## SELF-CERTIFICATION STATEMENT FROM LESSEE/OPERATOR



## SURFACE OWNER IDENTIFICATION

Well(s) Number and Location:

CCU Golden Creek 34-23MBH and the CCU Golden Creek 24-23MBH wells located in the NW/4NE/4 of Section 26, T147N-R95W, Dunn County, North Dakota.
I hereby certify that I have reached one of the following agreements with the Surface Owner:
1) I have a signed access agreement to enter the leased lands;
2) I have a signed waiver from the surface owner;
3) X I have an executed surface damage agreement from the surface owner regarding compensation for damages for loss of crops and tangible improvements.
Surface Owner Information: Surface Owner Name: Delry Schwalbe Surface Owner Address: Surface Owner Phone Number:
Signed this 13th day of April 2015.  Dan Flack, PTRRC Agent Burlington Resources Oil and Gas Company LP
STATE OF MONTANA § COUNTY OF YELLOWSTONE §
On this 197 day of April , in the year 2015, before me, personally
appeared, Dan Flack, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.
Notary Public in and for The State of North Dakota  Printed Name: BRANDON W. TREESE NOTARY PUBLIC for the State of Montana Residing at Billings, Montana My Commission Expires December 03, 2016  Notary Public in and for The State of North Dakota  Printed Name: BRANDON W. TREESE Residing in: Billings Montana  MY COMMISSION EXPIRES: DET 3, 2016

## **GEOPHYSICAL EXPLORATION AFFIDAVIT OF COMPLETION REPORT - FORM GE 6B**

INDUSTRIAL COMMISSION OF NORTH DAKOTA OIL AND GAS DIVISION 600 EAST BOULEVARD DEPT 405 BISMARCK, ND 58505-0840 SFN 51456 (03-2011)

PERMIT NAME (Required):	COP	Golden	Creek	
PERMIT NUMBER:	97-	0236		

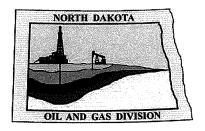
PERMIT NUMBER: 71-0236
AFFIDAVIT OF COMPLETION (GEOPHYSICAL CONTRACTOR)
STATE OF Colorado
COUNTY OF )
Before me, PANELA M TOHNSON, a Notary Public in and for the said
County and State, this day personally appeared
who being first duly sworn, deposes and says that (s)he is employed by
Hall, burton Energy Services , that (s)he has read North Dakota
Century Code Section 38-08.1, that the foregoing seismic project has been completed in
accordance with North Dakota Administrative Code Rule 43-02-12 and that the statements on
the reverse side of this document are true.
Geophysical Contractor Representative
Subscribed in my presence and sworn before me this day of
PAMELA M. JOHNSON NOTARY PUBLIC STATE OF COLORADO NOTARY ID 19874101186 MY COMMISSION EXPIRES MAY 01, 2018  Notary Public  Notary Public
My Commission Expires 400 01 500



# **GEOPHYSICAL EXPLORATION COMPLETION REPORT - FORM GE 6A**

INDUSTRIAL COMMISSION OF NORTH DAKOTA OIL AND GAS DIVISION 600 EAST BOULEVARD DEPT 405 BISMARCK, ND 58505-0840 SFN 51456 (03-2011)

Permit No.												
97-0236												
Shot Hole Opera	tions				·	*Non-Explosive Operations						
					Yes							
SECTION 1												
Geophysical Cor	ntractor											
Halliburton E	nergy Ser	vices										
Project Name an					·	County(s)						
COP Golden	Creek					Dunn						
Township(s)	_	_	_	_	_	Range(s)	_	_	_	_	_	
S26 T147						R95W						
Drilling and Pluge	ging Contracto	ors										
Date Commence	ed					Date Compl	eted					
March 26, 20	13					March 29	, 2013					
SECTION 2												
First S.P. #						Last S.P. #						
Loaded Holes (U	ndetonated S	hot Points)				•						
S.P.#'s												
Charge Size												
Depth												
Reasons Holes \	Vere Not Sho	t										
SECTION 3												
Flowing Holes ar S.P.#'s	id/or Blowouts	5										
Procedure for Plu	ugging Flowin	g Holes and/	or Blowouts								<u> </u>	
Include a 7.5 mir individual shot he	ole, SP #, line	e#, and legal	location.	p or a compl	iter generate	ea post-piot f	acsimile of t	ne approxim	ate scale dis	playing ea	icn	



# Oil and Gas Division

Lynn D. Helms - Director

Bruce E. Hicks - Assistant Director

#### **Department of Mineral Resources**

Lynn D. Helms - Director

#### North Dakota Industrial Commission

www.dmr.nd.gov/oilgas

MARCH 21, 2013

MR. PRICE STARK
HALLIBURTON
15579 E. HINSDALE CIR.
STE 102
CENTENNIAL, CO 80112-6900

RE:

COP GOLDEN CREEK

GEOPHYSICAL EXPLORATION PERMIT # 97-0236

**DUNN COUNTY** 

NON EXPLOSIVE METHOD

Dear Mr. Stark:

Please be advised that we are in receipt of your Geophysical Exploration (noise attenuation test) permit application and it is conditionally approved; effective for one year from MARCH 21, 2013. PURSUANT TO NDAC 43-02-12-05 (DISTANCE RESTRICTION) non-explosive exploration method may not be conducted not less than 300 feet from a water well, building, underground cistern, pipelines, and flowing spring. Review the following conditions for your permit:

- 1. A pre-program meeting with state seismic inspector Tom Torstenson is required. You must contact him at 701-290-1546 (cell) or 701-227-7436 at least 24 hours prior to any exploration operations. Also, a copy of the entire permit is required for all contractors at the pre-program meeting.
- 2. All variances for distance restrictions are to be furnished, and a pre-plot map displaying any source points that do not comply with the distance restriction rule must be supplied to the inspector.
- 3. The following information must be submitted within 30 days of the completion of the project by the Geophysical Company:
  - a. Completion Report,
  - b. Completion Affidavit,
  - c. Post Plot Map. It must show all water wells, buildings, underground cisterns, pipelines, and flowing springs that fall within the program area and within one half mile of the perimeter of the program.
  - d. SD card or email: <u>ttorstenson@nd.gov</u> with all source and receiver points,

- e. Letter stating that the Geophysical Company has given all surface owner's a copy of the Section and Chapter of the NDCC as stated in paragraph 5.
- 4. The following information must be submitted within 30 days of the completion of the project by the SUBCONTRACTOR(s) (when applicable):
  - a. Plugging Report
  - b. Plugging Affidavit
- 5. It is required that within seven days of initial contact between the permitting agent and the operator of the land, the permitting agent shall provide the operator of the land and each landowner owning land within one-half mile of the land on which geophysical exploration activities are to be conducted a written copy of NDCC Section 38-08.1-04.1 (Exploration Permit) and NDCC Chapter 38-11.1 (Oil and Gas Production Damage Compensation). The permitting agent shall file an affidavit with this office confirming compliance with such notification. For your convenience, a copy of both Sections are enclosed.
- 6. The permit agent shall notify the operator of the land at least seven days before commencement of any geophysical exploration activity, unless waived by mutual agreement of both parties. The notice must include the approximate time schedule and the location of the planned activity.
- 7. Information regarding the location of water wells, springs, etc.; refer to the following ND State Water Commission Mapservice website, at: http://mapservice.swc.state.nd.us/
- 8. The entire permit can be viewed, as well as the status of various seismic projects in the state, at: https://www.dmr.nd.gov/oilgas/seismic/seismicstats.asp

Should you have any questions regarding this matter, feel free to contact me at 701-328-8020, or Tom Torstenson at the number listed in paragraph 1.

Mom

Sincerely.

Todd L. Holweger DMR Permit Manager

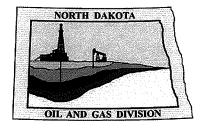


## **GEOPHYSICAL EXPLORATION PERMIT - FORM GE 1**

INDUSTRIAL COMMISSION OF NORTH DAKOTA OIL AND GAS DIVISION 600 EAST BOULEVARD DEPT 405 BISMARCK, ND 58505-0840 SFN 51459 (03-2011)

	SS 15 20 ST 81 FT	
13/4/3	MAR 2013	ENS'187
ZIII.	DOIL & GAS	17879
<b>1</b> 000	25 + 5 12	

1) a. Company		Address				State
Hallburton		15579 E Hind	dsale Cir. Suite	e 102 Center	nnial, CO 801 <sup>-</sup>	12
Contact		Telephone			Fax	
Price Stark		303-579-2088	8		303-766-4306	
Surety Company	_	Bond Amount			Bond Number	
Westchester Fire Ins	urance Company	\$25,000			K083	58977
2) a. Subcontractor(s)		Address			Telephone	
b. Subcontractor(s)		Address			Telephone	
Party Manager     Michael Brandt		Address (local)	<del></del>		Telephone (local 303-242-157	1
4) Project Name or Line COP Golden Creel						
5) Exploration Method (S Non-explosive	thot Hole, Non-Explosive, 2	D, 3D, Other)				
	(Must check all that apply)			<del></del>		
	osive - Distance setbacks a	anniv to water wells	s hulldings under	round deterne	ninelines and flow	dna carinac
						· · ·
	e - Distance setbacks appl	y to water wells, bu	ılldings, undergrou	nd cisterns, pipe	elines, and flowing	springs.
7) Size of Hole 3-D	Amt of Charge	Depth	Source points	s per sq. mi.	No. of sq. ml.	
Size of Hole 2-D	Amt of Charge	Depth	Source point	s per in mi.	No. of in. mi.	
8) Approximate Start Dat March 28, 2013	e			nate Completion	n Date	
	MIIST BE NOTIFIED AT	LEAST 24 HOLL			CENEUT OF OF	OPHYSICAL OPERATIONS
		LLA31 24 1100	NO IN ADVANCE	OF COMMEN	CEMENT OF GE	OPHTSICAL OPERATIONS
Location of Proposed I	Project - County					
Dunn	lo					
	Section	21			147	R. <b>95</b>
	Section	29			147	R. <b>95</b>
Section(s), Township(s)	Section	15		T.	147	R. <b>95</b>
& Range(s)	Section	16		T.	147	R. <b>95</b>
	Section	-		T.		R.
	Section			T,		R.
hereby swear or affirm th	eat the information provided	l is true complete :	and correct as deta	rmined from all	available records	Date
Signature		Printed Name	210 0011000 23 0010			March 14, 2013
orginature of the same of the		Price Stark		Titl	e ockies Project	Manager
mail Address(es)				1,133		
orice.stark@halliburton.co	m					
					Permit Co	onditions
	/This and 4- 04 4 22	n	ļ			
Parmit No.	(This space for State of			* Permit	t in hand required a	at pre-program meeting
Permit No. 970234 Approvaí Date 3/21/2013			with field inspector and be aware of all NDIC Rules and Regulations (i.e. distance restrictions).			
Approved by	1020 6 Hole	sec_		* See at	tached letter.	
Mineral Resources Permit Manager			269 81	ייייים ופונקו.		



# Oil and Gas Division

Lynn D. Helms - Director

Bruce E. Hicks - Assistant Director

#### **Department of Mineral Resources**

Lynn D. Helms - Director

#### **North Dakota Industrial Commission**

www.dmr.nd.gov/oilgas

MARCH 21, 2013

The Honorable Reinhard Hauck Dunn County Auditor 205 Owens Street Manning, ND 58642-0105

RE:

Geophysical Exploration

Permit #97-0236

Dear Mr. Hauck:

Pursuant to Section 38-08.1-04.2 of the North Dakota Century Code, please be advised that HALLIBURTON was issued the above captioned permit on MARCH 21, 2013 and will remain in effect for a period of one year. The entire permit can be viewed on our website at: <a href="https://www.dmr.nd.gov/oilgas/seismic/seismicstats.asp">https://www.dmr.nd.gov/oilgas/seismic/seismicstats.asp</a>

Should you have any questions, please contact our office.

Sincerely,

Todd L. Holweger DMR Permit manager

#### Holweger, Todd L.

From: Price Stark <price.stark@pinntech.com>
Sent: Wednesday, March 20, 2013 11:29 AM

**To:** Holweger, Todd L.

Cc:Michael Brandt; Cody CandlerSubject:COP Golden Creek Vibes

Todd,

I wanted to email to say that our intention is to vibe 5 locations, three of them on lease roads and two of them on ConocoPhillips' well pads. We will not vibe on any county roads during the operation. If there are any concerns please let Michael Brandt, Cody Candler or myself know. Thank you.

Sincerely, Price

Price Stark | Project Manager | Pinnacle - a Halliburton Service | c: 303-579-2088 | o: 303-571-8295

This e-mail, including any attached files, may contain confidential and privileged information for the sole use of the intended recipient. Any review, use, distribution, or disclosure by others is strictly prohibited. If you are not the intended recipient (or authorized to receive information for the intended recipient), please contact the sender by reply e-mail and delete all copies of this message.





#### Price Stark

Pinnacle - A Halliburton Service 15579 E. Hinsdale Cir. Ste 102 Centennial, CO 80112-6900 Phone: 303.579.2088 Fax: 303.766.4306 price.stark@pinntech.com www.pinntech.com 3/15/2013

Mr. Todd Holweger NDIC tholweger@nd.gov

Pinnacle Microsesimic will be performing a vibe orientation for the upcoming treatment of the Golden Creek No. 24-23MBH and 34-23MBH lateral wells in Dunn County, ND (S26, T147, R95W). The expected timeframe for this operation is from March 22<sup>nd</sup> through March 31<sup>st</sup> 2013.

Pinnacle will rig-in a geophone toolstring in the nearby Golden Creek No. 33-23PH vertical well on March 22, 2013. These geophones require a known signal source to orient themselves to the physical world around them which will be accomplished using surface vibroseis signals.

This process will involve the use of a mini-vibroseis unit to perform 3, 12 second viberoseis sweeps at several locations in the surrounding area. An image of the vibroseis unit is provided in Figure 1. For the purposes of this project all vibe locations are on existing well pads and access roads. These vibe locations and their relative positions to the treatment and observation wells are provided below in Figure 2.

Due to the unknown nature of field operations the vibroseis orientation may need to be repeated during the fracture treatment if mechanical issues force the geophone toolstring to be replaced. This will involve a repeat of the same 12 second vibroseis sweeps at the same locations.



Figure 1





Figure 2

If there are any questions or concerns please contact me.

Sincerely,

Price Stark Rockies Project Manager

Pinnacle – a Halliburton Service

C: 303-579-2088

price.stark@pinntech.com

# VIBE LOCATION PLAT Burlington Resources, Inc.

P.O. Box 877 Baker, Montana 59313 3300 North A Street, Building 6, Midland, Texas 79705-5406

CCU Vibe Locations #1 & #2

1188 feet from the south line and 2360 feet from the east line (#1 surface location)

1083 feet from the south line and 450 feet from the east line (#2 surface location)

Section 21, T. 147 N., R. 95 W., 5th P.M.

Dunn County, North Dakota
Surface owner @ well site — Shirley Kleemann
Latitude 47'32'04.025" North; Longitude 102'47'19.986" West (#1 surface location)
Latitude 47'32'02.947" North; Longitude 102'46'52.155" West (#2 surface location)

[Derived from OPUS Solution NAD-83(2011)] iron Rebar & LS 4172 Aluminum Cap Found 090°25'38" - 2642.59' (Meas.) Mound of Stone & LS 1238 Yellow Plastic Cap Found 090°08'07" - 2635.27' (Meas.) Section Line Original Stone, Pits & LS 5999 Aluminum Cap Found (Meas.) 2656.09 1/16 Line <del>NW1</del> ≠4 NE1 / 359.59'18" Original Post & LS 3214 1/4 Line Aluminum ŝ 2633.56 2360' 1/16 Line SW1 SE1+ 450' Vibe #1 Site Vibe #2 Site ١ Elevation Elevation 2389' MSL 2406' MSL 1083 Original Stone Aluminum Cap Found

#### Scale 1"=1000"

Confidentiality Notice: The information contained on this plat is legally privileged and confidential information intended only for the use of recipients. If you are not the intended recipients, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.

I, Quentin Obrigewitsch, Professional Land Surveyor, N.D. No. 5999, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief.

2637.33

(Meas.)

Section Line

090'06'53"

NOTE: All land corners are assumed unless otherwise noted. The well location shown heron is not an as-built location.

10/16/2012 Brian Schmalz

090'09'33" - 2637.12' (Meas.)

Surveyed By N.D.P.L.S. # 6809

iron Rebar & LS 3214(

Vertical Control Datum Used North American Vertical Datum 1988 (NAVD 88)

Based on elevation derived from OPUS Solution on GPS\*21-147-95 (iron rebar) Located a distance of 767.34' on an azimuth of 057°20'54" from the SW corner of Section 21, T.147N., R.95W., 5th P.M. being at 2411.55' Elevation MSL.

Project No. 37121214, 37121215 Book OW-306 Pg. 5-6 Staking

Date Professional Consulting Engineers

and Surveyors Registered in North Dakota, South Dakota

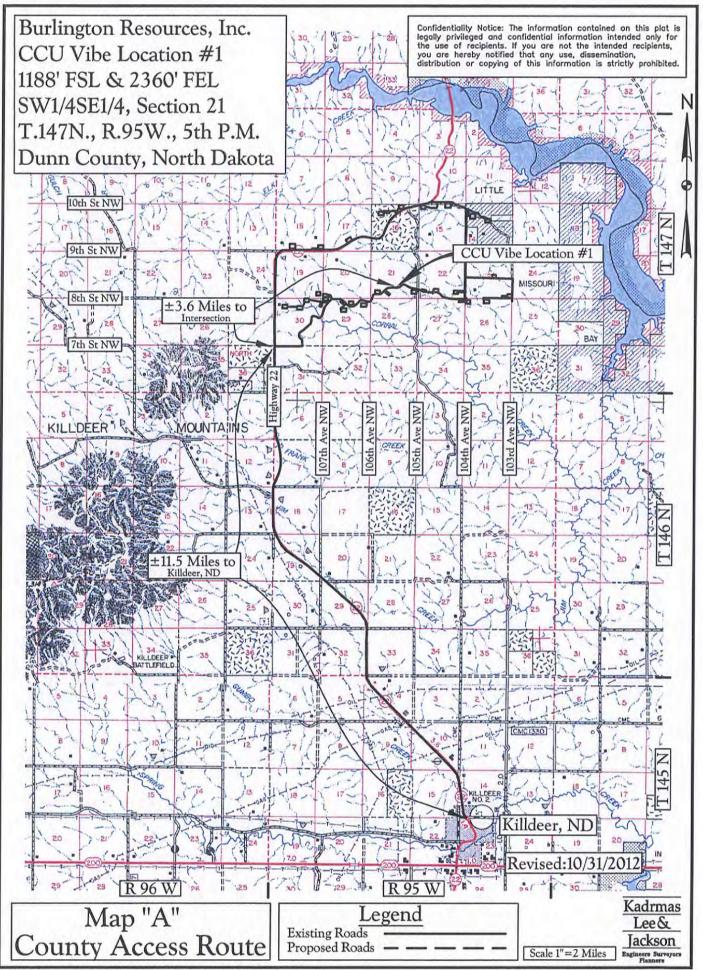
Montana, Wyoming & Minnesota Tele-Fax No. 701-483-2795 Bus. Phone No. 701-483-1284 P.O. Box 290 677 27th Ave. East

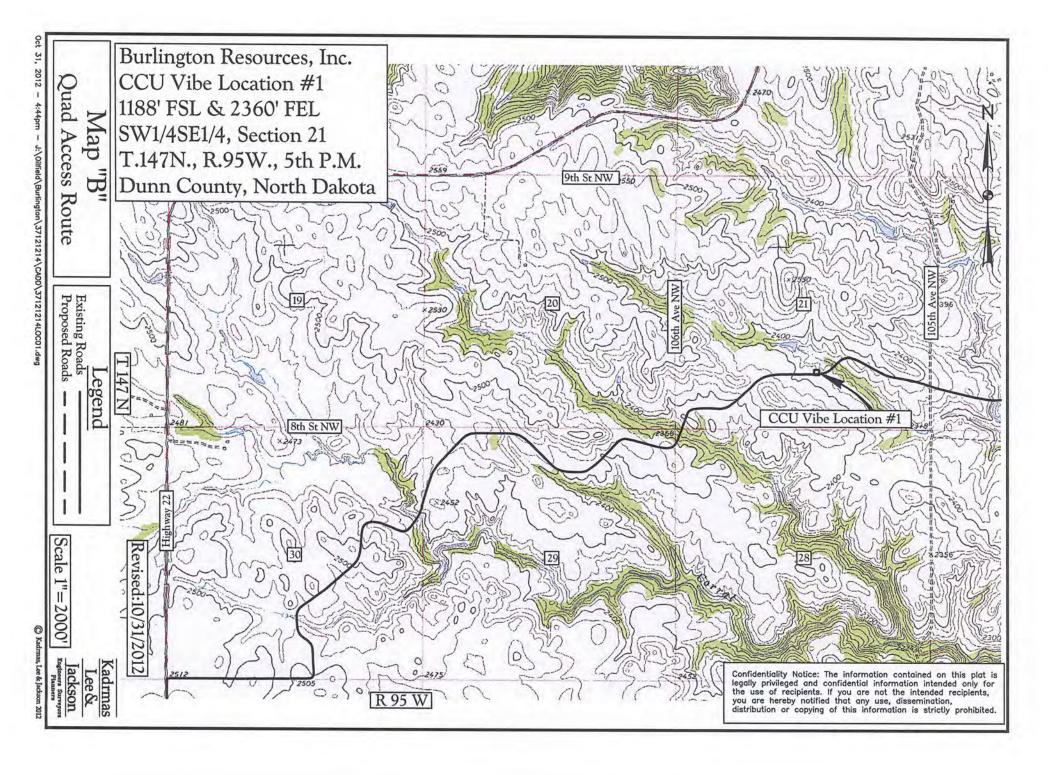
Dickinson, North Dakota 58602 Certificate of Authorization #C-061

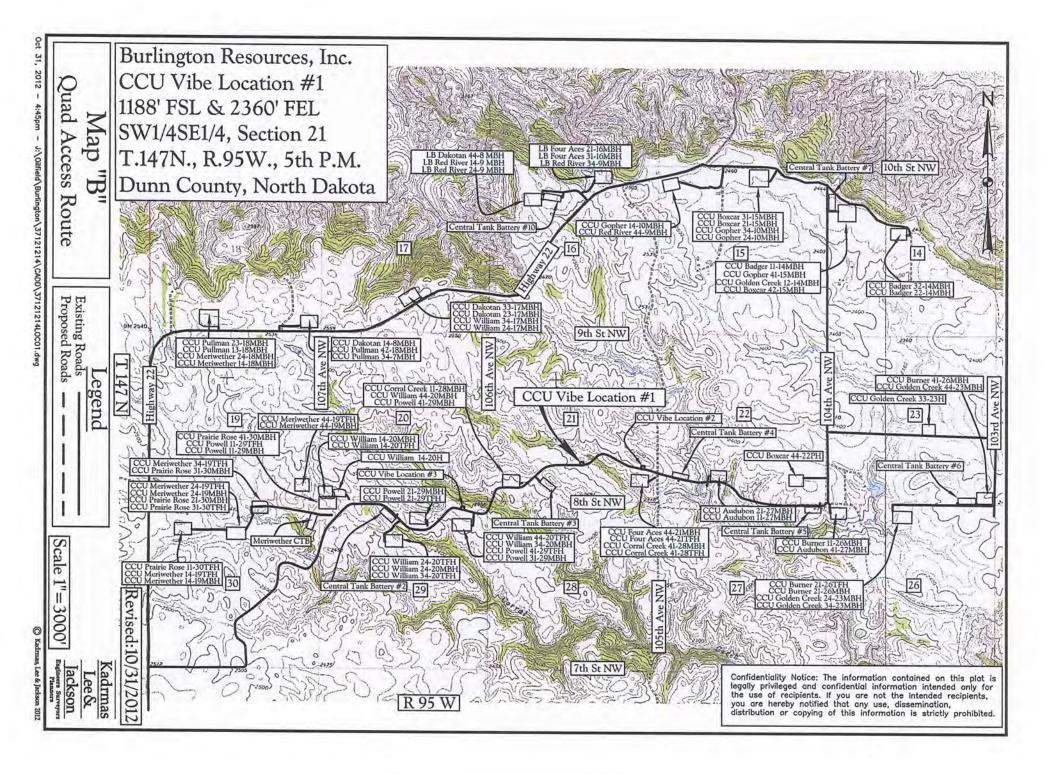


Kadrmas Lee & lackson Engineers Surveyor Planners

LS 3498







# VIBE LOCATION PLAT Burlington Resources, Inc.

P.O. Box 877 Baker, Montana 59313 3300 North A Street, Building 6, Midland, Texas 79705-5406

CCU Vibe Location #3

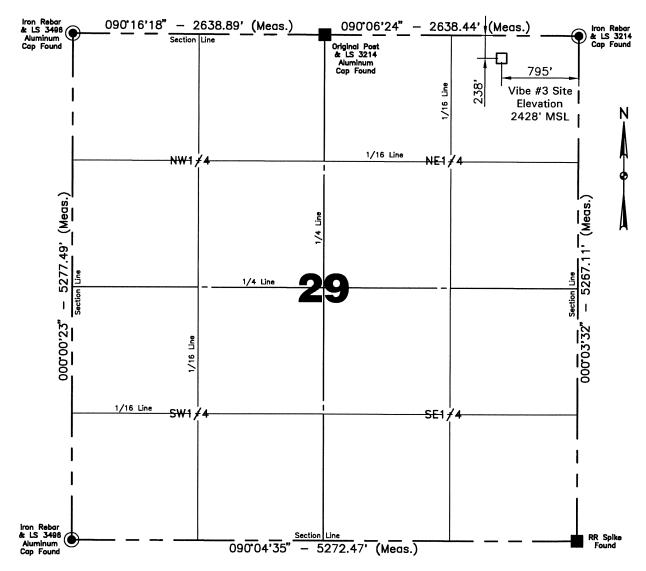
238 feet from the north line and 795 feet from the east line (surface location)

Section 29, T. 147 N., R. 95 W., 5th P.M.

Dunn County, North Dakota

Surface owner @ well site — Rick Rice
Latitude 47'31'50.032" North; Longitude 102'48'14.060" West (surface location)

[Derived from OPUS Solution NAD-83(2011)]



Confidentiality Notice: The information contained on this plat is legally privileged and confidential information intended only for the use of recipients. If you are not the intended recipients, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.

Scale 1"=1000'

I, Quentin Obrigewitsch, Professional Land Surveyor, N.D. No. 5999, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief.

NOTE: All land corners are assumed unless otherwise noted. The well location shown heron is not an as-built location.

Brian Schmalz 10/16/2012

Surveyed By N.D.P.L.S. # 6809

Vertical Control Datum Used North American Vertical Datum 1988 (NAVD 88)

Based on elevation derived from OPUS Solution on GPS\*21-147-95 (iron rebar) Located a distance of 767.34' on an azimuth of 057°20'54" from the NE corner of Section 29, T.147N., R.95W., 5th P.M. being at 2411.55' Elevation MSL.

Project No	).	371212	16	
Book OW-30	06 Pg	5-6	Staking	

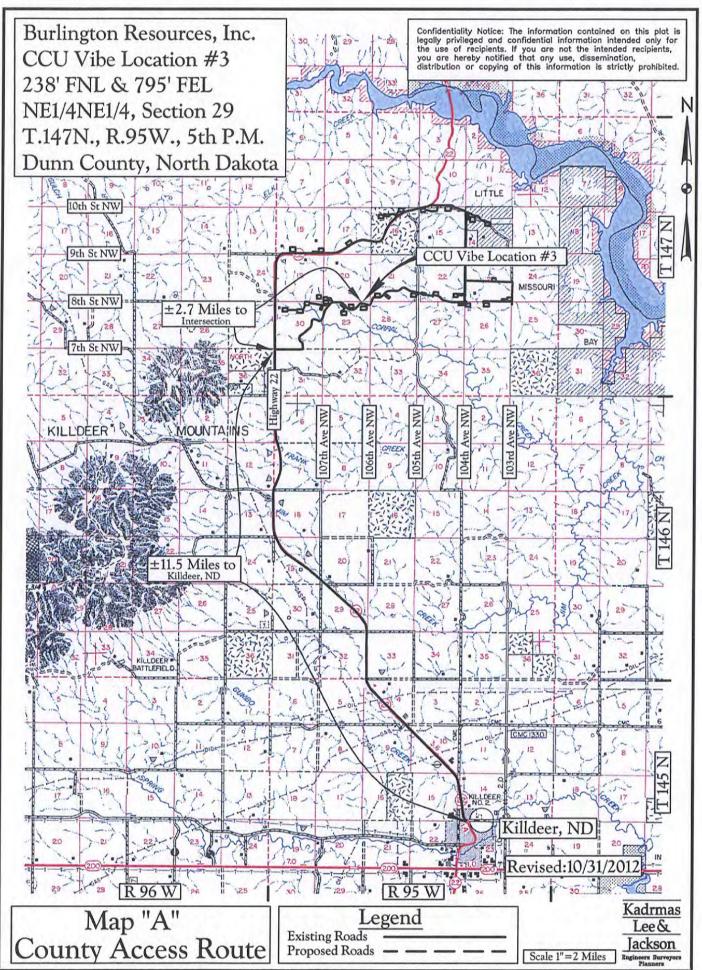
Date Professional Consulting Engineers and Surveyors Registered in North Dakota, South Dakota Montana, Wyoming & Minnesota

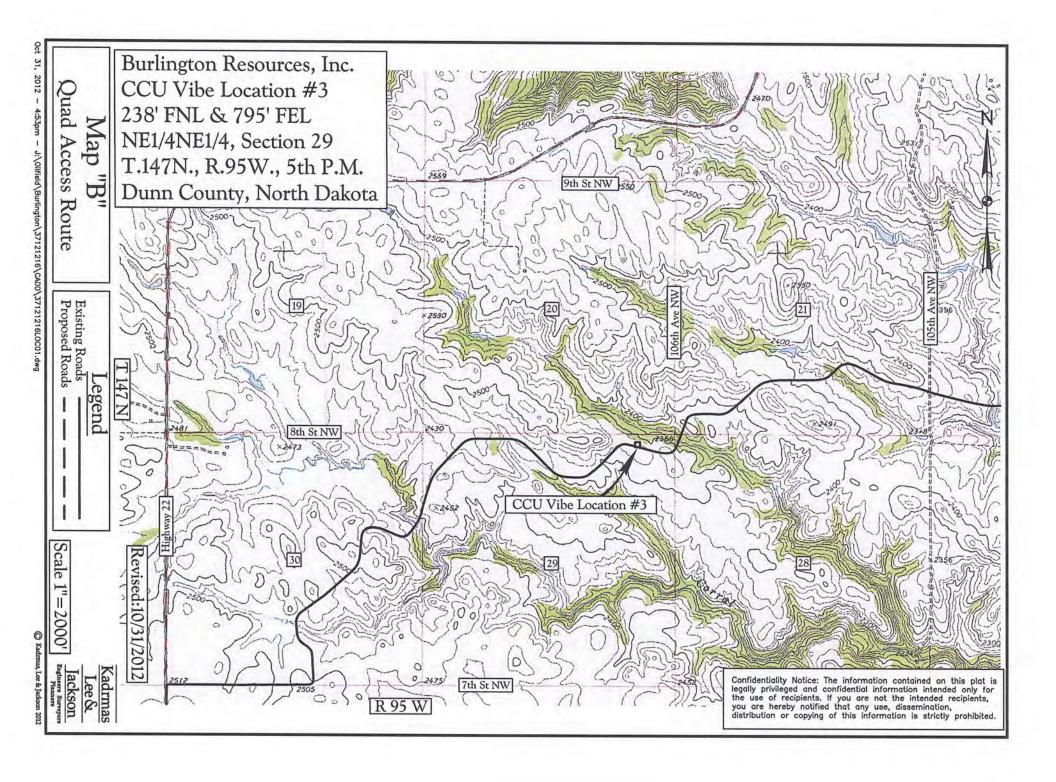
Tele-Fax No. 701-483-2795 Bus. Phone No. 701-483-1284 P.O. Box 290 677 27th Ave. East Dickinson, North Dakota 58602

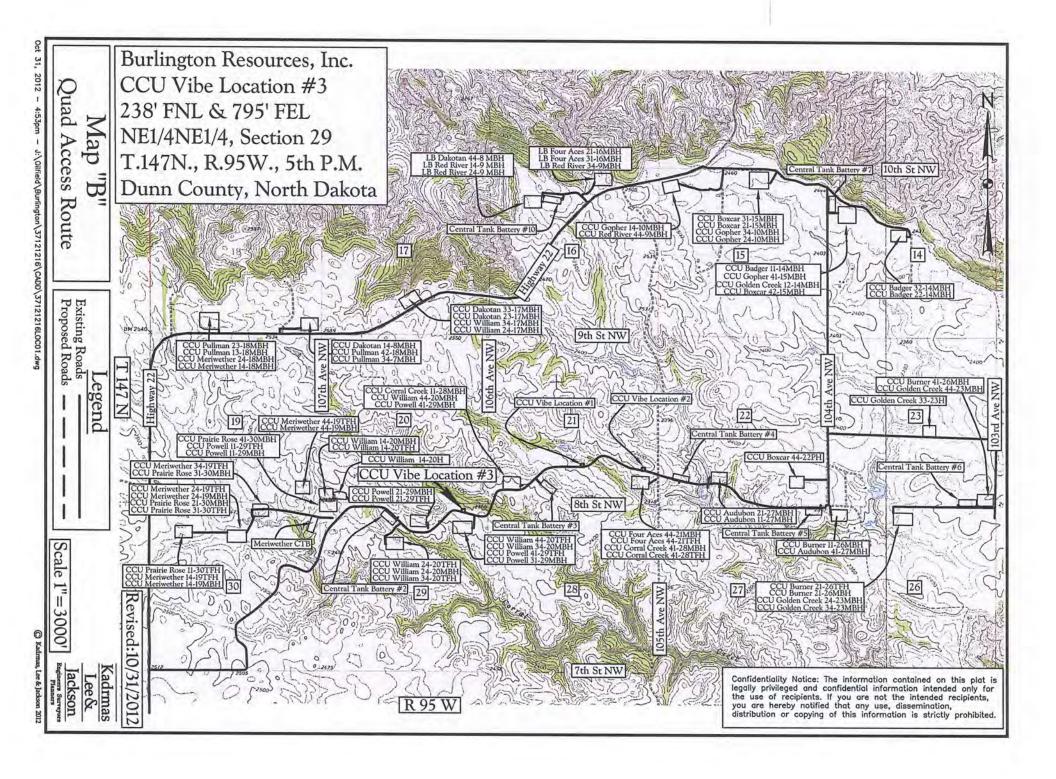
Certificate of Authorization #C-061



Kadrmas Lee & **Iackson** Engineers Survey Planners







# WELL LOCATION PLAT

Burlington Resources, Inc.

P.O. Box 877 Bake 3300 North A Street, Building 6 Baker, Montana 59313 Midland, Texas 79705-5406

### Boxcar #21-15H

325 feet from the north line and 1465 feet from the west line (surface location)

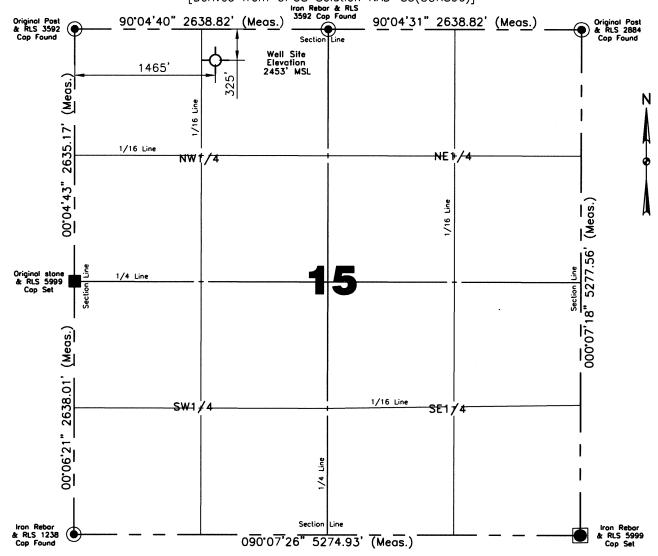
Section 15, T. 147 N., R. 95 W., 5th P.M.

Section 22, T. 147 N., R. 95 W., 5th P.M. (bottom hole location)
Dunn County, North Dakota

Surface owner @ well site - Tom & Twila Benz

Latitude 47°33'33.13" North; Longitude 102°46'24.04" West (surface location)

[Derived from OPUS Solution NAD-83(CORS96)]



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NOTE: All land corners are assumed unless otherwise noted. The well location shown hereon is not an as-built location.

#### Scale 1"=1000"

I, Rick Leach, Professional Land Surveyor, N.D. No. 3496, do hereby certify that the survey plot shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge

5/22/2008 Quentin Obrigewitsch Date

Surveyed By N.D.P.L.S. # 5999

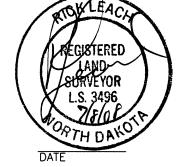
Vertical Control Datum Used Sea-Level Datum of NAVD 88

Based on elevation derived from OPUS Solution on GPS\* KLJ Spud 1 locoted a distance of 2281.49' © 072'11'49" from the Nw corner of Section 15 T147N., R 95W., being at 2461.03' Elevation MSL.

3708337 Project No. Book <u>OW-188</u> Pg.\_ <u>7-24</u> Staking

and Surveyors Registered in North Dakota, South Dakota Montana, Wyoming & Minnesota Tele-Fax No. 701-483-2795 Bus. Phone No. 701-483-1284 P.O. Box 290 677 27th Ave. E. Dickinson, North Dakota 58602 Certificate of Authorization €C-061

Professional Consulting Engineers



Kadrmas Lee & Tackson | Engineers Surveyor Planners

## HORIZONTAL SECTION PLAT

Burlington Resources, Inc.

P.O. Box 877 Baker, Montana 59 A Street, Building 6 Midland, Texas 59313 3300 North A Street, Building 6 79705-5406

#### Boxcar #21-15H

325 feet from the north line and 1465 feet from the west line (surface location)

Section 15, T. 147 N., R. 95 W., 5th P.M.

Section 22, T. 147 N., R. 95 W., 5th P.M. (bottom hole location)

Dunn County, North Dakota

Surface owner @ well site — Tom & Twila Benz

Latitude 47°33'33.13" North; Longitude 102°46'24.04" West (surface location) [Derived from OPUS Solution NAD-83(CORS96)]

090'04'40 #592 Cop Found 090'04'31" Original Post & RLS 3592 Cop Found 090'04'40" 090'04'31" Original Post & RLS 2884 Cap Found 1319.41 1319.41 1319.41 1319.41 Section Surface Location 000007'18" 325' FNL & 1465' FWL 000.06,25 92 000°05'34" 1/16 Line 1318. ,90.000 1318. 1318.02 090°05'48" 090'05'43" 090'05'48" 090'05'43" MM 1319.09 1319.09 1319.24 1319.24 000.04'43" 1317.59' 000'05'34" \_000°07'18" \_1319.39' 000.06'52" 000.06,25 1318.02 318 œ 090'06'56" Ë Original stone & RLS 5999 Cop Set 090'06'56" 090'06'56" 090'06'56" 1/4 Line 1318.76 1318.76 1319.07 1319.07 Section 000.07.18" s 1319.39' 000.06'51" 000.06'23" 000.06,25 19.29 000.06,51 1319.01 1319.10 1319.20 5 090'07'11" 090'07'11" 090'07'11" 090'07'11" 1/16 Line 1318.75 1318.75 1318.90 1318.90 000°07'18" 1319.39 000'06'23" 000.06'25" 000<u>06'21'</u> 1319.01' 1319.10 5 1319.20 319.29 .90.000 090'07'26" Section Line Iron Rebor & RLS 1238 Cop Found 090'07'26" 090'07'26" 090'07'26" & RLS 5999 Cop Set 1318.73' 1318.73' 1318.73' 1318.73<sup>1</sup>

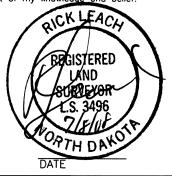
#### Scale 1"=1000"

Confidentiality Notice: The information contained on this plat is legally privileged and confidential information intended only for the use of recipients. If you are not the intended recipients, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.

All corners shown on this plot were found in the field during Burlington Resources Boxcor #21-15H oil well survey on May 22, 2008.
Distances to all others are colculated. All azimuths are based on the east line of Section 15, being on an azimuth of 000°07°18".

Surveyed By	Field Book
Q. Obrigewitsch	OW-188
Computed & Drown By	Project No.
M. Meismer	3708337

I, Rick Leach, Professional Lond Surveyor, N.D. No. 3496, do hereby certify that the survey plot shown hereon was made by me, or under my direction, from notes mode in the field, and the same is true and correct to the best of my knowledge and belief.



Kadrmas Lee & <u>Jackson</u> Engineers Surveyor Planners

# HORIZONTAL SECTION PLAT Burlington Resources, Inc.

P.O. Box 877 Baker, Montana 59313 3300 North A Street, Building 6 Midland, Texas 79705-5406

#### Boxcar #21-15H

Section 22, T. 147 N., R. 95 W., 5th P.M.

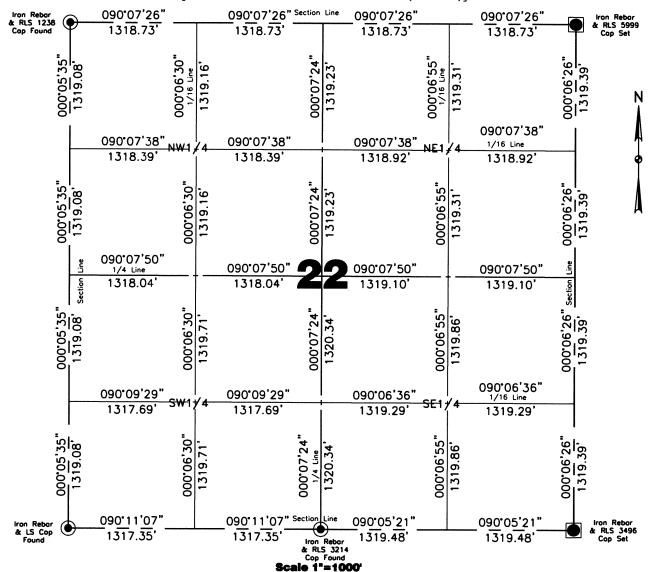
Section 22, T. 147 N., R. 95 W., 5th P.M. (bottom hole location)

Dunn County, North Dakota

Surface owner @ well site — Tom & Twila Benz

Latitude 47°33'33.13" North; Longitude 102°46'24.04" West (surface location)

[Derived from OPUS Solution NAD-83(CORS96)]

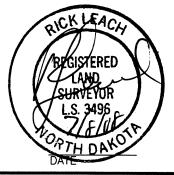


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All corners shown on this plat were found in the field during Burlington Resources Boxcar #21-15H oil well survey on May 22, 2008. Distances to all others are calculated. All azimuths are based on the east line of Section 22, being on an azimuth of 000°06'26".

Surveyed By	Field Book
Q. Obrigewitsch	OW-188
Computed & Drawn By	Project No.
M. Meismer	3708337

I, Rick Leach, Professional Land Surveyar, N.D. No. 3496, do hereby certify that the survey plot shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief.



Kadrmas Lee & **Jackson** Engineers Surveyor Planners

# **BOTTOM HOLE LOCATION PLAT**

Burlington Resources, Inc.

P.O. Box 877 Baker, Montana 59313 3300 North A Street, Building 6 Midland, Texas 79705-5406

Boxcar #21-15H

325 feet from the north line and 1465 feet from the west line (surface location)

Section 15, T. 147 N., R. 95 W., 5th P.M.

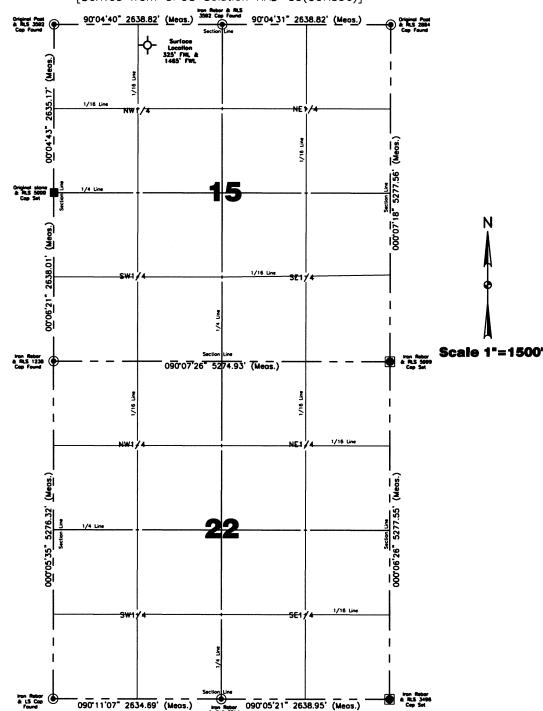
Section 22, T. 147 N., R. 95 W., 5th P.M. (bottom hole location)

Dunn County, North Dakota

Surface owner @ well site — Tom & Twila Benz

Latitude 47°33'33.13" North; Longitude 102°46'24.04" West (surface location)

[Derived from OPUS Solution NAD-83(CORS96)]



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Surveyed By	Computed & Drawn By	Approved By	Scale	Date
Q. Obrigewitsch	M. Meismer	Rick Leach	1"=1500'	7/07/08
Field Book	Material	Revised	Project No.	Drawing No.
OW-188	B.H. Lavout	_	3708337	4

Kadrmas Lee& Jackson Engineers Surveyo

# Burlington Resources, Inc. Boxcar #21-15H Section 15, T. 147 N., R. 95 W., 5th P.M. Dunn County, North Dakota

Well	Site	Elevation	2453.4'	MSL
Well	Pad	Elevation	2451.7	MSL

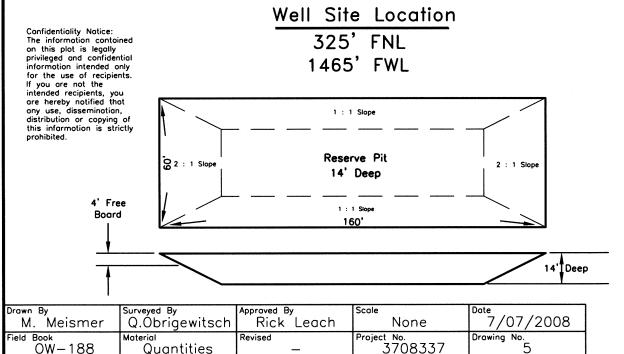
Excavation Plus Pit	10,880 C.Y. 3,150 C.Y. 14,030 C.Y.
Embankment Plus Shrinkage (+30%)	5,565 C.Y. 1,670 C.Y. 7,235 C.Y.
Stockpile Pit	3,150 C.Y.
Stockpile Top Soil (6")	3,250 C.Y.
Production Rehabilitation	0 C.Y.
Road Embankment & Stockpile from Pad	395 C.Y.
Disturbed Area From Pad	4.03 Acres

### NOTE:

All cut end slopes are designed at 1:1 slopes & all fill end slopes are designed at 1 1/2:1 slopes

Project No.

3708337



Revised

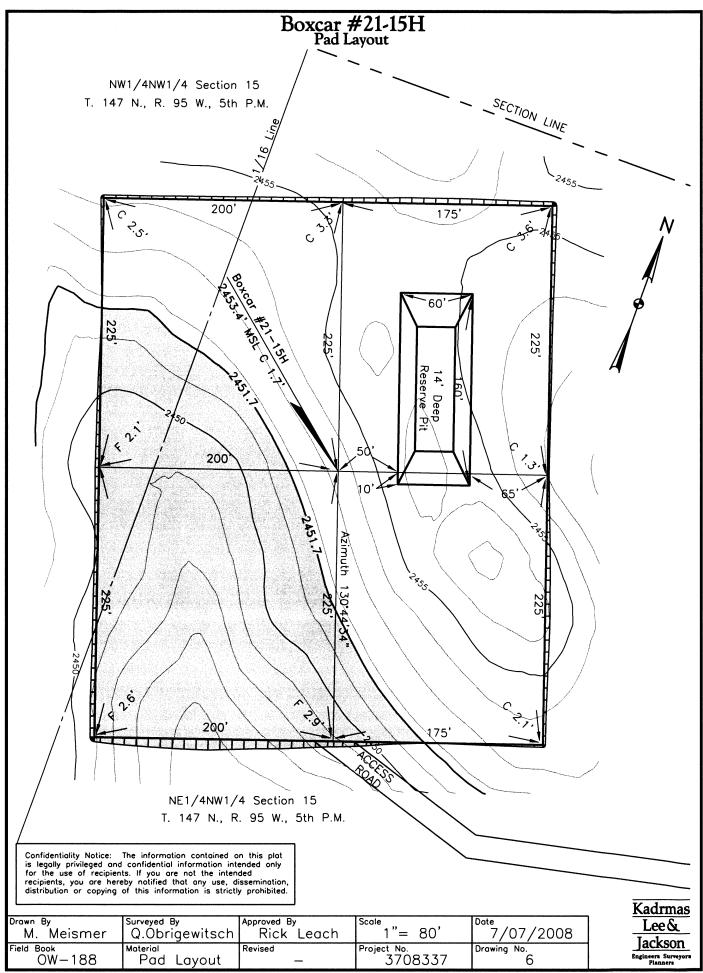
**Kadrmas** Lee & **Tackson** 

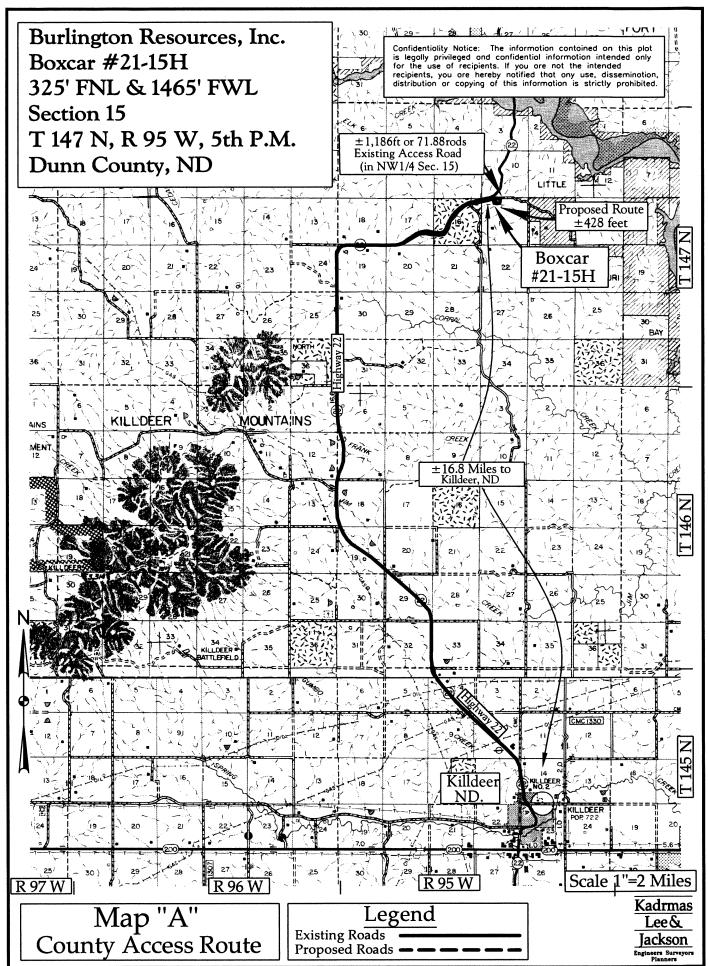
Quantities

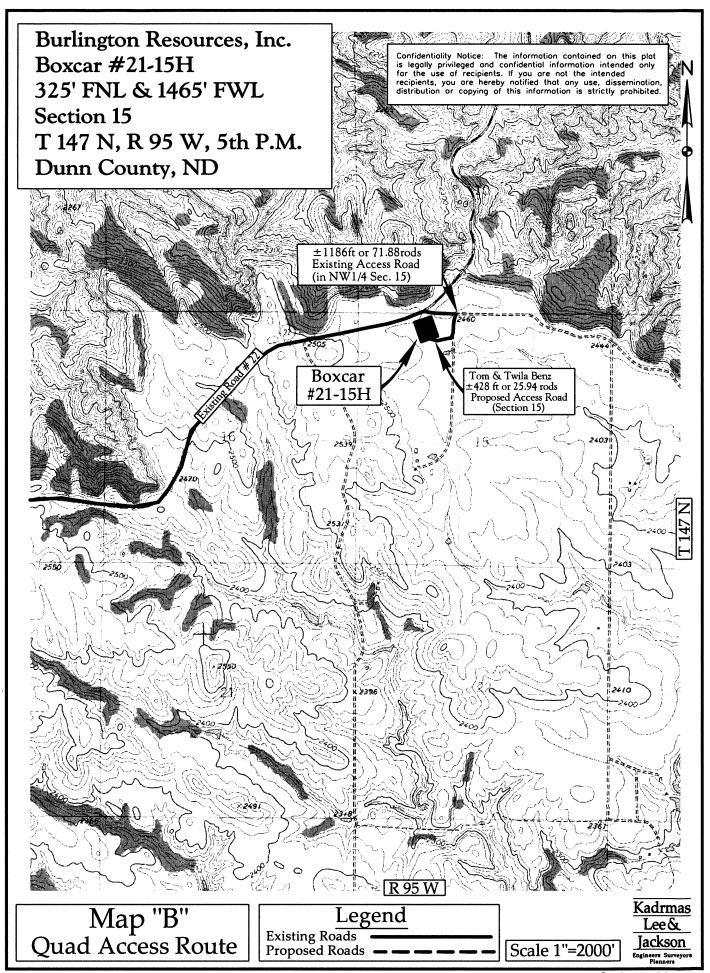
Material

ield Book

0W-188







## WELL LOCATION PLAT Burlington Resources, Inc. P.O. Box 877 Baker, Montana 5931 A Street, Building 6 Midland, Texas 59313 3300 North A Street, Building 6 79705-5406 Four Aces #11-16H 425 feet from the north line and 1293 feet from the west line (surface location) Section 16, T. 147 N., R. 95 W., 5th P.M. Section 21, T. 147 N., R. 95 W., 5th P.M. (bottom hole location) Dunn Country, North Dakota Surface owner @ well site - State of North Dakota Latitude 47°33'32.29" North; Longitude 102°47'43.34" West (surface location) [Derived from OPUS Solution NAD-83(CORS96)] 090°11'39" <u>5266.18' (Meas.)</u> Iron Rebor WC 7.92' From Corner & RLS 3496 Cop Found Original Post & RLS 3592 Cap Faund Section Line Well Site Elevation 2534' MSL 1293 1/16 2635.17 1/16 Line NE # NW # /4 Ŀ Original Stone & RLS 5999 1/4 Line 13.05" . |8 2638.01 1/16 Line SE1 Section 090°25'38" 2642.59' (Meas.) 090°08'09" 2635.20' (Meas.) Original Stone & RLS 5999 Cap Confidentiality Notice: The information contained on this plot is legally privileged and confidential information intended only for the use of recipients. If you are not the intended recipients, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited. Scale 1'=1000' I, Rick Leach, Professional Land Surveyor, N.D. No. 3496, da hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief. NOTE: All land corners are assumed unless otherwise noted. RICK LEACH The well location shown hereon is not an as-built location.

# Quentin Obrigewitsch 5/22/2008 Surveyed By N.D.P.L.S. # 5999 Date

Vertical Control Datum Used Sea—Level Datum of NAVD 88

Based on elevation derived from OPUS Salution on GPS\* KLJ Spud 1 located o distance of 2281.49' © 072'11'49" from the NE corner of Section 16 T147N., R 95W., being at 2461.03' Elevation MSL.

Project No. 3708336

Book <u>OW-188 Pg. 7-24</u> Staking

Professional Consulting Engineers and Surveyors
Registered in
North Dakota, South Dakota
Montana, Wyoming & Minnesota
Tele—Fax No. 701-483-2795
Bus. Phone No. 701-483-1284
P.O. Box 290
677 27th Ave. E.
Dickinson, North Dakota 58602
Certificate al Authorization €C-061

RECISTERED
LAND
SORVEYOR
L.S. 3496
777H DANO
DATE

Kadrmas
Lee &

Jackson

Engineers Surveyors
Planners

# HORIZONTAL SECTION PLAT Burlington Resources, Inc.

P.O. Box 877 Baker, Montana 593 A Street, Building 6 Midland, Texas 59313 3300 North A Street, Building 6 Midland, Four Aces #11-16H 79705-5406

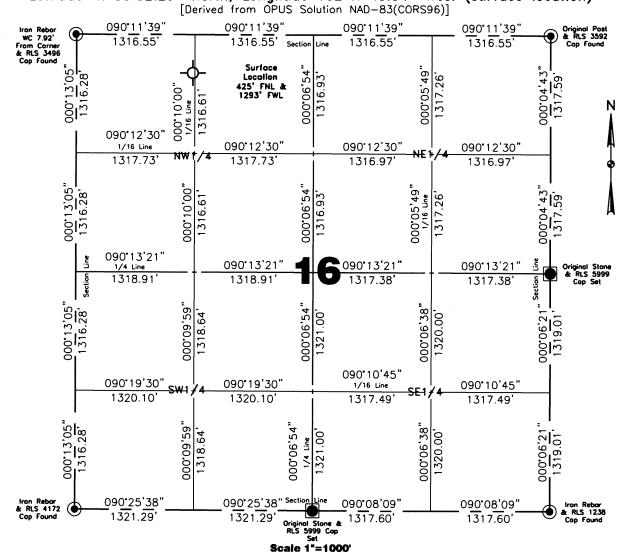
Section 21, T. 147 N., R. 95 W., 5th P.M.

Section 21, T. 147 N., R. 95 W., 5th P.M. (bottom hole location)

Dunn County, North Dakota

Surface owner @ well site — State of North Dakota

Latitude 47°33'32.29" North; Longitude 102°47'43.34" West (surface location)

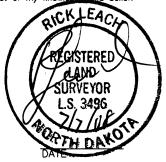


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All corners shown on this plat were found in the field during Burlington Resources Four Aces #11-16H oil well survey on May 22, 2008.
Distances to all others are colculated. All azimuths are based on the west line of Section 16, being on an azimuth of 000'13'05".

Surveyed By	Field Book	
Q. Obrigewitsch	OW-188	
Computed & Drawn By	Project No.	
M. Meismer	3708336	

I, Rick Leach, Professional Land Surveyor, N.D. No. 3496, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief.



Kadrmas Lee & Jackson

# HORIZONTAL SECTION PLAT Burlington Resources, Inc.

P.O. Box 877 Baker, Montana 5931 3300 North A Street, Building 6 Midland, Texas Four Aces #11-16H 59313 79705-5406

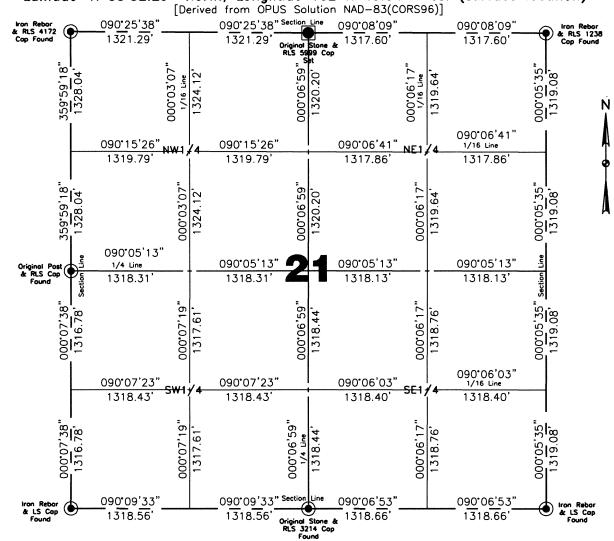
425 feet from the north line and 1293 feet from the west line (surface location)

Section 16, T. 147 N., R. 95 W., 5th P.M.
Section 21, T. 147 N., R. 95 W., 5th P.M. (bottom hole location)

Dunn County, North Dakota

Surface owner @ well site — State of North Dakota

Latitude 47°33'32.29" North; Longitude 102°47'43.34" West (surface location)



Scale 1"=1000'

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Distances to all others are calculated. All azimuths are based on the east line of Section 21, being on an azimuth of 000°05'35".

Surveyed By	Field Book	
Q. Obrigewitsch	OW-188	
Computed & Drawn By	Project No.	
M. Meismer	3708336	

I, Rick Leach, Professional Land Surveyor, N.D. No. 3496, do hereby certify that the survey plot shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief.



Kadrmas Lee & **Jackson** Engineers Surveyors Planners

# BOTTOM HOLE LOCATION PLAT Burlington Resources, Inc.

P.O. Box 877 Bake 3300 North A Street, Building 6 Baker, Montana 59313 ng 6 Midland, Texas 79705—5406

#### Four Aces #11-16H

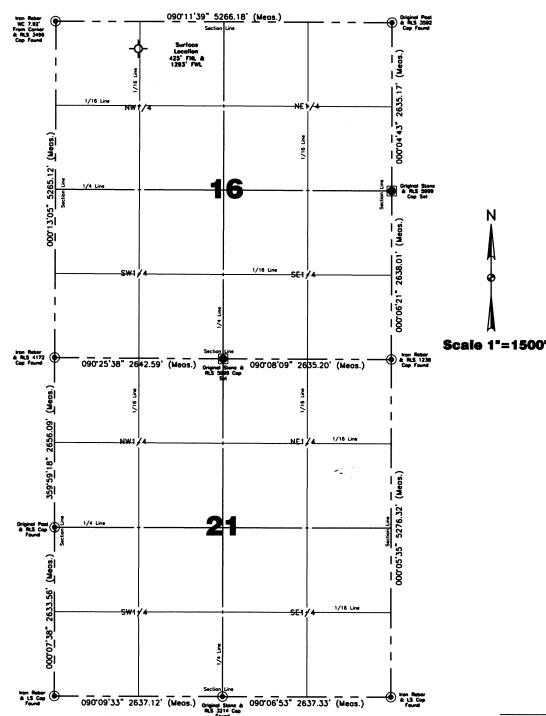
425 feet from the north line and 1293 feet from the west line (surface location)
Section 16, T. 147 N., R. 95 W., 5th P.M.

Section 21, T. 147 N., R. 95 W., 5th P.M. (bottom hole location)
Dunn County, North Dakota

Surface owner @ well site — State of North Dakota

Latitude 47°33'32.29" North; Longitude 102°47'43.34" West (surface location)

[Derived from OPUS Solution NAD-83(CORS96)]



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Surveyed By Q. Obrigewitsch	1	Approved By Rick Leach	Scale 1"=1500'	Date 7/05/08
Field Book	Material	Revised	Project No.	Drawing No.
OW-188	B.H. Layout	<del></del>	3708336	4

# Burlington Resources, Inc. Four Aces #11-16H Section 16, T. 147 N., R. 95 W., 5th P.M. Dunn County, North Dakota

Well	Site	Elevation	2533.6	MSL
Well	Pad	Elevation	2533.5	MSL

Excavation Plus Pit	28,685 C.Y. 3,150 C.Y.
	31,835 C.Y.
Embankment	18,765 C.Y.
Plus Shrinkage (+30%)	5,630 C.Y.
	24,395 C.Y.
Stockpile Pit	3,150 C.Y.
Stockpile Top Soil (6")	3,525 C.Y.
Production Rehabilitation	0 C.Y.
Road Embankment & Stockpile from Pad	765 C.Y.
Disturbed Area From Pad	4.37 Acres

### NOTE:

All cut end slopes are designed at 1:1 slopes & all fill end slopes are designed at 1 1/2:1 slopes

