Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAR 12 2015
Farmington Field Office
Bureau of Land Management

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

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.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

5. Lease Serial No.
NMNM 117564

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

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

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No.
Lybrook I30-2306 02H

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

9. API Well No.
30-043-21181

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

3b. Phone No. *(include area code)*
720-876-3740

10. Field and Pool or Exploratory Area
Lybrook Gallup/Basin Mancos Gas

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SHL: 1860' FSL and 606' FWL Section 30, T23N, R6W
BHL: 750' FSL and 330' FWL Section 30, T23N, R6W

11. Country or Parish, State
Sandoval County, New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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. (Encana) is no longer considering the Lybrook D32-2306 01H location to develop the minerals in the S2S2 Section 30, T23N, R6W. Encana has determined that the minerals in the S2S2 Section 30 , T23N, R6W can be developed by adding a second well to the Lybrook I30-2306 well pad. Encana wishes to replace the Lybrook D32-2306 01H (APD submitted on October 18, 2013) with the Lybrook I30-2306 02H and apply the $6,500 processing fee to the Lybrook I30-2306 02H well. For your records, Encana is submitting a sundry for the Lybrook I30-2306 02H, please note that the BHL remains the same and the SHL will change from 1' FNL, 337' FWL Section 32, T23N, R6W to 1,860' FSL, 606' FEL Section 30, T23N, R6W.

Attached Sundry Package:
C-102 and Survey Package
Drilling Plans
Directional Plan
Surface Use Plan of Operations
Reclamation Plan
Signed Certification Document

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

No surface activities have been conducted on the Lybrook D32-2306 01H location other than surveying and the removal of the survey stakes.

OIL CONS. DIV DIST. 3
DEC 04 2015

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

Title Regulatory Analyst

Signature Rosalie Thim

Date 3/12/15

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title AFM

Date 12/2/15

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)

NMOCD PV

ADHERE TO PREVIOUS NMOCD CONDITIONS OF APPROVAL 56

District I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., 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 Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-043-21181	42289/97232	LYBROOK GALLUP/BASIN MANCOS

4 Property Code	5 Property Name	6 Well Number
40310	LYBROOK I30-2306	02H

7 OGRID No.	8 Operator Name	9 Elevation
282327	ENCANA OIL & GAS (USA) INC.	7155'

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
I	30	23N	6W		1860	SOUTH	606	EAST	SANDOVAL

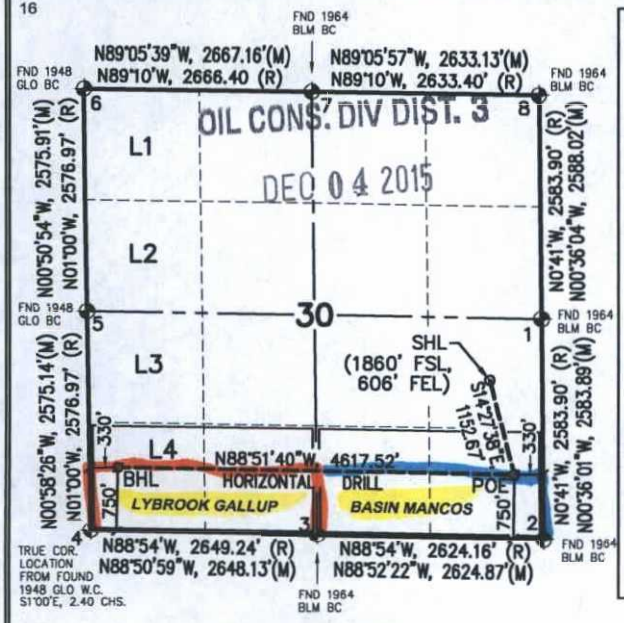
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West Line	County
M	30	23N	6W	4	750	SOUTH	330	WEST	SANDOVAL

12 Dedicated Acres	PROJECT AREA	13 Joint or Infill	14 Consolidation Code	15 Order No.
160.79 ACRES (RECORD)	S2SE SEC 30 BASIN MANCOS/ S2SW SEC 30 LYBROOK GALLUP			

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. mancos = 80. acres Gallup = 80.79 acres

16



LYBROOK I30-2306 02H WELL

SHL (WELL FLAG)
LAT. 36.194774°N (NAD83)
LONG. 107.502142°W (NAD83)
LAT. 36.194760°N (NAD27)
LONG. 107.501537°W (NAD27)

POE (POINT OF ENTRY)
LAT. 36.191710°N (NAD83)
LONG. 107.501162°W (NAD83)
LAT. 36.191696°N (NAD27)
LONG. 107.500557°W (NAD27)

PERFORATION POINT (HEEL)
LAT. 36.191711°N (NAD83)
LONG. 107.501230°W (NAD83)
LAT. 36.191697°N (NAD27)
LONG. 107.500625°W (NAD27)

PERFORATION POINT (TOE)
LAT. 36.191944°N (NAD83)
LONG. 107.516768°W (NAD83)
LAT. 36.191930°N (NAD27)
LONG. 107.516162°W (NAD27)

BHL (BOTTOM HOLE LOCATION)
LAT. 36.191944°N (NAD83)
LONG. 107.516802°W (NAD83)
LAT. 36.191930°N (NAD27)
LONG. 107.516196°W (NAD27)

SECTION CORNERS

1 LAT. 36.196728 °N (NAD83)
LONG. 107.500117 °W (NAD83)
LAT. 36.196714 °N (NAD27)
LONG. 107.499512 °W (NAD27)

2 LAT. 36.189633 °N (NAD83)
LONG. 107.500014 °W (NAD83)
LAT. 36.189619 °N (NAD27)
LONG. 107.499409 °W (NAD27)

3 LAT. 36.189765 °N (NAD83)
LONG. 107.508904 °W (NAD83)
LAT. 36.189751 °N (NAD27)
LONG. 107.508299 °N (NAD27)

4 LAT. 36.189901 °N (NAD83)
LONG. 107.517874 °W (NAD83)
LAT. 36.189887 °N (NAD27)
LONG. 107.517268 °W (NAD27)

5 LAT. 36.196971 °N (NAD83)
LONG. 107.518035 °W (NAD83)
LAT. 36.196957 °N (NAD27)
LONG. 107.517429 °W (NAD27)

6 LAT. 36.204043 °N (NAD83)
LONG. 107.518177 °W (NAD83)
LAT. 36.204029 °N (NAD27)
LONG. 107.517571 °W (NAD27)

7 LAT. 36.203938 °N (NAD83)
LONG. 107.509141 °W (NAD83)
LAT. 36.203924 °N (NAD27)
LONG. 107.508535 °W (NAD27)

8 LAT. 36.203834 °N (NAD83)
LONG. 107.500220 °W (NAD83)
LAT. 36.203820 °N (NAD27)
LONG. 107.499615 °W (NAD27)

SHEET A

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.

Brenda Linster 3/11/15
Signature Date

Brenda R. Linster
Printed Name

brenda.linster@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.

September 18, 2014
Date of Survey

Signature and Seal of Professional Surveyor:

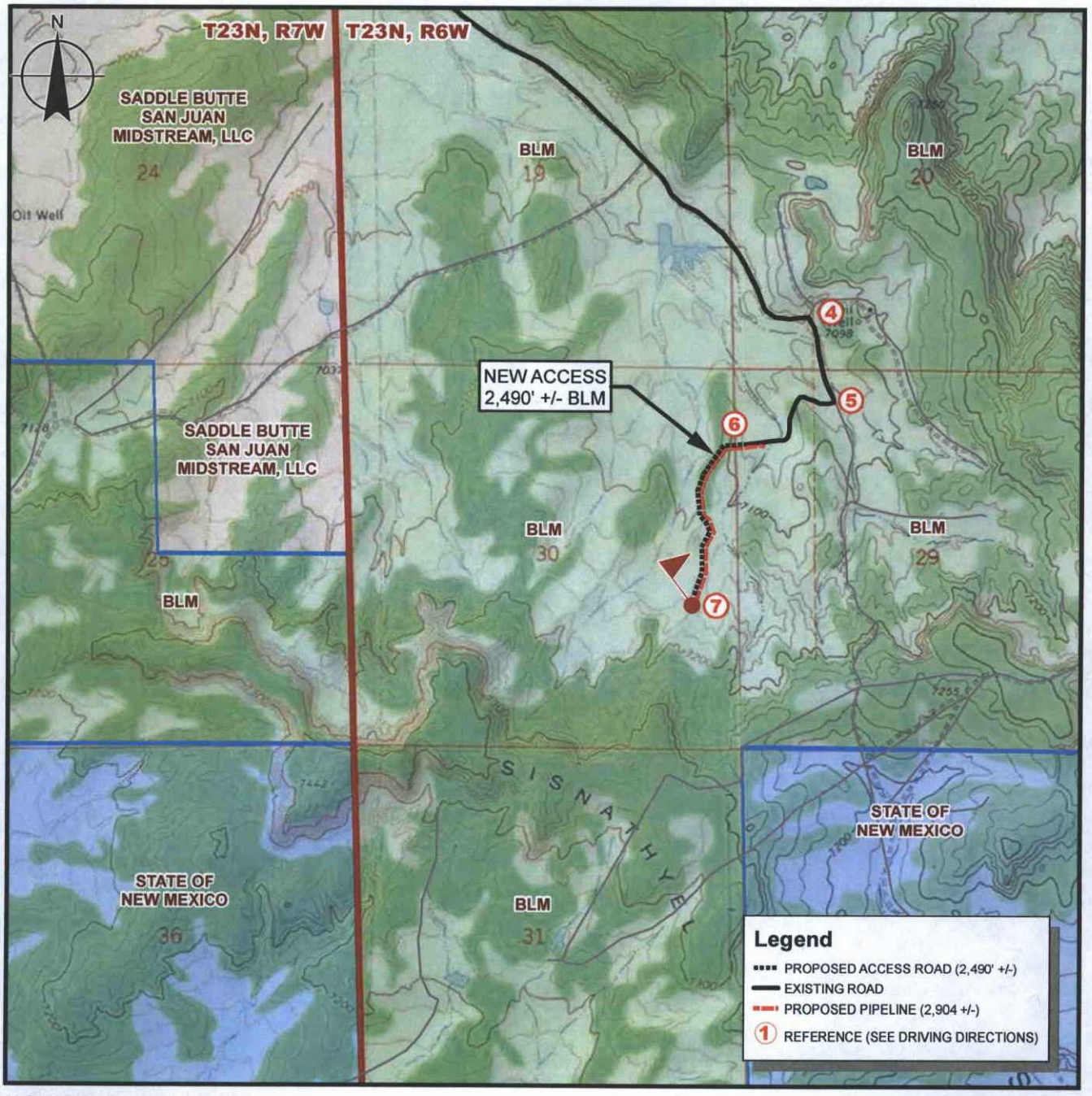
RICHARD L. MULLIKEN
NEW MEXICO
16873
3-10-15
PROFESSIONAL SURVEYOR

RICHARD L. MULLIKEN
Certificate Number 16873

LATITUDE: 36.194774° N
LONGITUDE: 107.502142° W
DATUM: NAD 83

ENCANA OIL & GAS (USA) INC.

LYBROOK I30-2306 #02H
1860' FSL & 606' FEL
LOCATED IN THE NE/4 SE/4 OF SECTION 30
T23N, R06W, N.M.P.M.
SANDOVAL COUNTY, NEW MEXICO
2,490' +/- OF NEW ACCESS ACROSS BLM LANDS



U.S.G.S QUAD: LYBROOK
SCALE: 1" = 2000' (1:24,000)
JOB No.: 14-07-74 REV1
DATE: 3/5/2015
DRAWN BY: SMM
SHEET 1 OF 1

SHEET B

WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789-4545

ENCANA OIL & GAS (USA) INC.

LYBROOK I30-2306 #02H
1860' FSL & 606' FEL
LOCATED IN THE NE/4 SE/4 OF SECTION 30
T23N, R06W, N.M.P.M.
SANDOVAL COUNTY, NEW MEXICO
2,490' +/- OF NEW ACCESS ACROSS BLM LANDS

DIRECTIONS

1) FROM THE INTERSECTION OF HWY 550 & US HWY 64 IN BLOOMFIELD, NEW MEXICO, TRAVEL SOUTH ON HWY 550 FOR 51.0 MILES.

2) TURN RIGHT AND HEAD SOUTH FOR 200' TO A FORK IN THE ROAD.

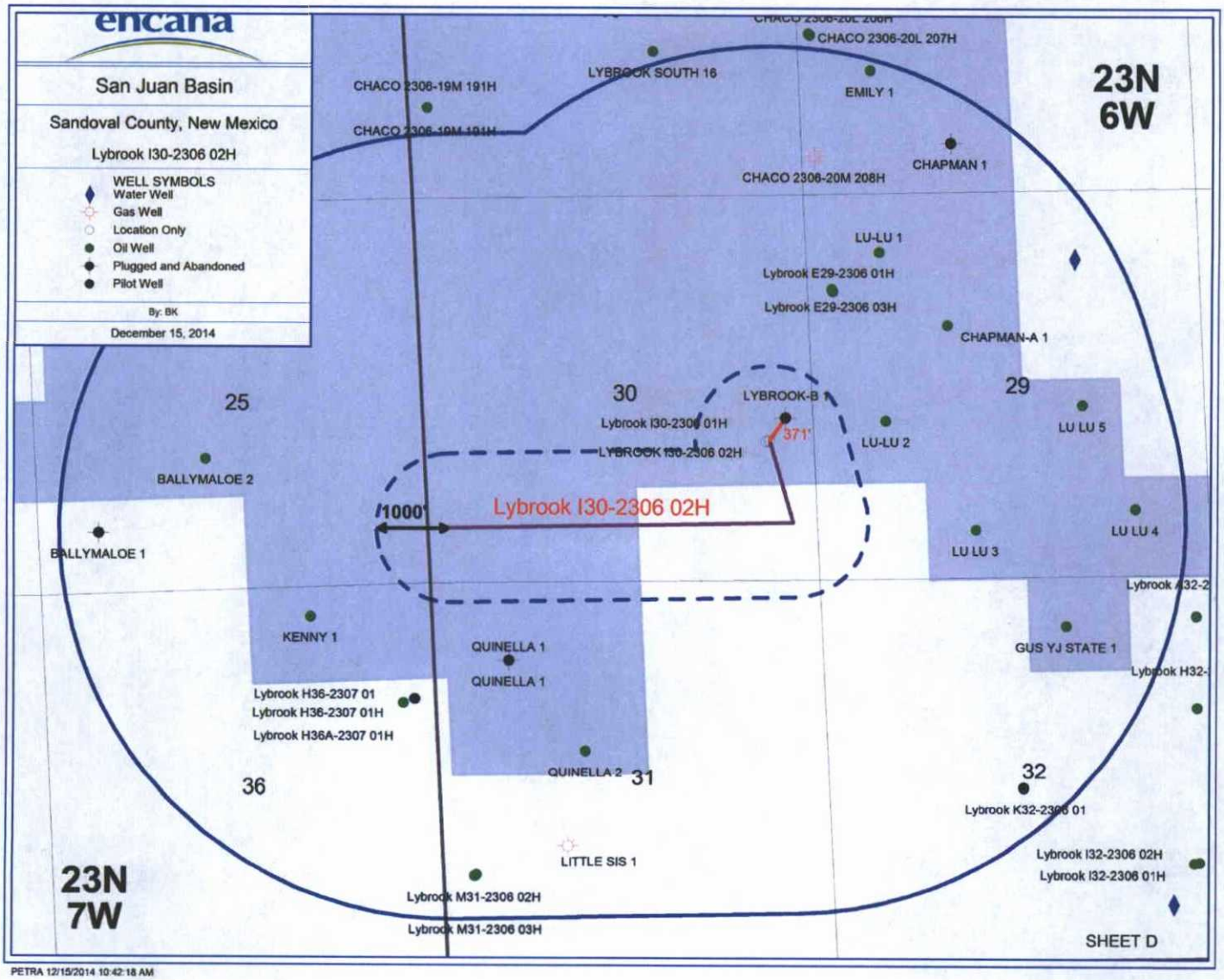
3) MERGE RIGHT AND TRAVEL 2.0 MILES TO A "T" INTERSECTION

4) TURN RIGHT (SOUTHEAST) AND TRAVEL 0.2 MILES TO FORK IN THE ROAD.

5) TURN RIGHT (WEST) AND TRAVEL 0.3 MILES TO EXISTING E29-2306 PAD AND NEW ACCESS ON THE RIGHT-HAND SIDE OF EXISTING ROADWAY.

6) CONTINUE 2490' ALONG STAKED ROAD TO STAKED ENCANA LYBROOK I30-2306 LOCATION.

7) WELL FLAG LOCATED AT: LATITUDE: 36.194774° N, LONGITUDE: 107.502142° W (NAD 83)



PETRA 12/15/2014 10:42:18 AM

ENCANA OIL & GAS (USA) INC.

LYBROOK I30-2306 #02H

- PROPOSED PIPELINE -

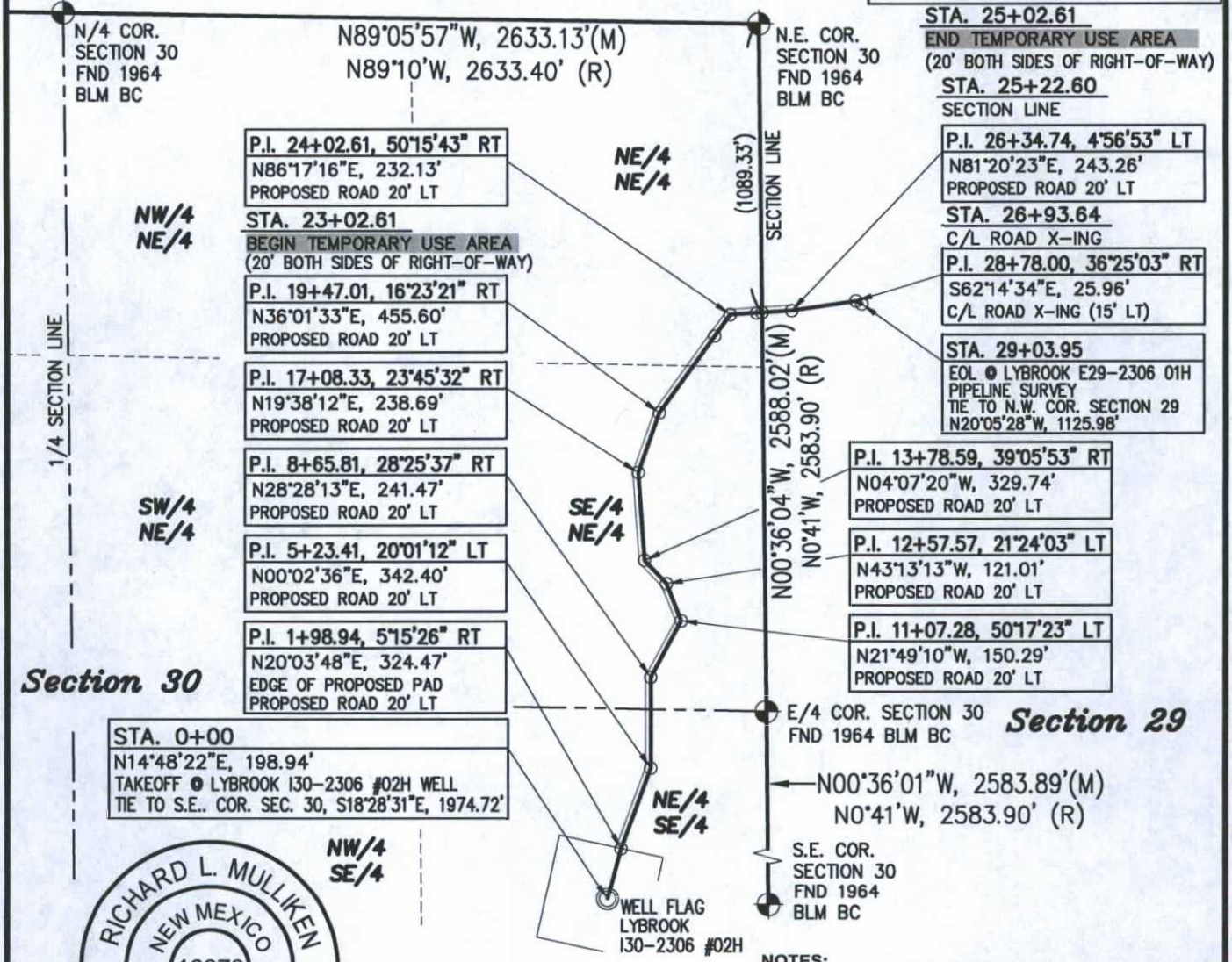
LOCATED IN THE E/2 E/2 OF SECTION 30,
AND THE NW/4 NW/4 OF SECTION 29,
T23N, R06W, N.M.P.M.
SANDOVAL COUNTY, NEW MEXICO

N

300' 0' 600'

SCALE: 1" = 600'

~ SURFACE OWNERSHIP ~
Bureau of Land Management
E/2 SECTION 30 0+00 to 25+22.60
2522.60 FT. or 152.89 RODS
NW/4 SECTION 29 25+22.60 to 29+03.95
381.35 FT. or 23.11 RODS
TOTAL LENGTH 2903.95 FT. / 176.00 RODS



RICHARD L. MULLIKEN
NEW MEXICO
16873
PROFESSIONAL SURVEYOR

NOTES:

1.) Basis of Bearing: Between found monuments at the Southeast corner and East One-Quarter corner of Section 30, T23N, R06W, N.M.P.M.
Line bears: N00°36'01"W, 2583.89'

2.) Wasatch Surveying and Encana Oil & Gas (USA) Inc. are not liable for underground utilities or pipelines. Contractor should call One-Call for location of any marked or unmarked, buried pipelines or cables on well pad, in construction zone and/or access road at least two (2) working days prior to construction.

I, Richard L. Mulliken, 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 made by me or under my supervision, and that the same is true and correct to the best of my belief and meets the minimum standards for surveying in New Mexico.

Rich L. Mulliken Date: 11-05-14

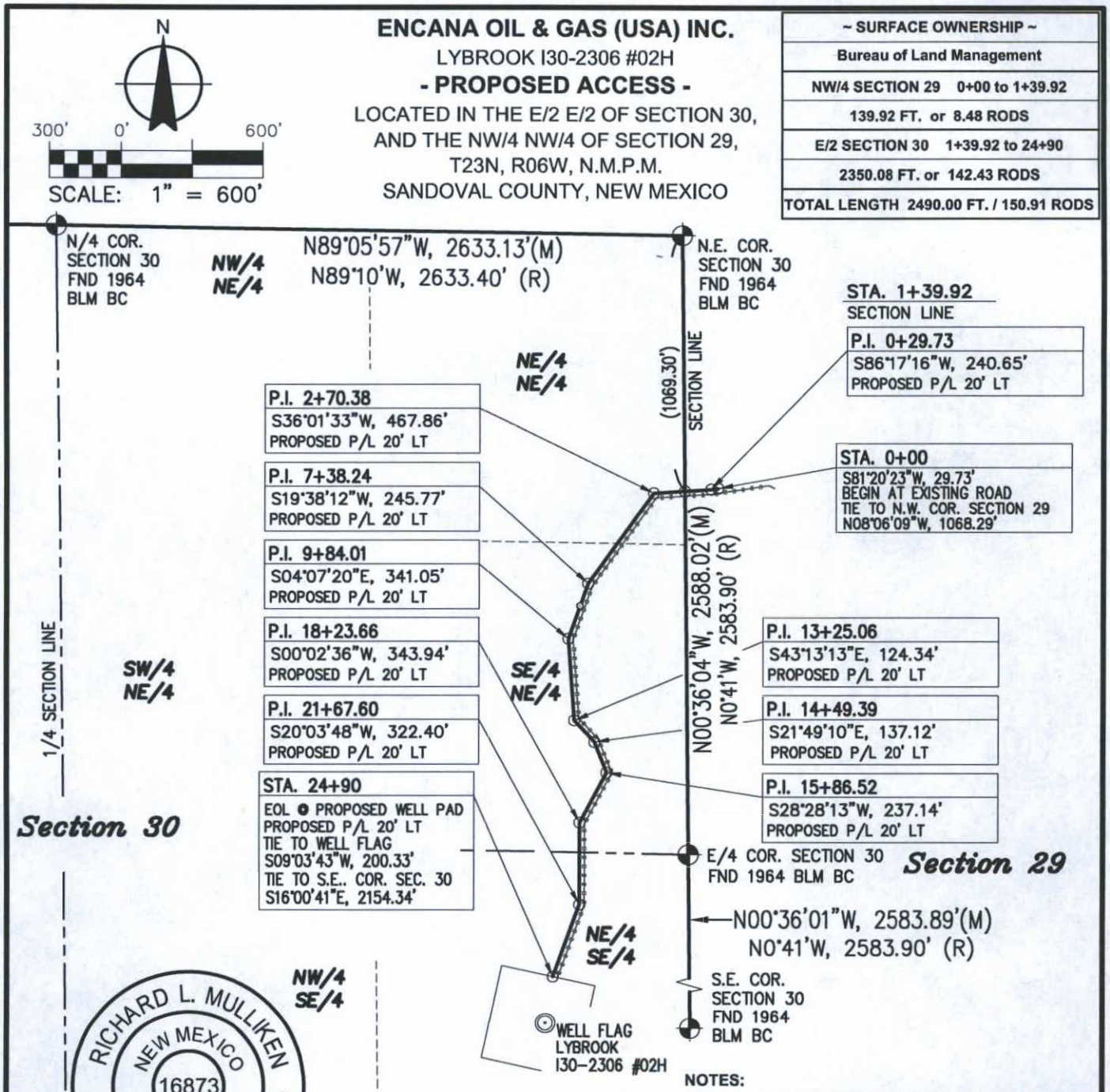
Richard L. Mulliken, PS
New Mexico L.S. #16873

JOB No. 14-07-74 REV-0 DATE: 11/04/14 DRAWN BY: SGT

WASATCH SURVEYING

WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789-4545

SHEET E



RICHARD L. MULLIKEN
NEW MEXICO
16873
PROFESSIONAL SURVEYOR

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Date: 3-5-15

Richard L. Mulliken, PS
New Mexico L.S. #16873

JOB No. 14-07-74 REV-1 DATE: 3/04/15 DRAWN BY: SGT

WASATCH SURVEYING

WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789-4545

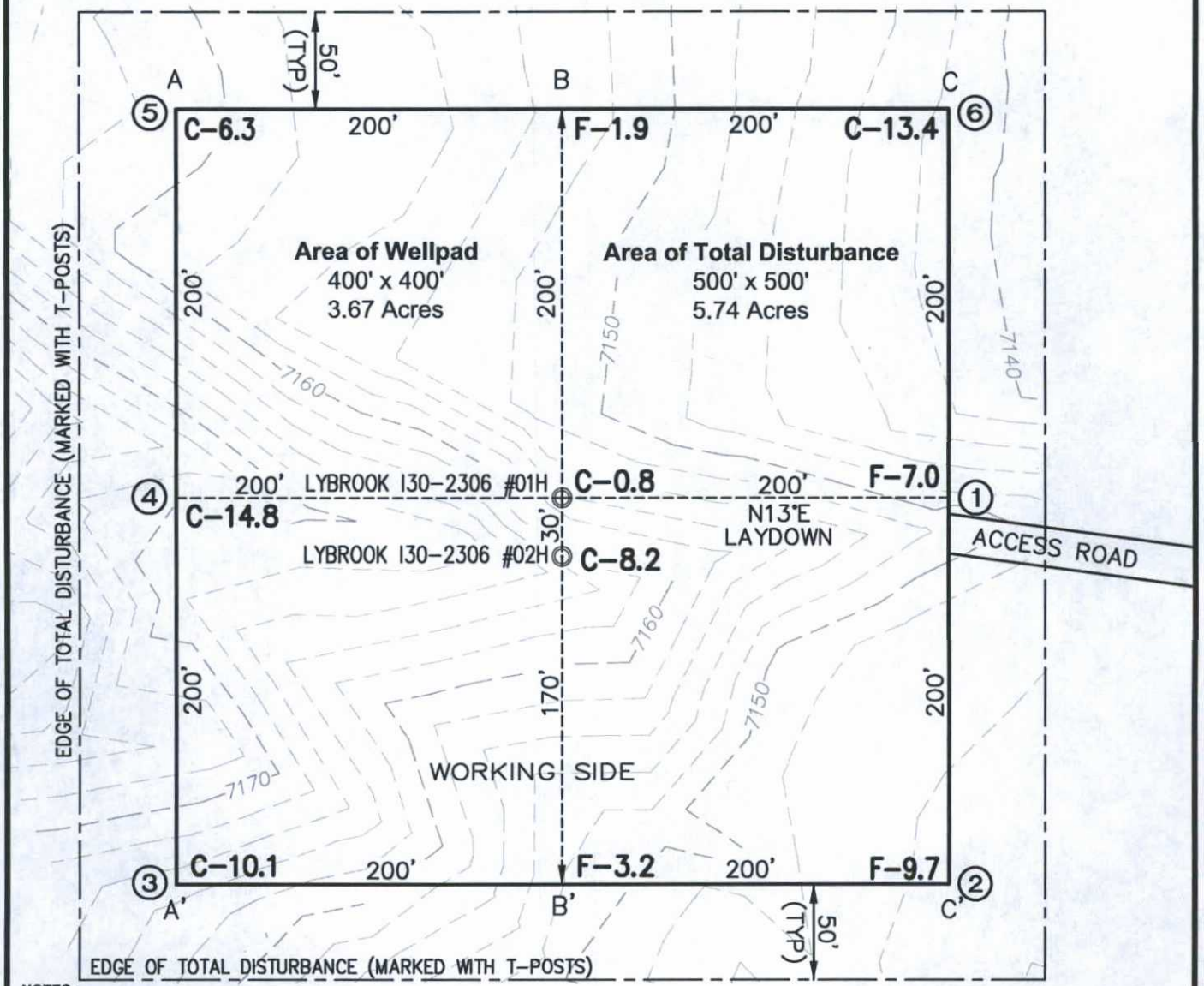
SHEET F

WELL FLAG
LATITUDE: 36.194774° N
LONGITUDE: 107.502142° W
DATUM: NAD83

ENCANA OIL & GAS (USA) INC.

LYBROOK I30-2306 #02H
1860' FSL & 606' FEL
LOCATED IN THE NE/4 SE/4 OF SECTION 30
T23N, R06W, N.M.P.M.
SANDOVAL COUNTY, NEW MEXICO
EXISTING GROUND ELEVATION: 7163.4'
FINISHED PAD ELEVATION: 7155.2'

~ SURFACE OWNERSHIP ~
Bureau of Land Management
SE/4 SECTION 30



NOTES:

1.) Basis of Bearing: Between found monuments at the Southeast corner and East One-Quarter corner of Section 30, T23N, R06W, N.M.P.M. Line bears: N00°36'01"W, 2583.89'

2.) Wasatch Surveying and Encana Oil & Gas (USA) Inc. are not liable for underground utilities or pipelines. Contractor should call One-Call for location of any marked or unmarked, buried pipelines or cables on well pad, in construction zone and/or access road at least two (2) working days prior to construction.

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

DATUM NOTE:
Datum NAD83(2011) Epoch 2010.000 (GRS80)
Projection Type = Transverse Mercator
Origin Latitude = 36°15'00" North
Origin Longitude = 107°52'30" West
Scale Reduction = 1.000 297 195 Unitless
Units = U.S. Survey Foot (USSF)
GEOID12a NAVD88
(WSA Local Coord Sys: Counselor)

TOTAL PERMITTED AREA
500' x 500' = 5.74 ACRES
JOB No. 14-07-74 REV-0
DATE: 9/22/14
DRAWN BY: SGT

80' 0' 80'
SCALE: 1" = 80'

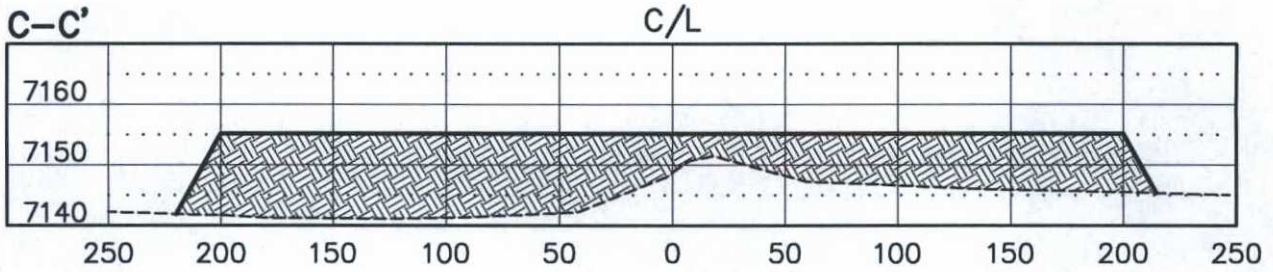
WASATCH SURVEYING
WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789-4545

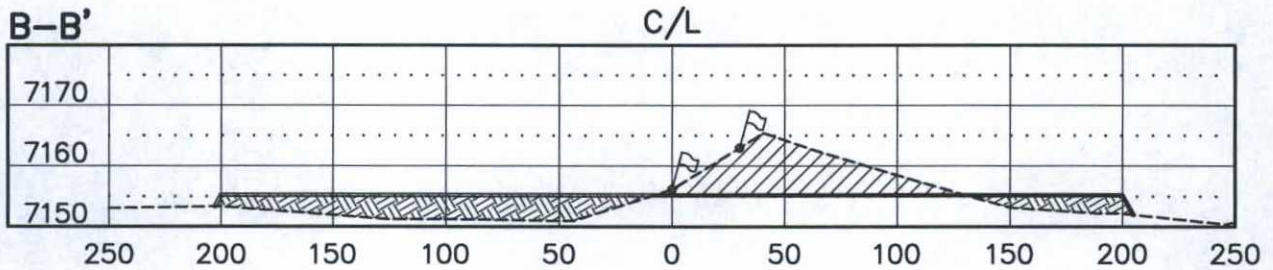
SHEET G-1

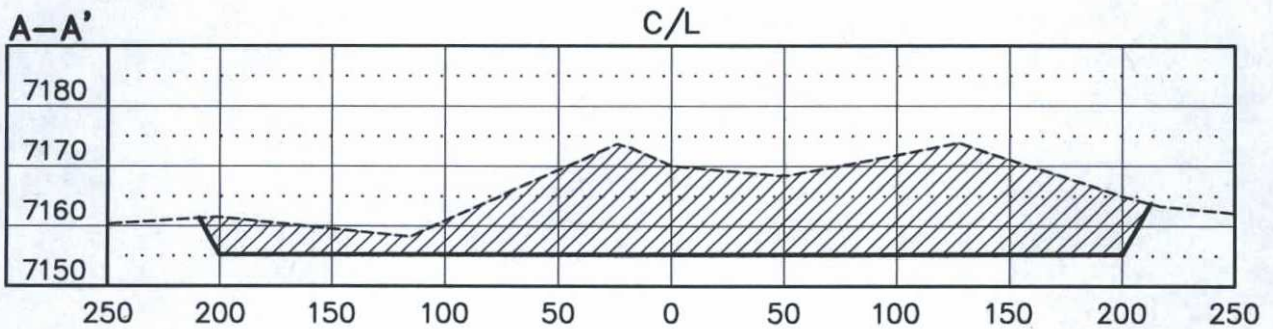
WELL FLAG
LATITUDE: 36.194774° N
LONGITUDE: 107.502142° W
DATUM: NAD83

ENCANA OIL & GAS (USA) INC.

LYBROOK I30-2306 #02H
1860' FSL & 606' FEL
LOCATED IN THE NE/4 SE/4 OF SECTION 30
T23N, R06W, N.M.P.M.
SANDOVAL COUNTY, NEW MEXICO
EXISTING GROUND ELEVATION: 7163.4'
FINISHED PAD ELEVATION: 7155.2'





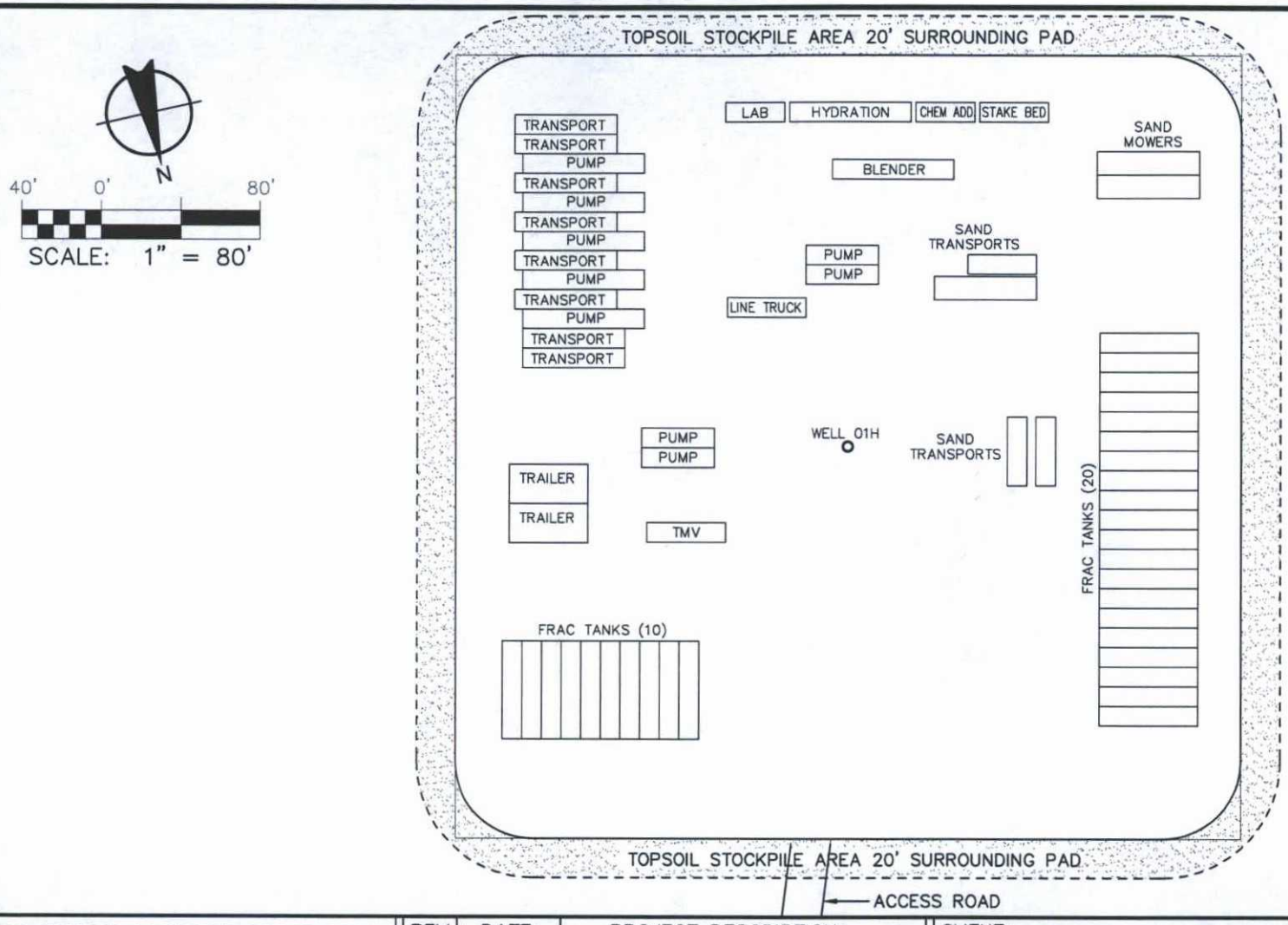


CUT
FILL

HORIZ. SCALE: 1" = 80'
VERT. SCALE: 1"= 30'
JOB No. 14-07-74 REV-0
DATE: 11/13/14

NOTE:
Wasatch Surveying and Encana Oil & Gas (USA) Inc. are not liable for underground utilities or pipelines. Contractor should call One-Call for location of any marked or unmarked, buried pipelines or cables on well pad, in construction zone and/or access road at least two (2) working days prior to construction.

WASATCH SURVEYING
WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789–4545



NOTE: TYPICAL LAYOUT IS SUBJECT TO CHANGE DUE TO SITE-SPECIFIC CONDITIONS AND EQUIPMENT AVAILABILITY.

PREPARED BY:

WASATCH SURVEYING

WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789-4545

REV.	DATE:	PROJECT DESCRIPTION
A	11/13/14	ISSUED FOR REVIEW

REFERENCE DRAWINGS	DWG. NO.
–	–
–	–
–	–

CLIENT: **ENCANA OIL & GAS (USA) INC.**

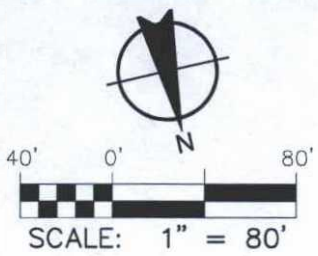
FAC. NAME: **LYBROOK 130-2306 02H WELL**

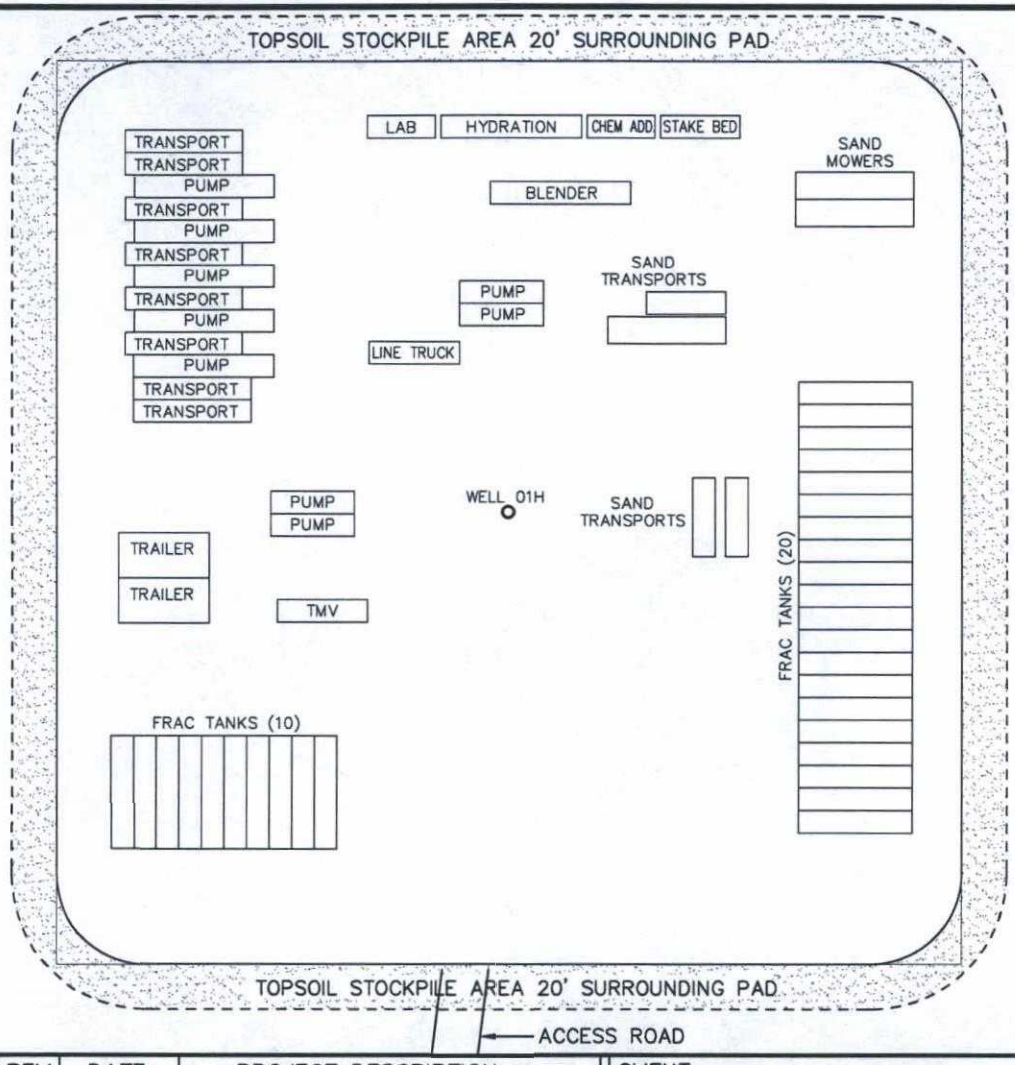
TITLE: TYPICAL DRILLING LAYOUT

LOCATION: LOCATED IN SECTION 30, T23N, R06W SANDOVAL COUNTY, NEW MEXICO

DRAWN BY: CJT	DATE: 11/13/14	DWG. NO.	REV
CHECKED BY: SGT	PROJECT NO.: 14-07-74	**1 of 1**	**A**
SCALE: AS NOTED			

SHEET H-1





NOTE: TYPICAL LAYOUT IS SUBJECT TO CHANGE DUE TO SITE-SPECIFIC CONDITIONS AND EQUIPMENT AVAILABILITY.

REV.	DATE:	PROJECT DESCRIPTION
A	11/13/14	ISSUED FOR REVIEW

REFERENCE DRAWINGS	DWG. NO.
–	–
–	–
–	–

CLIENT: **ENCANA OIL & GAS (USA) INC.**

FAC. NAME: **LYBROOK 130-2306 02H WELL**

TITLE: TYPICAL COMPLETIONS LAYOUT

LOCATION: LOCATED IN SECTION 30, T23N, R06W SANDOVAL COUNTY, NEW MEXICO

DRAWN BY: CJT	DATE: 11/13/14	DWG. NO.	REV
CHECKED BY: SGT	PROJECT NO.: 14-07-74	**1 of 1**	**A**
SCALE: AS NOTED			

PREPARED BY:
WASATCH SURVEYING
WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789-4545

Lybrook I30-2306 02H
SHL: 1860' FSL, 606' FEL Sec 30 23N 06W
BHL: 750' FSL, 330' FWL Sec 30 23N 06W
Sandoval, New Mexico

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
San Jose Fn.	n/a
Nacimiento Fn.	surface
Ojo Alamo Ss.	1,432
Kirtland Shale	1,660
Fruitland Coal	1,852
Pictured Cliffs Ss.	2,045
Lewis Shale	2,133
Cliffhouse Ss.	2,898
Menefee Fn.	3,576
Point Lookout Ss.	4,338
Mancos Shale	4,517
Mancos Silt	5,063
Gallup Fn.	5,321
Base Gallup	5,652

The referenced surface elevation is 7155', KB 7171'

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

Substance	Formation	Depth (TVD) units = feet
Water/Gas	Fruitland Coal	1,852
Oil/Gas	Pictured Cliffs Ss.	2,045
Oil/Gas	Cliffhouse Ss.	2,898
Gas	Menefee Fn.	3,576
Oil/Gas	Point Lookout Ss.	4,338
Oil/Gas	Mancos Shale	4,517
Oil/Gas	Mancos Silt	5,063
Oil/Gas	Gallup Fn.	5,321

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

Lybrook I30-2306 02H
SHL: 1860' FSL, 606' FEL Sec 30 23N 06W
BHL: 750' FSL, 330' FWL Sec 30 23N 06W
Sandoval, New Mexico

3. PRESSURE CONTROL

a) Pressure contol 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.
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 (MD)	Hole Size	Csg Size	Weight	Grade
Conductor	0'-60'	26"	16"	42.09#	
Surface	0'-500'	12 1/4"	9 5/8"	36#	J55, STC New
Intermediate	0'-5781'	8 3/4"	7"	26#	J55, LTC New
Production Liner	5681'-10456'	6 1/8"	4 1/2"	11.6#	B80*, LTC New

Casing String				Casing Strength Properties			Minimum Design Factors		
Size	Weight (ppf)	Grade	Connection	Collapse (psi)	Burst (psi)	Tensile (1000lbs)	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
4.5"	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 I30-2306 02H
SHL: 1860' FSL, 606' FEL Sec 30 23N 06W
BHL: 750' FSL, 330' FWL Sec 30 23N 06W
Sandoval, New Mexico

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:

Casing	Depth (MD)	Cement Volume (sacks)	Cement Type & Yield	Designed TOC	Centralizers
Conductor	0'-60'	100 sks	Type I Neat 16 ppg	Surface	None
Surface	0'-500'	228 sks	Type III Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.2% bwoc FL-52A + 58.9% Fresh Water	Surface	1 per joint on bottom 3 joints
Intermediate	0'-5781'	100% open hole excess Stage 1 Lead: 540 sks Stage 1 Tail: 409 sks	Lead: PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuft/sk Tail: Type III Cmt + 1% CaCl + 0.25lb/sk Cello Flake 14.5ppg 1.38cuft/sk	Surface	1 every 3 joints through water bearing zones
Production Liner	5681'-10456'	50% OH excess Stage 1 Blend Total: 271sks	Blend: Premium Lite High Strength FM + 0.7% bwoc R-3 + 3% bwow Potassium Chloride + 0.25lbs/sack Cello Flake + 0.5% bwoc CD-32 + 1.15% bwoc FL-52A + 60 lbs/sack Calcium Carbonate + 124.4% Fresh Water. Yield 2.63 cuft/sk	Liner Hanger	N/A

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 minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. WELL PLAN & DIRECTIONAL DRILLING PROGRAM

The proposed horizontal well will have a kick off point of 2000'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5571'/10456'	Gallup

6. DRILLING FLUIDS PROGRAM

a) Surface through Intermediate Casing Point:

Hole Size (in)	Depth (TVD/MD)	Mud Type	Density (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
30"	0-60'/60'	Fresh Water	8.3-9.2	38-100	4-28
12 1/4"	0'-500'/500'	Fresh Water	8.3-10	60-70	NC
8 3/4"	500'/500'-5445'/5781	Fresh Water LSND	8.3-10	40-50	8-10

b) Intermediate Casing Point to TD:

Hole Size (in)	Depth (TVD/MD)	Mud Type	Density (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
6 1/8"	5445'/5781'-5571'/10456'	Fresh Water LSND	8.3-10	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. 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, & LOGGING

a) Drill Stem Testing - None anticipated.
b) Coring - None anticipated.
c) Mudd 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

8. ABNORMAL PRESSURES & HYDROGEN SULFIDE

The anticipated bottom hole pressure is +/- 2614 psi based on a 9.0 ppg at 5586' TVD of the horizontal lateral target. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

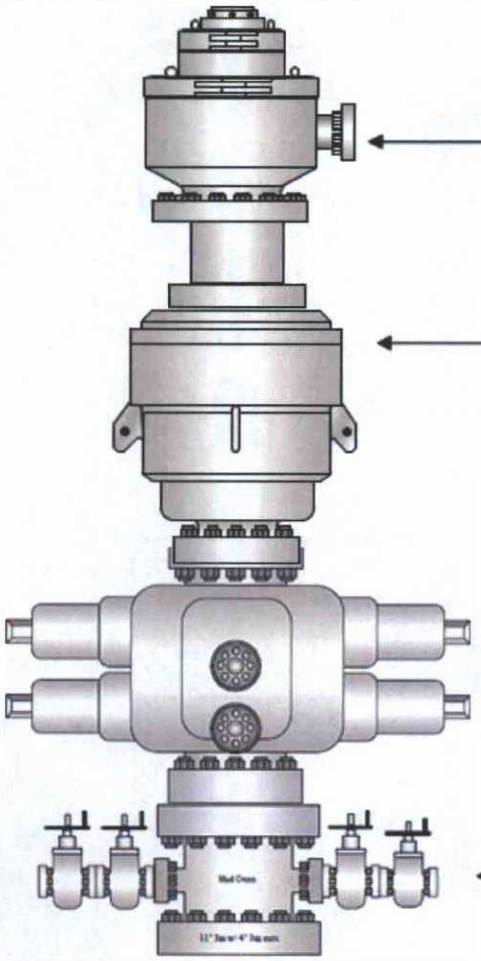
Drilling is estimated to commence on September 15, 2015. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 20 days.

WELLHEAD BLOWOUT CONTROL SYSTEM

encana

Well Name and Number:
Lybrook I30-2306 02H

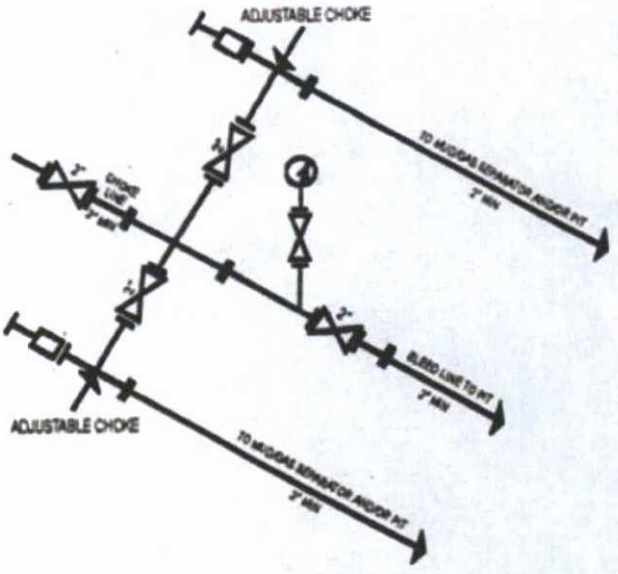


11" 3K Rotating Head

11" 3K Annular

3K Double Ram
Top: Pipe Ram
Bottom: Blind Ram
3" Outlets Below Ram

3K Mud Cross 3" gate valves



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

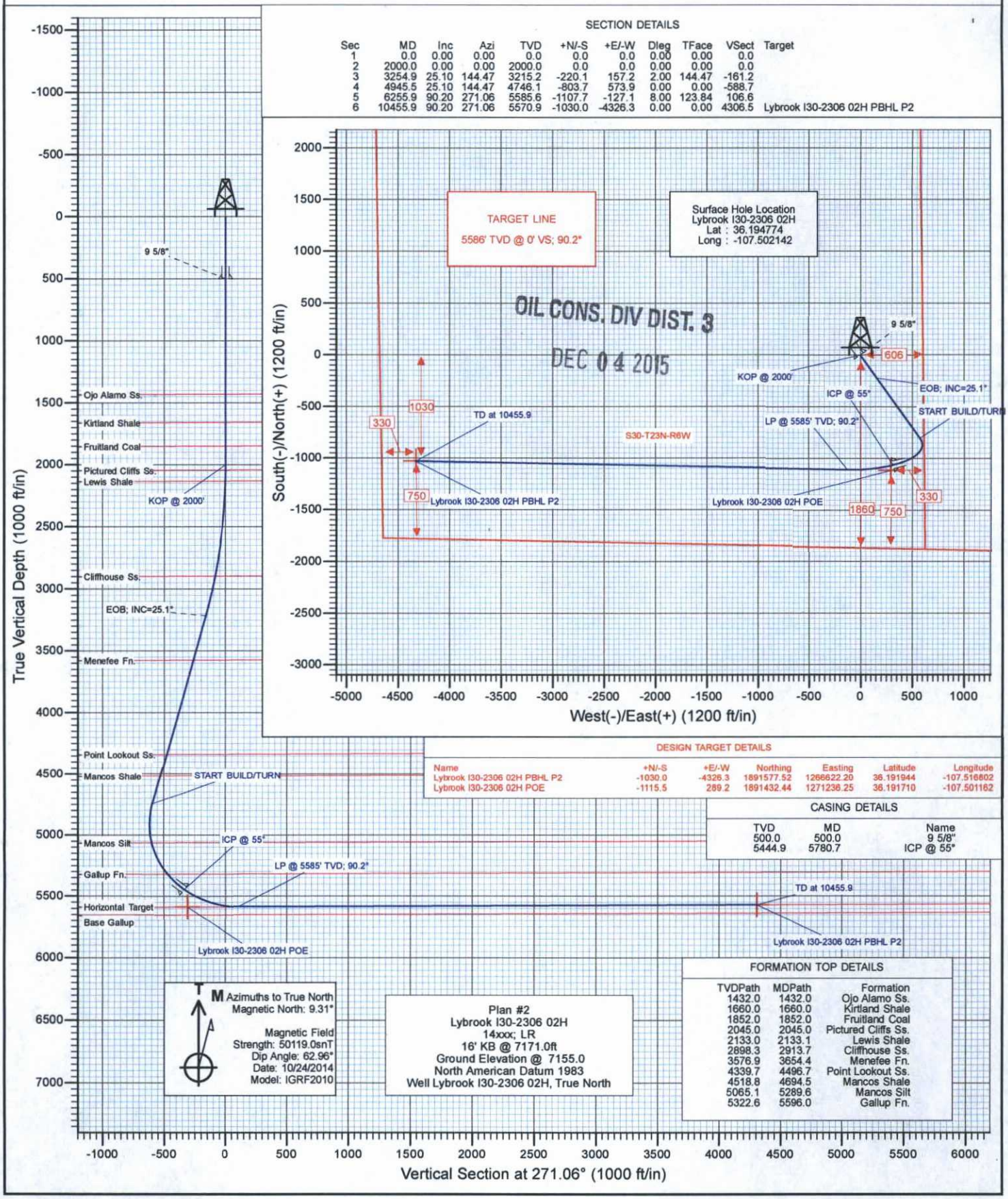
encana natural gas

Project: Sandoval County, NM
Site: S30-T23N-R6W
Well: Lybrook I30-2306 02H
Wellbore: HZ
Design: Plan #2

CATHEDRAL

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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	3254.9	25.10	144.47	3215.2	-220.1	157.2	2.00	144.47	-161.2	
4	4945.5	25.10	144.47	4746.1	-803.7	573.9	0.00	0.00	-588.7	
5	6255.9	90.20	271.06	5585.6	-1107.7	-127.1	8.00	123.84	106.6	
6	10455.9	90.20	271.06	5570.9	-1030.0	-4326.3	0.00	0.00	4306.5	Lybrook I30-2306 02H PBHL P2



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Lybrook I30-2306 02H PBHL P2	-1030.0	-4326.3	1891577.52	1266622.20	36.191944	-107.516602
Lybrook I30-2306 02H POE	-1115.5	289.2	1891432.44	1271236.25	36.191710	-107.501162

CASING DETAILS

TVD	MD	Name
500.0	500.0	9 5/8"
5444.9	5780.7	ICP @ 55°

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1432.0	1432.0	Ojo Alamo Ss.
1660.0	1660.0	Kirtland Shale
1852.0	1852.0	Fruitland Coal
2045.0	2045.0	Pictured Cliffs Ss.
2133.0	2133.1	Lewis Shale
2898.3	2913.7	Cliffhouse Ss.
3576.9	3654.4	Menefee Fn.
4339.7	4496.7	Point Lookout Ss.
4518.8	4694.5	Mancos Shale
5065.1	5289.6	Mancos Silt
5322.6	5596.0	Gallup Fn.

T M Azimuths to True North
Magnetic North: 9.31°
Magnetic Field
Strength: 50119.0snT
Dip Angle: 62.96°
Date: 10/24/2014
Model: IGRF2010

Plan #2
Lybrook I30-2306 02H
14xxx; LR
16' KB @ 7171.0ft
Ground Elevation @ 7155.0
North American Datum 1983
Well Lybrook I30-2306 02H, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Lybrook I30-2306 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 7171.0ft
Project:	Sandoval County, NM	**MD Reference:**	16' KB @ 7171.0ft
Site:	S30-T23N-R6W	**North Reference:**	True
Well:	Lybrook I30-2306 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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	S30-T23N-R6W				
Site Position:		**Northing:**	1,892,551.59 ft	**Latitude:**	36.194774
From:	Lat/Long	**Easting:**	1,270,961.46 ft	**Longitude:**	-107.502142
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	-0.74 °

Well	Lybrook I30-2306 02H					
Well Position	**+N/-S**	0.0 ft	**Northing:**	1,892,551.59 ft	**Latitude:**	36.194774
	+E/-W	0.0 ft	**Easting:**	1,270,961.46 ft	**Longitude:**	-107.502142
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	0.0 ft	**Ground Level:**	7,155.0 ft

Wellbore	HZ			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	10/24/2014	9.31	62.96	50,119

Design	Plan #2				
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	271.06	

Plan Sections

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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,254.9	25.10	144.47	3,215.2	-220.1	157.2	2.00	2.00	0.00	144.47	
4,945.5	25.10	144.47	4,746.1	-803.7	573.9	0.00	0.00	0.00	0.00	
6,255.9	90.20	271.06	5,585.6	-1,107.7	-127.1	8.00	4.97	9.66	123.84	
10,455.9	90.20	271.06	5,570.9	-1,030.0	-4,326.3	0.00	0.00	0.00	0.00	Lybrook I30-2306 02H

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Lybrook I30-2306 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 7171.0ft
Project:	Sandoval County, NM	**MD Reference:**	16' KB @ 7171.0ft
Site:	S30-T23N-R6W	**North Reference:**	True
Well:	Lybrook I30-2306 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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	
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	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,432.0	0.00	0.00	1,432.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,660.0	0.00	0.00	1,660.0	0.0	0.0	0.0	0.00	0.00	Kirtland Shale
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	
1,852.0	0.00	0.00	1,852.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
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	KOP @ 2000'
2,045.0	0.90	144.47	2,045.0	-0.3	0.2	-0.2	2.00	2.00	Pictured Cliffs Ss.
2,100.0	2.00	144.47	2,100.0	-1.4	1.0	-1.0	2.00	2.00	
2,133.1	2.66	144.47	2,133.0	-2.5	1.8	-1.8	2.00	2.00	Lewis Shale
2,200.0	4.00	144.47	2,199.8	-5.7	4.1	-4.2	2.00	2.00	
2,300.0	6.00	144.47	2,299.5	-12.8	9.1	-9.4	2.00	2.00	
2,400.0	8.00	144.47	2,398.7	-22.7	16.2	-16.6	2.00	2.00	
2,500.0	10.00	144.47	2,497.5	-35.4	25.3	-25.9	2.00	2.00	
2,600.0	12.00	144.47	2,595.6	-50.9	36.4	-37.3	2.00	2.00	
2,700.0	14.00	144.47	2,693.1	-69.3	49.5	-50.7	2.00	2.00	
2,800.0	16.00	144.47	2,789.6	-90.3	64.5	-66.2	2.00	2.00	
2,900.0	18.00	144.47	2,885.3	-114.1	81.5	-83.6	2.00	2.00	
2,913.7	18.27	144.47	2,898.3	-117.6	84.0	-86.1	2.00	2.00	Cliffhouse Ss.
3,000.0	20.00	144.47	2,979.8	-140.6	100.4	-103.0	2.00	2.00	
3,100.0	22.00	144.47	3,073.2	-169.8	121.2	-124.3	2.00	2.00	
3,200.0	24.00	144.47	3,165.2	-201.6	143.9	-147.6	2.00	2.00	
3,254.9	25.10	144.47	3,215.2	-220.1	157.2	-161.2	2.00	2.00	EOB; INC=25.1°
3,300.0	25.10	144.47	3,256.0	-235.7	168.3	-172.6	0.00	0.00	
3,400.0	25.10	144.47	3,346.6	-270.2	193.0	-197.9	0.00	0.00	
3,500.0	25.10	144.47	3,437.1	-304.7	217.6	-223.2	0.00	0.00	
3,600.0	25.10	144.47	3,527.7	-339.2	242.3	-248.5	0.00	0.00	
3,654.4	25.10	144.47	3,576.9	-358.0	255.7	-262.2	0.00	0.00	Menefee Fn.
3,700.0	25.10	144.47	3,618.2	-373.8	266.9	-273.8	0.00	0.00	
3,800.0	25.10	144.47	3,708.8	-408.3	291.6	-299.1	0.00	0.00	
3,900.0	25.10	144.47	3,799.3	-442.8	316.2	-324.4	0.00	0.00	
4,000.0	25.10	144.47	3,889.9	-477.3	340.9	-349.6	0.00	0.00	
4,100.0	25.10	144.47	3,980.5	-511.8	365.5	-374.9	0.00	0.00	
4,200.0	25.10	144.47	4,071.0	-546.4	390.2	-400.2	0.00	0.00	
4,300.0	25.10	144.47	4,161.6	-580.9	414.8	-425.5	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Lybrook I30-2306 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 7171.0ft
Project:	Sandoval County, NM	**MD Reference:**	16' KB @ 7171.0ft
Site:	S30-T23N-R6W	**North Reference:**	True
Well:	Lybrook I30-2306 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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
4,400.0	25.10	144.47	4,252.1	-615.4	439.5	-450.8	0.00	0.00	
4,496.7	25.10	144.47	4,339.7	-648.8	463.3	-475.2	0.00	0.00	Point Lookout Ss.
4,500.0	25.10	144.47	4,342.7	-649.9	464.1	-476.1	0.00	0.00	
4,600.0	25.10	144.47	4,433.2	-684.4	488.8	-501.3	0.00	0.00	
4,694.5	25.10	144.47	4,518.8	-717.1	512.1	-525.2	0.00	0.00	Mancos Shale
4,700.0	25.10	144.47	4,523.8	-719.0	513.4	-526.6	0.00	0.00	
4,800.0	25.10	144.47	4,614.4	-753.5	538.1	-551.9	0.00	0.00	
4,900.0	25.10	144.47	4,704.9	-788.0	562.7	-577.2	0.00	0.00	
4,945.5	25.10	144.47	4,746.1	-803.7	573.9	-588.7	0.00	0.00	START BUILD/TURN
5,000.0	22.94	153.80	4,795.9	-822.6	585.4	-600.5	8.00	-3.96	
5,100.0	20.75	174.60	4,888.9	-857.8	595.6	-611.4	8.00	-2.19	
5,200.0	21.38	196.91	4,982.3	-892.9	592.0	-608.4	8.00	0.63	
5,289.6	24.19	214.04	5,065.1	-923.8	576.9	-593.9	8.00	3.13	Mancos Silt
5,300.0	24.62	215.75	5,074.5	-927.3	574.5	-591.6	8.00	4.18	
5,400.0	29.62	229.53	5,163.6	-960.3	543.5	-561.2	8.00	5.00	
5,500.0	35.65	239.33	5,247.8	-991.3	499.5	-517.8	8.00	6.03	
5,596.0	41.99	246.26	5,322.6	-1,018.6	446.0	-464.8	8.00	6.60	Gallup Fn.
5,600.0	42.26	246.51	5,325.6	-1,019.6	443.5	-462.3	8.00	6.81	
5,700.0	49.22	252.04	5,395.3	-1,044.7	376.6	-395.8	8.00	6.96	
5,780.7	55.00	255.70	5,444.9	-1,062.3	315.4	-335.0	8.00	7.16	ICP @ 55°
5,800.0	56.39	256.50	5,455.8	-1,066.2	300.0	-319.6	8.00	7.24	
5,883.3	62.47	259.67	5,498.1	-1,080.9	229.8	-249.7	8.00	7.30	Lybrook I30-2306 02H POE
5,900.0	63.70	260.26	5,505.7	-1,083.5	215.1	-235.2	8.00	7.35	
6,000.0	71.09	263.58	5,544.1	-1,096.4	123.8	-144.1	8.00	7.39	
6,100.0	78.54	266.61	5,570.3	-1,104.6	27.7	-48.2	8.00	7.45	
6,200.0	86.02	269.48	5,583.7	-1,108.0	-71.2	50.7	8.00	7.48	
6,255.9	90.20	271.06	5,585.6	-1,107.7	-127.1	106.6	8.00	7.49	LP @ 5585' TVD; 90.2°
6,300.0	90.20	271.06	5,585.4	-1,106.9	-171.2	150.7	0.00	0.00	
6,400.0	90.20	271.06	5,585.1	-1,105.0	-271.1	250.7	0.00	0.00	
6,500.0	90.20	271.06	5,584.7	-1,103.2	-371.1	350.7	0.00	0.00	
6,600.0	90.20	271.06	5,584.4	-1,101.3	-471.1	450.7	0.00	0.00	
6,700.0	90.20	271.06	5,584.0	-1,099.5	-571.1	550.7	0.00	0.00	
6,800.0	90.20	271.06	5,583.7	-1,097.6	-671.1	650.7	0.00	0.00	
6,900.0	90.20	271.06	5,583.3	-1,095.8	-771.1	750.7	0.00	0.00	
7,000.0	90.20	271.06	5,583.0	-1,093.9	-871.0	850.7	0.00	0.00	
7,100.0	90.20	271.06	5,582.6	-1,092.1	-971.0	950.7	0.00	0.00	
7,200.0	90.20	271.06	5,582.3	-1,090.2	-1,071.0	1,050.7	0.00	0.00	
7,300.0	90.20	271.06	5,581.9	-1,088.4	-1,171.0	1,150.7	0.00	0.00	
7,400.0	90.20	271.06	5,581.6	-1,086.5	-1,271.0	1,250.7	0.00	0.00	
7,500.0	90.20	271.06	5,581.2	-1,084.7	-1,371.0	1,350.7	0.00	0.00	
7,600.0	90.20	271.06	5,580.9	-1,082.8	-1,470.9	1,450.7	0.00	0.00	
7,700.0	90.20	271.06	5,580.5	-1,081.0	-1,570.9	1,550.7	0.00	0.00	
7,800.0	90.20	271.06	5,580.2	-1,079.1	-1,670.9	1,650.7	0.00	0.00	
7,900.0	90.20	271.06	5,579.8	-1,077.3	-1,770.9	1,750.7	0.00	0.00	
8,000.0	90.20	271.06	5,579.5	-1,075.4	-1,870.9	1,850.7	0.00	0.00	
8,100.0	90.20	271.06	5,579.1	-1,073.6	-1,970.8	1,950.7	0.00	0.00	
8,200.0	90.20	271.06	5,578.8	-1,071.7	-2,070.8	2,050.6	0.00	0.00	
8,300.0	90.20	271.06	5,578.4	-1,069.9	-2,170.8	2,150.6	0.00	0.00	
8,400.0	90.20	271.06	5,578.1	-1,068.0	-2,270.8	2,250.6	0.00	0.00	
8,500.0	90.20	271.06	5,577.7	-1,066.2	-2,370.8	2,350.6	0.00	0.00	
8,600.0	90.20	271.06	5,577.4	-1,064.3	-2,470.8	2,450.6	0.00	0.00	
8,700.0	90.20	271.06	5,577.0	-1,062.5	-2,570.7	2,550.6	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Lybrook I30-2306 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 7171.0ft
Project:	Sandoval County, NM	**MD Reference:**	16' KB @ 7171.0ft
Site:	S30-T23N-R6W	**North Reference:**	True
Well:	Lybrook I30-2306 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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	90.20	271.06	5,576.7	-1,060.6	-2,670.7	2,650.6	0.00	0.00	
8,900.0	90.20	271.06	5,576.3	-1,058.8	-2,770.7	2,750.6	0.00	0.00	
9,000.0	90.20	271.06	5,576.0	-1,056.9	-2,870.7	2,850.6	0.00	0.00	
9,100.0	90.20	271.06	5,575.6	-1,055.1	-2,970.7	2,950.6	0.00	0.00	
9,200.0	90.20	271.06	5,575.3	-1,053.2	-3,070.7	3,050.6	0.00	0.00	
9,300.0	90.20	271.06	5,574.9	-1,051.4	-3,170.6	3,150.6	0.00	0.00	
9,400.0	90.20	271.06	5,574.6	-1,049.5	-3,270.6	3,250.6	0.00	0.00	
9,500.0	90.20	271.06	5,574.2	-1,047.7	-3,370.6	3,350.6	0.00	0.00	
9,600.0	90.20	271.06	5,573.9	-1,045.8	-3,470.6	3,450.6	0.00	0.00	
9,700.0	90.20	271.06	5,573.5	-1,044.0	-3,570.6	3,550.6	0.00	0.00	
9,800.0	90.20	271.06	5,573.2	-1,042.1	-3,670.5	3,650.6	0.00	0.00	
9,900.0	90.20	271.06	5,572.8	-1,040.3	-3,770.5	3,750.6	0.00	0.00	
10,000.0	90.20	271.06	5,572.5	-1,038.4	-3,870.5	3,850.6	0.00	0.00	
10,100.0	90.20	271.06	5,572.1	-1,036.6	-3,970.5	3,950.6	0.00	0.00	
10,200.0	90.20	271.06	5,571.8	-1,034.7	-4,070.5	4,050.6	0.00	0.00	
10,300.0	90.20	271.06	5,571.4	-1,032.9	-4,170.5	4,150.6	0.00	0.00	
10,400.0	90.20	271.06	5,571.1	-1,031.0	-4,270.4	4,250.6	0.00	0.00	
10,455.9	90.20	271.06	5,570.9	-1,030.0	-4,326.3	4,306.5	0.00	0.00	TD at 10455.9 - Lybrook I30-2306 02H PBHL - I

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Lybrook I30-2306 02H P - plan misses target center by 112.4ft at 5883.3ft MD (5498.1 TVD, -1080.9 N, 229.8 E) - Point	0.00	0.00	5,587.1	-1,115.5	289.2	1,891,432.44	1,271,236.25	36.191710	-107.501162
Lybrook I30-2306 02H P - plan misses target center by 0.1ft at 10455.9ft MD (5570.9 TVD, -1030.0 N, -4326.3 E) - Point	0.00	0.00	5,571.0	-1,030.0	-4,326.3	1,891,577.52	1,266,622.20	36.191944	-107.516802
Lybrook I30-2306 02H P - plan hits target center - Point	0.00	0.00	5,570.9	-1,030.0	-4,326.3	1,891,577.52	1,266,622.20	36.191944	-107.516802

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
5,780.7	5,444.9	ICP @ 55°	0.000	0.000

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Lybrook I30-2306 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 7171.0ft
Project:	Sandoval County, NM	**MD Reference:**	16' KB @ 7171.0ft
Site:	S30-T23N-R6W	**North Reference:**	True
Well:	Lybrook I30-2306 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,432.0	1,432.0	Ojo Alamo Ss.		-0.20	271.03
1,660.0	1,660.0	Kirtland Shale		-0.20	271.03
1,852.0	1,852.0	Fruitland Coal		-0.20	271.03
2,045.0	2,045.0	Pictured Cliffs Ss.		-0.20	271.03
2,133.1	2,133.0	Lewis Shale		-0.20	271.03
2,913.7	2,898.0	Cliffhouse Ss.		-0.20	271.03
3,654.4	3,576.0	Menefee Fn.		-0.20	271.03
4,496.7	4,338.0	Point Lookout Ss.		-0.20	271.03
4,694.5	4,517.0	Mancos Shale		-0.20	271.03
5,289.6	5,063.0	Mancos Silt		-0.20	271.03
5,596.0	5,321.0	Gallup Fn.		-0.20	271.03

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,000.0	2,000.0	0.0	0.0	KOP @ 2000'
3,254.9	3,215.2	-220.1	157.2	EOB; INC=25.1°
4,945.5	4,746.1	-803.7	573.9	START BUILD/TURN
6,255.9	5,585.6	-1,107.7	-127.1	LP @ 5585' TVD; 90.2°
10,455.9	5,570.9	-1,030.0	-4,326.3	TD at 10455.9

Lybrook I30-2306 02H
SHL: NESE Section 30, T23N, R6W
1860' FSL and 606' FEL
BHL: SWSW Section 30, T23N, R6W
750' FSL and 330' FWL
Sandoval County, New Mexico
Lease Number: NMNM 117564

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- Topo Map Depicting Well Site, Access Roads, and Pipeline
Sheet C- Directions to Site
Sheet D- Adjacent Wells
Sheet E- Proposed Pipeline Survey
Sheet F- Proposed Access Road Survey
Sheets G-1 and G-2- Proposed Well Site Plan and Profile
Sheets H-1 and H-2- Proposed Well Site Layout

Appendix A- Reclamation Plan
Appendix B- Road Maintenance Plan

1. EXISTING ROADS

A. Existing access roads are shown on Sheet B.

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 Resource Road in good condition and regularly maintained. This road will not need any upgrades.

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 shown on Sheet B and Sheet F. Approximately 2,490 feet (0.47 miles) 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 12, 2013.

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. Maximum grade will average 0-8 percent.

E. Construction materials and methods – See Item 6.A.

F. 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).

G. 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 2,904 foot (0.55 miles), up to 6-inch outside diameter, steel gas pipeline, is proposed. The entire length of the pipeline will co-located with the proposed road and is on BLM land. This well will be connected to the existing Encana Lybrook E29-2306 01H pipeline which will tie in in the NWNW of Section 29, T23N R6W. Please refer to Sheets B, E-1, E-2 and E-3.

2. Encana requested 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.

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 re-vegetated.

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 123.4 Travel southerly on US 550 for approximately 22.5 miles to Mile Marker 100.9. Go right (southerly) for 200' to fork in road. Go right, which is straight (south-westerly), for 2.0 miles to "T" intersection. Go right (south-easterly) for 0.2 miles to fork in road. Go right (westerly) for 0.1 miles to fork in road. Go right (south-westerly) for 0.2 miles to new access road on right-hand side of existing roadway which continues for 0.47 miles (2,490 feet) to staked Encana Lybrook I30-2306 01H 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 accommodate year-round traffic. All other construction requirements will be completed prior to drilling.

2. No cattle guard or fences required.

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. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and dozer. Construction of the access road and 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 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 in the construction zone. 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 14.8 feet on the south edge of the pad (midline corner 4) and the maximum fill will be approximately 9.7 feet on the northwest corner (corner 2).

4. As determined during the onsite on September 12, 2013, the following best management practices will be implemented:
   a. A silt trap will be installed at the south edge of the pad between corner 5 and the midpoint between corners 5 and 6.

   b. The midline of corner 4 will be high walled at 1:1.

   c. A silt trap will be installed in the northeast corner (corner 2)

   d. Water will be diverted around the pad and silt traps installed as needed upon interim reclamation.

5. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and dozer. Construction for the access road and well pad will take approximately 2 to 3 weeks.

C. Pipeline
See the Plan of Development submitted with the final modifications to the Standard Form 299 Application for authorization to construct, operate, maintain, and terminate a 2,906 foot, up to 6-inch diameter buried, steel well connect pipeline that was submitted to the BLM on November 8, 2013.

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 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.

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.

Lybrook I30-2306 02H
SHL: NESE Section 30, T23N, R6W
1860' FSL and 606' FEL
BHL: SWSW Section 30, T23N, R6W
750' FSL and 330' FWL
Sandoval County, New Mexico
Lease Number: NMNM 117564

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 G-1, G-2, H-1, and H-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 12, 2013, plant species were picked from the Sagebrush-Grass Community Seed List. These species will be used in the re-vegetation 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. Encana received an approved access road right-of way grant from the BLM on February 3, 2014. Issued Serial Number NMNM 130587.

B. The planned well pad is on lease and will not require a right-of-way. Encana plans to use the existing Lybrook E29-2306 well pad located in the SWNW of Section 29 T23N R6W as a completions staging area for trucks.

C. Encana received an approved pipeline right-of way grant from the BLM on February 3, 2014. Issued Serial Number NMNM 130588.

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.

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.

Appendix A

United States Department of the Interior
Bureau of Land Management

Reclamation Plan

Encana Oil & Gas (USA) Inc.

Proposed Lybrook I30-2306 01H Well Pad, Access Road, and Pipeline

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Prepared for

encana

Prepared by

Ecosphere
Environmental Services
4801 N. Butler, Suite 15101
Farmington, NM 87401

September 2013

U.S. Department of the Interior
Bureau of Land Management
Farmington District
Farmington Field Office
6251 N. College Blvd., Ste. A
Farmington, NM 87402
Phone: (505) 564-7600
FAX: (505) 564-7608

BLM

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ACRONYMS

BLM	Bureau of Land Management
Encana	Encana Oil & Gas (USA) Inc.
FAN	final abandonment notice
FFO	Farmington Field Office
GPS	global positioning system
PLS	pure live seeds
ROW	right-of-way

RECLAMATION PLAN (PROCEDURE B)

Applicant	Encana Oil & Gas (USA) Inc. (Encana)
Project Type	Well pad, pipeline and access road
Well, Oil and Gas Lease, or Right-of-Way (ROW) Name	Lybrook I30-2306 01H
Legal Location	1867 feet FSL and 635 feet FEL of Section 30, Township 23 North, Range 6 West, New Mexico Principal Meridian in Sandoval County, New Mexico
Lease Number	NMNM 117546

1. INTRODUCTION

This reclamation plan has been prepared to meet the requirements and guidelines of the Bureau of Land Management (BLM) Farmington Field Office (FFO) Bare Soil Reclamation Procedures (BLM 2013a) and Onshore Oil and Gas Order No. 1.

The Encana contact person for this reclamation plan is:

Jason Eckman
Field Regulatory Analyst
Encana Oil & Gas (USA) Inc.
143 Diamond Ave
Parachute, CO
970-285-2656

1.1 Vegetation Reclamation Procedure B

Completion of a Vegetation Reclamation Plan in accordance with Procedure B of the BLM/FFO Bare Soil Reclamation Procedures is required for surface disturbing actions, grants, or permits authorized by the BLM/FFO resulting in bare mineral soil **across an area greater than or equal to 1 acre**, not including a BLM/FFO-approved working area. Working areas include areas routinely used to operate and maintain facilities or improvements. The FFO makes no distinction between interim and final revegetation processes; revegetation processes and standards are the same for all revegetation activities.

1.2 Revision of the Reclamation Plan

Encana may submit a request to the BLM/FFO to revise the Reclamation Plan at any time during the life of the project in accordance to page 44 of the Gold Book (USDI-USDA 2007). Encana will include justification for the revision request.

2. PROJECT DESCRIPTION

Encana is proposing to construct the Lybrook I30-2306 01H well pad, access road, and well-tie pipeline. The proposed project would be located on federal lands with the mineral resources administered by the BLM/FFO. The proposed project would be located on Sisnathyel Mesa approximately 3 miles southwest of the community of Counselor, New Mexico.

2.1 Estimated Total Area of Disturbance

The proposed Lybrook I30-2306 well pad would require constructing a 400-foot by 400-foot location with a 50-foot-wide construction zone around the perimeter of the location, resulting in a total disturbance of 5.74 acres. Encana would also construct and operate a proposed well-tie pipeline, which would be approximately 2,906 feet in length constructed within a 40-foot wide right-of-way (ROW). Approximately 202 feet of the proposed pipeline would be located within the proposed well pad. To access the site Encana would construct an approximately 2,490 foot resource road. The proposed road would parallel the proposed pipeline. Total construction width of the pipeline/access road would be 50 feet and would be designated as 20 feet of disturbance adjacent to the road and 30 feet of disturbance on the road. The total disturbance from the access road and pipeline would be 3.10 acres. One temporary use area (TUA) would be needed along the proposed access road/pipeline ROW. The TUA would be 40 feet by 200 feet TUA between Stations 23+05.1 and 25+05.1 resulting in 0.184 acre of disturbance. Total surface disturbance of the proposed project would be 9.02 acres.

3. PRE-DISTURBANCE SITE VISIT

The pre-disturbance site visit occurred on September 12, 2013. The following persons were present at the site visit (Table 3-1).

Table 3-1. Pre-disturbance site visit attendees

Name	Affiliation	Contact Number
Craig Willems	BLM/FFO	505-564-7600
Jillian Aragon	BLM/FFO	505-564-7600
Shari Ketcham	BLM/FFO	505-564-7600
Esther Willeto	BLM/FFO	505-564-7600
Brenda Linster	Encana	720-876-3533
Johnny Stinson	Adobe Contractors, Inc.	505-632-1486
Benny Benfield	G&L Services	505-3204649
Steve Fuller	La Plata Archaeological Consultants	970-565-8708
Jacob Brown	NCE	505-486-1695
Kyle Schneider	NCE	505-486-1695
Jaime DeMarco	Ecosphere Environmental Services	505-327-3088

3.1 Vegetation Community

Based on observations made during the pre-disturbance site visit, the BLM/FFO representative has determined that the vegetation community which best represents the proposed project area is Sagebrush/Grass. Big sagebrush is the dominant shrub species across most of the FFO. Sagebrush grasslands are typically associated with various grass species, such as James' galleta, blue grama, and Indian ricegrass. Other shrubs typical of this vegetation community include various sagebrush species, broom snakeweed, fourwing saltbush, winterfat, and antelope bitterbrush.

3.2 Proposed Reclamation Seed Mix

Disturbance will be re-contoured and topsoil will be redistributed and prepared for seeding by the construction contractor. Ripping, disking, and seeding of the site will be done by Encana using the BLM-

approved seed mix, which is shown in Table 3-2. The proposed reclamation seed mix takes into account the existing vegetation on the proposed project site.

Table 3-2. Sagebrush/Grass community seed mix

Common Name	Scientific Name	Variety	Season	Form	PLS lbs/acre[1]
Blue grama	*Bouteloua gracilis*	Alma or Hachita	Warm	Bunch	2.0
Blue flax	*Linum lewisii*	Apar	Cool	Forb	0.25
Bottlebrush squirreltail	*Elymus elymoides*	Tusas or VNS	Cool	Bunch	3.0
Fourwing saltbush	*Atriplex canescens*	VNS	Cool	Shrub	2.0
Indian ricegrass	*Achnatherum hymenoides*	Paloma or Rimrock	Cool	Bunch	3.5
Rocky Mtn. bee plant	*Cleome serrulata*	Local collection or VNS	Cool	Forb	0.25
Western wheatgrass	*Pascopyrum smithii*	Arriba	Cool	Sod-forming	2.0
Winterfat	*Krascheninnikovia lanata*	VNS	Cool	Shrub	2.0

[1]Based on 60 pure live seeds (PLS) per square foot, drill seeded; double this rate (120 PLS per square foot) if broadcast or hydro-seeded; "lbs" refers to pounds.

3.3 Vegetation Reclamation Standards

Requirements for determining reclamation and if it is successfully completed for the selected vegetation community are determined by the reclamation percent cover standards for the community, as outlined in Table 3-3. These standards must be met during post-disturbance monitoring procedures in order for the BLM/FFO to sign off on the attainment of vegetation reclamation standards.

Table 3-3. Reclamation goal for Sagebrush/Grass vegetation cover

Functional Group	Percent (%) Foliar Cover	Common Species
Trees/Shrubs/Grasses/Forbs	≥35	Utah Juniper-Pinyon pine; big sagebrush, four-wing saltbush , antelope bitterbrush, alkali sacaton, Western wheatgrass, Indian ricegrass, galleta, sand dropseed, scarlet globemallow, wooly Indianwheat , fleabane, Penstemon spp., buckwheat, threadleaf groundsel.
Invasive/Undesirables (10% allowed toward meeting standard of 35%)	≤10	Plants with a potential to become a dominant species and their presence is a detriment to revegetation efforts or the native plant community. Examples of invasive species include cheatgrass, Russian thistle, and kochia.

3.4 Pre-Disturbance Weed Survey

During the pre-disturbance site visit, the proposed action area was surveyed for noxious weeds listed on the New Mexico Department of Agriculture's A and B list. During the survey, no noxious weeds were found in the proposed action area. The Onsite Noxious Weed form was completed and signed by the BLM/FFO representative; the form is attached to this reclamation plan.

3.5 Pre-Disturbance Soil Evaluation

The BLM/FFO representative and Encana Representative collaboratively decided at the pre-disturbance site visit that no soil testing is necessary for the proposed project area.

3.6 Pre-Disturbance Site Photographs

Photographs were taken of the pre-disturbance site using a digital camera with 12-megapixel capability and without zoom or wide-angle adjustments. The location in North American Datum 83 Latitude/Longitude decimal degrees of each photo point (A through D) was recorded using a global positioning system (GPS). Each photograph in the Reclamation Plan is notated with the direction the photograph was taken and the GPS coordinates of the photo point. The photographs locations are listed in Table 3-4.

Table 3-4. List of required pre-disturbance site photographs

Photo Point	Photographs	Location Description
A	1, 2, 3, 4	From each well pad corner, looking toward the center stake
B	5, 6, 7, 8	Four Cardinal directions from the center stake
C	9	From the start point of the access road, toward the well pad
D	10	From the end of the access road at the well pad, toward the start of the access road.

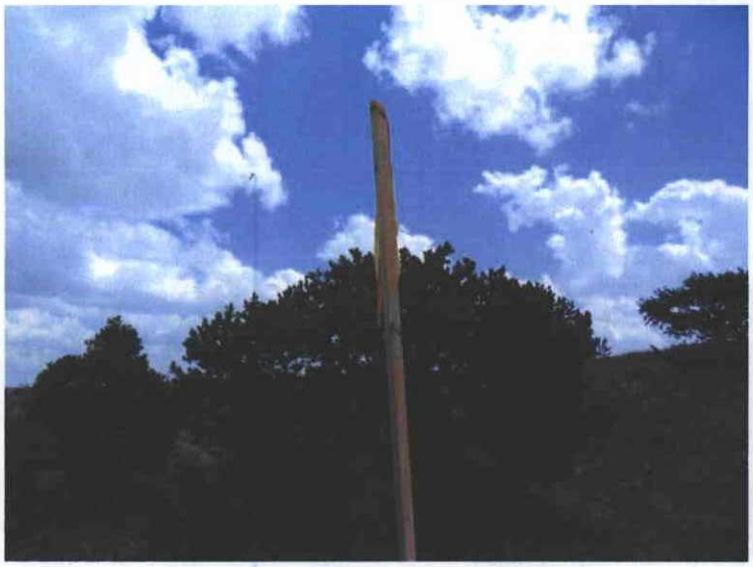
Location:	Lybrook I30-2306 01H (northeast corner 2)			
Photo Point:	A	**Photo Direction:**	Southwest	
Photo Number:	1	**GPS Coordinates:**	36.19522	-107.5014

Location:	Lybrook I30-2306 01H (northwest corner 6)			
Photo Point:	A	**Photo Direction:**	Southeast	
Photo Number:	2	**GPS Coordinates:**	36.19545	-107.5028

Location:	Lybrook I30-2306 01H (southeast corner 3)			
Photo Point:	A	**Photo Direction:**	Northwest	
Photo Number:	3	**GPS Coordinates:**	36.19412	-107.5017

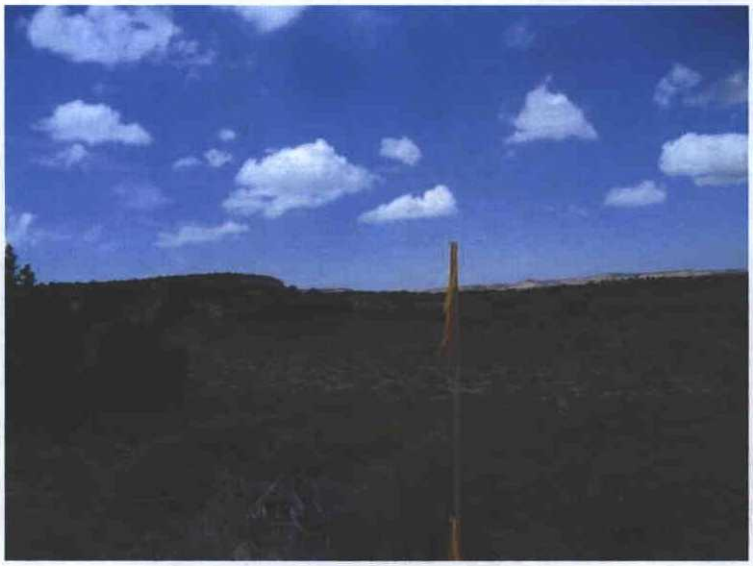
Location:	Lybrook I30-2306 01H (southwest corner 5)			
Photo Point:	A	**Photo Direction:**	Northeast	
Photo Number:	4	**GPS Coordinates:**	36.19438	-107.5031

Location:	Lybrook I30-2306 01H (center stake)			
Photo Point:	B	**Photo Direction:**	North	
Photo Number:	5	**GPS Coordinates:**	36.19479	-107.5022



Location:	Lybrook I30-2306 01H (center stake)			
Photo Point:	B	**Photo Direction:**	East	
Photo Number:	6	**GPS Coordinates:**	36.19479	-107.5022

Location:	Lybrook I30-2306 01H (center stake)			
Photo Point:	B	**Photo Direction:**	South	
Photo Number:	7	**GPS Coordinates:**	36.19479	-107.5022



Location:	Lybrook I30-2306 01H (center stake)			
Photo Point:	B	**Photo Direction:**	West	
Photo Number:	8	**GPS Coordinates:**	36.19479	-107.5022

Location:	Lybrook I30-2306 01H from the beginning of the access road/pipeline ROW			
Photo Point:	C	**Photo Direction:**	West	
Photo Number:	9	**GPS Coordinates:**	36.20094	-107.4999

Location:	Lybrook I30-2306 01H from the end of the access road/pipeline ROW			
Photo Point:	D	**Photo Direction:**	North	
Photo Number:	10	**GPS Coordinates:**	36.19520	-107.5016

4. RECLAMATION TECHNIQUES FOR SUCCESSFUL REVEGETATION

4.1 Vegetation and Site Clearing

Woody vegetation, such as large shrubs, will be cleared from the staked project area and stockpiled for later use as soil mulch, visual mitigation, and/or wildlife shelters.

Surface rocks (where present and useful for reclamation) will be stockpiled adjacent to the topsoil stockpile. During reclamation activities, the surface rock will be placed within the area of reclamation for erosion control or in a manner that visually blends with the adjacent undisturbed area.

4.2 Topsoil Stripping, Storage, and Replacement

At a minimum, the upper 6 inches of topsoil will be stripped, following vegetation and site clearing during construction of the pipeline. Encana (or its contractor) will take care not to mix topsoil with the underlying subsoil horizons and will stockpile the topsoil separately from subsoil or other excavated material. Topsoil and sub-surface soils will be replaced in the proper order, prior to final seedbed preparation.

4.3 Water Management/Erosion Control Features

The BLM/FFO representative and the Encana representative will work in collaboration to develop site-specific erosion control or water management features and to identify installation locations. Potential erosion control or water management features that may be used include (but are not limited to) waterbars

or rolling dips for roads, sediment basins or sediment traps, check dams, silt fencing, outlet protection for culverts, erosion control blankets or geotextiles, and straw wattles.

Encana (or its contractors) will use erosion control blankets, straw bales, or straw wattles as appropriate to limit erosion and sediment transport from any stockpiled soils.

A 24-inch minimum culvert will be installed where the new well pad access road meets the main road that is the existing roadway. Additional culverts will be installed as needed on the along the new and upgraded access roads.

4.4 Seedbed Preparation

For cut-and-fill slopes, initial seedbed preparation will consist of backfilling and re-contouring to achieve the configuration specified in the reclamation plan. Disturbed areas will be re-contoured to blend with the surrounding landscape, emphasizing restoration of the existing drainage patterns and landform to pre-construction condition, to the extent practicable.

Seedbed preparation for compacted areas will be ripped to a minimum depth of 12 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. Disking will be conducted if large clumps or clods remain after ripping. Any tilling or disking that occurs along the contour of the slope and seed drills will also be run along the contour to provide terracing and prevent rapid runoff and erosion. If broadcast seeding is used, a dozer or other tracked equipment will track perpendicular to the slope prior to broadcast seeding.

Following final contouring, the backfilled or ripped surfaces will be covered evenly with stockpiled topsoil. Final seedbed preparation will consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting. Seedbed preparation may not be necessary for topsoil storage piles or other areas of temporary seeding.

4.5 Soil Amendments

Based on information gathered at the on-site inspection and as a result of any soil testing conducted for the proposed project area, the Encana representative and the FFO representative have decided collaboratively that no soil amendments will be used during reclamation of the proposed project area.

4.6 Seeding

The seed mix chosen for this project area is listed in Table 3-2. Seeding will occur within 120 days of completion of project construction.

A Truax seed drill or modified rangeland drill that allows for seeding species from different seed boxes at different planting depths will be used to seed the disturbed areas of the site. Encana or its reclamation subcontractor will ensure that perennial grasses and shrubs are planted at the appropriate depth. Intermediate size seeds (such as wheatgrasses and shrubs) will be planted at a depth of 0.5 inch, larger seeds (such as Indian ricegrass) will be planted at a depth of at 1 to 2 inches, and small seeds (such as alkali sacaton and sand dropseed) will be planted at a depth of 0.25 inch. In situations where differing planting depths are not practicable with the equipment being used, the entire mix will be planted no deeper than 0.25 inch.

Drill seeding may be used on well-packed and stable soils that occur on gentler slopes and where tractors and drills can safely operate. Where drill seeding is not practicable due to topography, the contractor will hand-broadcast seed using a "cyclone" hand seeder or similar broadcast seeder. Broadcast application of seed requires a doubling of the drill-seeding rate. The seed will then be raked into the ground so the seed is planted no deeper than 0.25 inch below the surface.

4.7 Mulching

Hand seeding with hydro-mulch, excelsior netting and/or mulch with netting is required on the cut/fill slopes. Mulch should be grass or straw spread at 2,000 to 3,000 pounds/acre or 1 to 2-inches deep. Mulching will consist of crimping certified weed-free straw or certified weed-free native grass hay into the soil.

Straw or native grass hay mulch can be applied by hand broadcasting or blowing to a uniform depth of 2 to 3 inches, equivalent to a rate of about 2 tons per acre (one 74-pound bale per 800 square feet). When applied properly, approximately 20 to 40 percent of the original ground surface can be seen.

Straw or native grass hay mulch will then be anchored using one of the following methods:

- Hand Punching—a spade or shovel is used to punch straw into the soil at 12-inch intervals until all areas have straw standing perpendicular to the slope and the straw is embedded at least 4 inches into the soil.
- Roller Punching—a roller is used to spread mulch over an area; the roller is equipped with straight studs not less than 6 inches long, from 4 to 6 inches wide, and approximately 1 inch thick.
- Crimper Punching—like roller punching, a crimper is used over the soil. The crimper has serrated disk blades about 4 to 8 inches apart that force the mulch into the soil. Crimping should be done in two directions with the final pass across the slope.

Mulch applications in extremely clayey soils should be evaluated carefully to avoid developing an adobe mixture. In these cases, a soil amendment may prove more beneficial.

4.8 Noxious and Invasive Weed Control

Should noxious or invasive weeds be documented after earthwork and seeding activities, the BLM/FFO weed coordinator will provide Encana with specific requirements and instructions for weed treatments including the period of treatment, approved herbicides that may be used, required documentation to be submitted to the BLM/FFO after treatment, and any other site-specific instructions that may be applicable.

5. MONITORING REQUIREMENTS

Monitoring will be completed according to BLM/FFO Bare Soil Reclamation Procedure B (BLM 2013b). Monitoring activities will be initiated after the project is completed, during the post-disturbance earthwork and seeding inspection process.

5.1 Post-Disturbance Monitoring Initiation

During the post-disturbance inspection at the project site, the BLM/FFO representative (in collaboration with the Encana Representative) will determine site-specific monitoring locations for photo point monitoring and vegetation line point intercept transects. The BLM/FFO will GPS the monitoring locations, take the initial monitoring photographs, and complete the initial monitoring report within 60 days of the post-disturbance earthwork and seeding inspection. The initial report will be available from the BLM/FFO.

5.2 Post-Disturbance Monitoring Photographs

The minimum photo points to be documented for post-disturbance monitoring (including annual monitoring and long-term monitoring) are described in Table 5-1. Photographs will be taken with a digital camera with 12-megapixel capability and without zoom or wide-angle adjustments. GPS coordinates for each photo point will be provided by the BLM/FFO in the initial monitoring report and subsequently included with each photograph in the annual monitoring report.

Table 5-1. List of minimum required post-disturbance monitoring photographs

Photo Point	Photographs	Location Description

5.3 Annual Monitoring

Encana will begin annual monitoring of the photo points and the vegetation line point intercept transects 2 calendar years after the completion and approval of the earthwork and seeding. Monitoring may occur during any time of the year. A completed monitoring report of the permanent photo points will be submitted by Encana to the BLM/FFO by December 31 of the year the site is monitored. Within 60 days after receipt, the BLM/FFO will acknowledge that the report has been received and evaluated.

Vegetation line point intercept transects will be monitored annually until attainment of vegetation reclamation standards is met. Encana will keep a record of the monitoring for future submittal to the BLM/FFO at reclamation attainment.

5.4 Attainment of Vegetation Reclamation Standards

When vegetation on a reclaimed site appears to meet the required percent revegetation standard (see Section 3.3), Encana will submit to the BLM/FFO a written request for concurrence that revegetation standards have been attained. The request will include all annual transect data sheets and a current set of monitoring photographs. The BLM/FFO will review the request and approve or deny the request within 60 days of receipt. If the request is denied, the BLM/FFO may initiate a site inspection within 60 days of the denial to analyze the site and determine if remedy actions may be appropriate.

5.5 Long-Term Monitoring

After the required percent revegetation standard has been attained, Encana will begin long-term monitoring. Every fifth year after attainment, Encana will monitor the site at all established photo points to ensure the site remains productive and stable. A completed monitoring report of the permanent photo points will be submitted to the BLM/FFO by December 31 of the year the site is monitored. The BLM/FFO will acknowledge that the report has been received and evaluated within 60 days after receipt.

5.6 Final Abandonment

If 1 acre or more of bare soil results from earthwork required in preparation for final abandonment, Encana will follow the Vegetation Reclamation Plan in accordance with Procedure B of the BLM/FFO Bare Soil Reclamation Procedures (2013a).

If final abandonment or relinquishment earthwork results in less than 1 acre, but more than 0.1 acre of bare soil, Encana will initiate the Vegetation Reclamation Plan in accordance with Procedure A of the BLM/FFO Bare Soil Reclamation Procedures (2013a).

Revegetation percent cover standards will be attained, documented, and submitted to the BLM/FFO by Encana or an exception granted before the BLM/FFO will approve a final abandonment notice (FAN) or relinquishment.

5.7 Cessation of Monitoring

Monitoring requirements will remain in effect as long as the permit, grant, or authorization remains in force and until all infrastructure or associated facilities are abandoned by established BLM procedure and a FAN or relinquishment is issued by the BLM/FFO. Encana will document that percent cover standards have been obtained when submitting a request for a FAN or a relinquishment.

6. REFERENCES

43 CFR Part 3160, "Onshore Oil and Gas Order No. 1; Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Approval of Operations," 72 Federal Register 44 (March 2007), pp. 10328-10338.

BLM. 2013a. Farmington Field Office Bare Soil Reclamation Procedures. Available at: http://www.blm.gov/pgdata/etc/medialib/blm/nm/field_offices/farmington/farmington_planning/surface_use_plan_of.Par.69026.File.dat/FFO%20Bare%20Soil%20Reclamation%20Procedures%202-1-13.pdf. Accessed February 2013.

BLM. 2013b. Updated Reclamation Goals. Available at: http://www.blm.gov/nm/st/en/fo/Farmington_Field_Office/ffo_planning/surface_use_plan_of/updated_reclamation.html. Accessed February 2013.

U.S. Department of the Interior - U.S. Department of Agriculture (USDI-USDA). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST-06/021+307/REV 07. Bureau of Land Management. Denver, Colorado. 84 pp.

Onsite Noxious Weed Form

If noxious weeds are found during the onsite, fill out form and submit to FFO weed coordinator
Operator ENCANA CUSTER! Surveyor(s) JAIME D
Well Name and Number LYBROOK I30-2306 Date 9/12/13
Location: Township, Range, Section _____
Location of Project NAD 83 Decimal Degrees _____

Class A Noxious Weed – Check Box if Found

	Alfombrilla		Diffuse knapweed		Hydrilla		Purple starthistle		Yellow toadflax
	Black henbane		Dyer's woad		Leafy spurge		Ravenna grass		
	Camelthorn		Eurasian watermilfoil		Oxeye daise		Scotch thistle		
	Canada thistle		Giant salvinia		Parrotfeather		Spotted knapweed		
	Dalmation toadflax		Hoary cress		Purple loosestrife		Yellow starthistle		

Class B Noxious Weed – Check Box if Found

	African rue		Perennial pepperweed		Russian knapweed		Tree of heaven
	Chicory		Musk thistle		Poison hemlock		
	Halogeton		Malta starthistle		Teasel		

Comments:

none found

FFO Representative: _____ 9/12/13
sign and date
Operator Representative Brenda Richter 09/12/13
sign and date

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Appendix B

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,t he 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: ☐ Access Road to Well Pad		
Type of Inspection: ☐ Daily ☐ Monthly ☐ /ithin 72hours of a rain/snowmelt event ☐ 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

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Site Specific Information
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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 I30-2306 02H
SHL: NESE Section 30, T23N, R6W
1860' FSL and 606' FEL
BHL: SWSW Section 30, T23N, R6W
750' FSL and 330' FWL
Sandoval County, New Mexico
Lease Number: NMNM 117564

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.

Brenda R Linster 3/12/15

Date

Brenda R. Linster
Manager, Regulatory & Permitting
Encana Oil & Gas (USA) Inc.
370 17th Street, Suite 1700
Denver, CO 80202
Phone: (720) 876-3989
Cell: (970) 309-8106