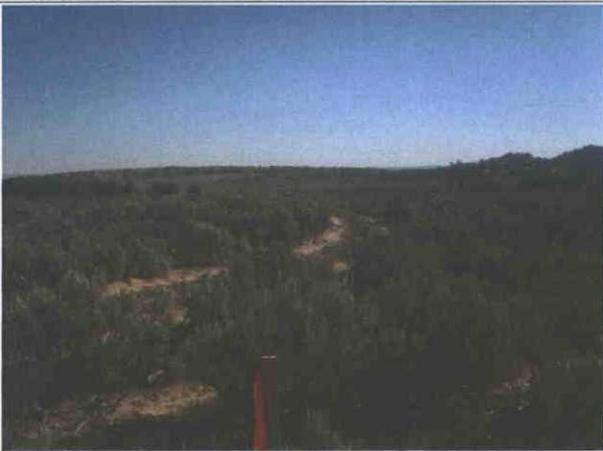
The pipeline tie corridor will be 40.00 feet in width and 3487.90 feet in length, or 3.20 acres. Approximately 268.80 feet of the pipeline tie will be located within the well pad. The remainder of the pipeline tie (approximately 3219.10 feet) will be co-located along the access road. Along the 3219.10-foot-long segment of the pipeline tie, the pipeline tie centerline will be located 20.00 feet from the access road centerline. Because 15.00 feet of the 3219.10-foot-long segment of the pipeline tie corridor width will overlap the access road, the new disturbance area associated with this segment of the pipeline tie will be 25.00 feet wide (1.85 acres).

During the pre-disturbance site visit, a 75-foot-by-300-foot (0.52-acre) staging area/TUA was identified for the project. The staging area/TUA will be located at the intersection of Encana's proposed Lybrook M12-2206 No. 01H access road and a newly constructed oil and gas lease road. This staging area/TUA will be considered new surface disturbance for the project. During interim reclamation, any disturbance that occurs within the staging area/TUA will be reclaimed following this Plan.

Photographs of the pre-disturbance project area are provided in Table 1, below.

Table 1. Pre-Disturbance Photographs of the Project Area

Photograph No. and Description	Photograph
1. View from wellheads looking east.	
2. View from wellheads looking north.	

Photograph No. and Description	Photograph
3. View from wellheads looking south.	
4. View from wellheads looking west.	
5. View of end of access road and start of pipeline tie looking east-northeast.	

Photograph No. and Description	Photograph
6. View of staging area/TUA looking northeast.	

Vegetation Community

During the pre-disturbance site visit, of the eight most common BLM-FFO vegetation communities, it was determined that the Sagebrush Community best represents the project area. A detailed description of this vegetation community is available on the New Mexico BLM web page (http://www.blm.gov/nm/st/en/fo/Farmington_Field_Office/ffo_planning/surface_use_plan_of.html).

3. RECLAMATION

Vegetation Reclamation Procedure B (for the revegetation of bare mineral soil areas [excluding the Working Area] that are equal to or greater than 1.0 acre in size) will apply to the project. Vegetation Procedure B is described further in the Procedures.

3.1. Seed Mixture

During the site visit, plant species were picked from the Sagebrush-Grass Community Seed List; these species will be used in the revegetation seed mixture. The plant species picked during the site visit are provided in Table 2, below.

Table 2. Lybrook B14-2206 Nos. 01H – 02H Revegetation Seed Mixture

Common Name	Scientific Name	Pure Live Seed (Pounds/Acre ²)
Fourwing saltbush	<i>Atriplex canescens</i>	2.0
Winterfat	<i>Krascheninnikovia lanata</i>	2.0
Indian ricegrass	<i>Achnatherum hymenoides</i>	4.0
Blue grama	<i>Bouteloua gracilis</i>	2.0
Sand dropseed	<i>Sporobolus cryptandrus</i>	0.5
Bottlebrush squirreltail	<i>Elymus elymoides</i>	3.0
Small burnet	<i>Sanguisorba minor</i>	2.0
Lewis flax	<i>Linum lewisii</i>	0.25

* Based on 60 pure live seeds per square foot if drill seeded. This rate would be doubled (120 pure live seeds per square foot) if broadcasted or hydroseeded.

3.2. State of New Mexico Noxious Weeds

During the pre-disturbance site visit, a noxious weed survey was conducted by the BLM-FFO, Encana, and NCI for species listed on the New Mexico Department of Agriculture (NMDA) A and B lists. The weed survey was conducted according to the BLM-FFO Pre-Disturbance Weed Management Procedure guidelines provided in Appendix D of the Procedures.

No State of New Mexico noxious weeds included on the NMDA's A or B lists were identified within the project area. During the pre-disturbance site visit, the Onsite Noxious Weed Form was completed and is available as an attachment to this Plan.

3.3. Reclamation Techniques

3.3.1. Interim Reclamation Techniques

If the Lybrook B14-2206 Nos. 01H – 02H wells prove to be productive, portions of the project area that are not required for production (non-working areas [outside of the tear drop and access road]) will be reclaimed during interim reclamation.

The BLM-FFO Environmental Protection Staff will be notified (505-564-7600) at least 48 hours prior to the start of interim reclamation activities associated with this project. Interim reclamation areas will be re-contoured and re-seeded within 120 days of final construction. If drilling has not been initiated on the well pad within 120 days of the well pad being constructed, Encana will submit a site-stabilization plan to the BLM-FFO.

Vegetation removed during construction, including trees that measure less than 3 inches in diameter (at ground level) and slash/brush, will be chipped or mulched and incorporated into the topsoil as additional organic matter. Trees 3 inches in diameter or greater (at ground level) will be cut to ground level and delimbed. Tree trunks (left whole) and cut limbs will be placed along the access road in a manner so as to not create additional disturbance or degrade new/existing reclamation, if present. The subsurface portion of the trees (tree stumps) will be buried in the pipeline ROW, placed in adjacent areas needing soil stabilization, or hauled to an approved disposal facility.

Following the removal of vegetation during construction of the project, the top 6 inches of topsoil will be stripped. The topsoil will be stored separately from subsoil or other excavated material within the construction zone approved by the APDs and ROW Grants. The topsoil will be free of brush and tree limbs, trunks, and roots. Vehicle/equipment traffic will not be allowed to cross topsoil stockpiles. The topsoil will be protected so that wind and water erosion are minimized. During monthly, voluntary stormwater inspections, topsoil will be inspected for signs of wind and/or water erosion. If sign of such erosion is observed, mitigation will be designed and implemented to halt erosion.

During interim reclamation, surface disturbance areas will be recontoured to match pre-disturbance conditions or to blend with the surrounding landform, as close as possible. Within these areas, stockpiled topsoil will be evenly redistributed prior to final seedbed preparation. Topsoil will not be redistributed when the ground or topsoil is frozen or wet. Seedbed preparation for compacted areas will be ripped to a minimum depth of 12 inches, furrows will be spaced 2 feet apart, and ripping will be conducted perpendicularly in two phases, where practicable. If large clumps/clods result from the ripping process, disking will be conducted to a depth of 6 inches and perpendicular to slopes in order to minimize runoff and erosion.

The interim reclamation area will be seeded with plant species from the Sagebrush-Grass Community Seed List, as described in Section 3.1 (Seed Mixture). A disc-type seed drill with two boxes for various seed sizes will be utilized for seeding the reclamation area. The drill rows will be 8.00 to 10.00 inches apart. Where practicable with the seeding equipment being used, planting depths for small seeds will be 0.25 inch, for intermediate seeds will be 0.50 inch, and for large seeds will be 1.00 to 2.00 inches. Where the aforementioned depths are impracticable with the seeding equipment being used, planting depths will

be no more than 0.25 inch. A drag, packer, or roller will follow the seeder to ensure uniform seed coverage and adequate compaction. Seeding will be run perpendicular to slopes in order to minimize runoff and erosion. In areas where the slope is too steep for a seed drill, hand or broadcast seeding methods will be utilized, and the seeds will be covered to the depths described above. The establishment of vegetation will assist in stabilizing the soil and minimizing erosion within the project area.

During the pre-disturbance site visit, the placement of the following water diversions was determined within the project area:

- A silt trap will be placed at the southeastern corner (Corner 3) of the well pad construction zone.
- A silt trap will be placed around the southwestern corner (Corner 5) of the well pad construction zone.
- A silt trap will be placed at the northeastern corner (Corner 2) of the well pad construction zone.
- Drainage will be diverted from the silt trap at the southwestern corner (Corner 5) of the well pad construction zone, to the northwestern corner (Corner 6) of the well pad construction zone, to the silt trap at the northeastern corner of the well pad (Corner 2) construction zone.
- Drainage will be diverted from the silt trap at the southwestern corner (Corner 5) of the well pad construction zone, to the silt trap at the southeastern corner (Corner 3) of the well pad construction zone, to the eastern midline of the well pad construction zone.
- A 24-inch-diameter (or larger) culvert will be placed beneath the access road, where the access road enters the well pad.
- 24-inch-diameter (or larger) culverts will be placed beneath the access road, as necessary.

Additional water diversions, if needed, will be installed upon interim reclamation. These water-management measures will reduce soil erosion caused by stormwater runoff and assist with revegetation success during reclamation.

From initial construction to final reclamation, Encana will strive to minimize surface damage by utilizing Best Management Practices, including maintaining proper drainage and controlling traffic within the project area.

3.3.2. Final Reclamation Techniques

If the Lybrook B14-2206 Nos. 01H – 02H wells prove to be unproductive, or when the well is no longer commercially viable, the wells will be abandoned and final reclamation activities will take place.

The BLM-FFO Environmental Protection Staff will be notified (505-564-7600) at least 48 hours prior to the start of final reclamation activities associated with this project.

Downhole well abandonment will be carried out under current BLM-FFO and state of New Mexico regulations. The bores will be plugged with cement and the production facilities will be removed. Aboveground markers will be placed over the plugged holes. The markers will contain individual well identification information.

The underground pipeline tie will typically be plugged and left in place.

Encana will reclaim the access road, unless the BLM-FFO requests that the access road be left unreclaimed. In the instance that the access road is reclaimed, it will be ripped to a minimum of 12 inches and waterbars will be installed. This reclaimed area will be protected from vehicular travel by the construction of a dead-end ditch and earthen barricade at the entrance of the ripped area.

During final reclamation, disturbed areas will be recontoured to match pre-disturbance conditions or to blend with the surrounding landform, as close as possible. Within these areas, stockpiled topsoil will be evenly redistributed prior to final seedbed preparation. Topsoil will not be redistributed when the ground or topsoil is frozen or wet. Compacted areas will be ripped to a minimum depth of 12 inches, furrows will be spaced 2 feet apart, and ripping will be conducted perpendicularly in two phases, where practicable. If

large clumps/clods result from the ripping process, disking will be conducted to a depth of 6 inches and perpendicular to slopes in order to minimize runoff and erosion.

The reclamation area will be seeded with plant species from the Sagebrush-Grass Community Seed List, as described in Section 3.1 (Seed Mixture). A disc-type seed drill with two boxes for various seed sizes will be utilized for seeding the reclamation area. The drill rows will be 8.00 to 10.00 inches apart. Where practicable with the seeding equipment being used, planting depths for small seeds will be 0.25 inch, for intermediate seeds will be 0.50 inch, and for large seeds will be 1.00 to 2.00 inches. Where the aforementioned depths are impracticable with the seeding equipment being used, planting depths will be no more than 0.25 inch. A drag, packer, or roller will follow the seeder to ensure uniform seed coverage and adequate compaction. Seeding will be run perpendicular to slopes in order to minimize runoff and erosion. In areas where the slope is too steep for a seed drill, hand or broadcast seeding methods will be utilized, and the seeds will be covered to the depths described above. The establishment of vegetation will assist in stabilizing the soil and minimizing erosion within the project area.

During final abandonment, Encana will strive to minimize surface damage by utilizing Best Management Practices, including maintaining proper drainage and controlling traffic within the project area.

3.4. Challenges

According to the Natural Resources Conservation Service, two soil types are located within the project area: Orlie-Sparham association (0- to 5-percent slopes) and Vessilla-Menefee-Orlie association (0- to 33-percent slopes). The Orlie-Sparham soil association has a low potential for water erosion and high potential for wind erosion. The Vessilla-Menefee-Orlie soil type has a high potential for water erosion and very high potential for wind erosion. The water and wind erosion potentials associated with these two soil types could potentially affect reclamation success within the project area.

4. MONITORING AND REPORTING

4.1. Interim Reclamation Monitoring and Reporting

4.1.1. Interim Reclamation Monitoring

Per the Procedures - Procedure B guidelines, monitoring is required to document attainment of the vegetation percent cover standard for the Sagebrush Vegetation Community and to document successful interim reclamation. Interim reclamation will apply to the non-working area of the well pad, the pipeline tie, and the staging area/TUA.

The monitoring sites will be established by the BLM-FFO, in collaboration with Encana, during the required earthwork and/or seeding inspection. The initial monitoring tasks will be conducted by the BLM-FFO.

Per the Procedures, annual monitoring is required starting two calendar years after BLM-FFO approval of required earthwork and/or seeding. Annual monitoring will continue until the vegetation percent cover standard has been attained and approved by the BLM-FFO, or until an exception has been issued by the BLM-FFO. The vegetation percent cover standard and exception is described further in Section 4.1.2 (Interim Reclamation Attainment).

Once the vegetation percent cover standard has been attained, long-term monitoring will occur every five years until relinquishment of the ROW Grant or APD.

Because the well pad will be permitted via an APD and the pipeline tie and staging area/TUA will be permitted via two ROW Grants, interim and long-term monitoring procedures will be different for these project features; these differences are described below.

Well Pad

Annual and long-term monitoring will be conducted by Encana.

Pipeline Tie and Staging Area/TUA

Annual and long-term monitoring will be conducted by the BLM-FFO.

4.1.2. Interim Reclamation Attainment

Each of the eight BLM-FFO vegetation communities included in the Procedures has been assigned a vegetation percent cover standard for plant species classified as non-invasive and desirable and plant species classified as invasive or undesirable. The vegetation percent cover standard for non-invasive/desirable plant species within the Sagebrush Vegetation Community is equal to or greater than 35%. The vegetation percent cover standard for invasive/undesirable plant species is equal to or less than 10%. Per the Procedures, this vegetation percent cover standard must be attained for interim reclamation to be considered successful.

If, during the interim reclamation process, a reclaimed area has not met the vegetation percent cover standard, a conference will be held with Encana, the BLM-FFO, and any other effected parties to analyze the issues affecting reclamation success. This process (including reclamation exception requests) is outlined in the Procedures.

4.1.3. Interim Reclamation Reporting

For the well pad, pipeline tie, and staging area/TUA, the BLM-FFO will complete the initial monitoring report within 60 days of the earthwork and/or seeding inspection approval. Monitoring reports will then be completed annually until the project area has reached attainment. Long-term monitoring reports will then be completed every five years until the APD or ROW Grant has been relinquished.

Because the well pad will be permitted via an APD and the pipeline tie and staging area/TUA will be permitted via two ROW Grants, interim reclamation reporting procedures will be different for these project features; these differences are described below.

Well Pad

The BLM-FFO will submit the initial monitoring report to Encana within 60 days of the earthwork and/or seeding inspection approval. Per the Procedures, Encana is required to report to the BLM-FFO starting two calendar years after interim reclamation earthwork and/or seeding. A completed BLM-FFO monitoring form is due to the BLM-FFO by December 31 of each monitoring year.

Once monitoring results indicate that the well pad area has reached attainment, Encana will request concurrence from the BLM-FFO following the reporting guidelines outlined in the Procedures. Once the BLM-FFO concurs that the vegetation percent cover standard has been attained, Encana will submit long-term monitoring reports to the BLM-FFO following the guidelines outlined in the Procedures.

Pipeline Tie and Staging Area/TUA

Starting two calendar years after interim reclamation earthwork and/or seeding, annual monitoring reports will be completed by the BLM-FFO within 60 days of the annual monitoring inspection.

Once monitoring results indicate that the pipeline tie and staging area/TUA areas have reached attainment, the BLM-FFO will prepare documentation stating that vegetation percent cover standards have been attained.

As stated in Section 4.1.1 (Interim Reclamation Monitoring), after the vegetation percent cover standard has been attained, the BLM-FFO will complete long-term monitoring reports.

4.2. Final Reclamation Monitoring and Reporting

4.2.1. Final Reclamation Monitoring

Per the Procedures - Procedure B guidelines, monitoring is required to document attainment of the vegetation percent cover standard for the Sagebrush Vegetation Community and to document successful reclamation for receipt of a FAN or relinquishment from the BLM-FFO. Final reclamation will apply to the well pad working area and the access road.

The monitoring sites will be established by the BLM-FFO, in collaboration with Encana, during the required earthwork and/or seeding inspection.

Per the Procedures, annual monitoring is required starting two calendar years after BLM-FFO approval of required earthwork and/or seeding. Annual monitoring will continue until the vegetation percent cover standard has been attained and approved by the BLM-FFO, or until an exception has been issued by the BLM-FFO. The vegetation percent cover standard and exception is described further in Section 4.2.2 (Final Reclamation Attainment).

Once the vegetation percent cover standard has been attained, long-term monitoring will occur every five years until relinquishment of the ROW Grant or APD.

Because the well pad will be permitted via an APD and the access road will be permitted via a ROW Grant, final reclamation monitoring procedures will be different for these project features; these differences are described below.

Well Pad

Annual and long-term monitoring will be conducted by Encana.

Access Road

Annual and long-term monitoring will be conducted by the BLM-FFO.

4.2.2. Final Reclamation Attainment

The vegetation percent cover standard for the Sagebrush Community is described in Section 4.1.2 (Interim Reclamation Attainment). Per the Procedures, this vegetation percent cover standard must be attained before the BLM-FFO will issue a FAN or a relinquishment for the Lybrook B14-2206 Nos. 01H – 02H.

If, during the final reclamation process, a reclaimed area has not met the vegetation percent cover standard, a conference will be held with Encana, the BLM-FFO, and any other effected parties to analyze the issues affecting reclamation success. This process (including reclamation exception requests) is outlined in the Procedures.

4.2.3. Final Reclamation Reporting

For the well pad and access road, the BLM-FFO will complete the initial monitoring report within 60 days of the earthwork and/or seeding inspection approval. Monitoring reports will then be completed annually until the project area has reached attainment. Long-term monitoring reports will then be completed every five years until the APD or ROW Grant has been relinquished.

Because the well pad will be permitted via an APD and the access road will be permitted via a ROW Grant, final reclamation reporting procedures will be different for these project features; these differences are described below.

Well Pad

The BLM-FFO will submit the initial monitoring report to Encana within 60 days of the earthwork and/or seeding inspection approval. Per the Procedures, Encana is required to report to the BLM-FFO starting two calendar years after earthwork and/or seeding. A completed BLM-FFO monitoring form is due to the BLM-FFO by December 31 of each monitoring year.

Once monitoring results indicate that the well pad area has reached attainment, Encana will request concurrence from the BLM-FFO following the reporting guidelines outlined in the Procedures. Once the BLM-FFO concurs that the vegetation percent cover standard has been attained, Encana will submit long-term monitoring reports to the BLM-FFO following the guidelines outlined in the Procedures.

Access Road

Starting two calendar years after final reclamation earthwork and/or seeding, annual monitoring reports will be completed by the BLM-FFO within 60 days of the annual monitoring inspection.

Once monitoring results indicate that the access road area has reached attainment, the BLM-FFO will prepare documentation stating that vegetation percent cover standards have been attained.

As stated in Section 4.1.1 (Interim Reclamation Monitoring), after the vegetation percent cover standard has been attained, the BLM-FFO will complete long-term monitoring reports.

ATTACHMENT. ONSITE NOXIOUS WEED FORM

Onsite Noxious Weed Form

If noxious weeds are found during the onsite, fill out form and submit to FFO weed coordinator
 Operator ENVIRO OIL & GAS (USA) INC. Surveyor(s) Holmes (NCI), Amador (ECA), Herrera (BLM)
 Well Name and Number LYBROOK B1A-ZZ06 Date 9/4/13
 Location: Township, Range, Section _____
 Location of Project NEAR THE Medical Campus

Class A Noxious Weed -- Check Box if Found

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Arrowweed	<input type="checkbox"/> Diffuse knotweed	<input type="checkbox"/> Spittle	<input type="checkbox"/> Purple marshmallow	<input type="checkbox"/> Yellow madweed
<input type="checkbox"/> Black henbane	<input type="checkbox"/> Dyer's weed	<input type="checkbox"/> Leafy spurge	<input type="checkbox"/> Russian green	
<input type="checkbox"/> Cowslip	<input type="checkbox"/> Russian vine	<input type="checkbox"/> Cowpe clover	<input type="checkbox"/> Scotch thistle	
<input type="checkbox"/> Canada thistle	<input type="checkbox"/> St. Ignace	<input type="checkbox"/> Parrotflower	<input type="checkbox"/> Spotted knapweed	
<input type="checkbox"/> Redwing	<input type="checkbox"/> Flaxweed	<input type="checkbox"/> Purple loosestrife	<input type="checkbox"/> Yellow madweed	

Class B Noxious Weed -- Check Box if Found

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Arrowweed	<input type="checkbox"/> Russian vine	<input type="checkbox"/> Russian knapweed	<input type="checkbox"/> Tansy ragwort
<input type="checkbox"/> Chickweed	<input type="checkbox"/> Leafy spurge	<input type="checkbox"/> Yellow madweed	
<input type="checkbox"/> Shepherd's purse	<input type="checkbox"/> Purple loosestrife	<input type="checkbox"/> Wild	

Comments: Russian thistle scattered; very dense along portions of proposed access/PC corridor

FFO Representative: [Signature]
 sign and date
 Operator Representative [Signature] 4 SEPT 2013
 sign and date

Appendix B Road Maintenance Plan

The following Road Maintenance Plan will be implemented and followed by Encana Oil & Gas (USA) Inc. (Encana) for roads utilized in its San Juan Basin Operations. All roads will be constructed and maintained to meet the Bureau of Land Management (BLM) Gold Book Standards and BLM Manuals 9113-1 (Roads Design Handbook) and BLM Manuals 9113-2 (Roads National Inventory and Condition Assessment Guidance and Instructions Handbook).

Road Inspection

1. An Encana representative or designated inspector will inspect all newly constructed or reconstructed roads that will be used to construct, operate, maintain and terminate Encana's oil and gas operations.
2. Road inspections will be conducted monthly or within 72 hours of a major storm event. The Inspector will observe road conditions as they drive to and from locations.
3. Inspectors will examine the roadways and document the inspection using the attached checklist during each inspection. Inspections will consist of road crowns, culverts, ditches, silt traps and/or any other water control structures.
4. Inspection records will be kept on file and will be provided to the BLM upon request.

Maintenance Procedures

Corrections will be documented on the attached inspection checklist and Encana will contact one of its authorized contractors to correct the problem.

1. **Road Crown**
If the road crown surface becomes rutted, not adequately draining, or in a roughened condition, Encana's contractor will utilize a maintainer to re-grade and/or resurface the road crown.
2. **Culverts**
If culverts or silt traps are plugged, Encana's contractor will use hand tools or a backhoe to excavate and remove debris or sediment impeding the function of the culvert. If the culvert is damaged by having its inlet or outlet crushed, the culvert will be replaced.
3. **Ditches**
If road side ditches become blocked or not functioning properly, Encana's contractor will use a maintainer or the necessary equipment to clear or blade the ditch to allow it to function properly.
4. **Silt Traps or Water Control Structures**
If silt traps or water control structures are found to be filled with sediment or not functioning properly, Encana's contractor will use the appropriate equipment to clean out sediment or repair/modify the structure to allow it to function properly. Sediment removed from silt traps or water control structures will be disposed of at an approved facility.
5. **Disturbances from Maintenance**
If areas are disturbed from implementation of this plan, they will be mitigated and reseeded if necessary.

Encana Road Inspection and Maintenance Report Form

Road Inspected (Site ID): _____

Title of Inspector:		Name of Inspector:		Date:	
Type of Area: <input type="checkbox"/> Access Road to Well Pad					
Type of Inspection: <input type="checkbox"/> Daily <input type="checkbox"/> Monthly <input type="checkbox"/> Within 72 hours of a rain/snowmelt event <input type="checkbox"/> Inter Conditions Exist					
Site Specific Information					
Road Condition Check List					
Road:	Good	Poor	Action Needed	Comments	
Surface Condition (slopes/gravel/etc)					
Surface Drainage					
Culvert(s)					
Culvert(s) Inlet Protection					
Culvert(S) Outlet Protection					
Roadside Ditches and Turnouts					
Run On Diversion					
Revegetation					
Sediment Control:	Good	Poor	Action Needed	Comments	
Check Dam					
Silt Trap/Pond					
Filter Berm					
Sediment Basin					
Sediment Trap					
Wattles					
Silt Fence					
Actions Taken			Date Work Was Performed		
Date	Signature	Type of Inspection			

Signature certifying that the site is in compliance (after all necessary repairs, maintenance, and changes)

_____ Date _____ Signature

Lybrook B14-2206 02H
SHL: NWN Section 14, T22N, R6W
1247 FNL and 2248 FEL
BHL: SWNE Section 15, T22N, R6W
2120 FNL and 2295 FEL
Sandoval County, New Mexico
Lease Number: NMNM 117562

**Encana Oil & Gas (USA) Inc.
Certification**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Holly Hill

9/11/13

Holly Hill
Regulatory Analyst
Encana Oil & Gas (USA) Inc.
370 17th Street, Suite 1700
Denver, CO 80202
Phone: (720) 876-5331
Cell: (303) 521-2835

Date