

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

ORIGINAL

Operator: License # 32340
Name: Bluegrass Energy, Inc.
Address: 5727 S. Lewis, Suite 700
City/State/Zip: Tulsa, OK 74105
Purchaser: Bradshaw Gas
Operator Contact Person: Mark Repasky
Phone: (918) 743-8060
Contractor: Name: Cheyenne Drilling
License: 5382
Wellsite Geologist: _____

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SIOW Temp. Abd. Other
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:
Operator: _____

Well Name: _____
Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to Enhr./SWD
 Plug Back Plug Back Total Depth
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Enhr.?) Docket No. _____

7/28/00 7/30/00 8/31/00
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 071-207280000
County: Greeley
 C SE Sec. 17 Twp. 19 S. R. 40 East West
1320 feet from N (circle one) Line of Section
1320 feet from W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE NW SW
Lease Name: Edman Well #: 3-17
Field Name: Bradshaw

Producing Formation: Lower Winfield
Elevation: Ground: 3593 Kelly Bushing: 3599
Total Depth: 2975 Plug Back Total Depth: 2926
Amount of Surface Pipe Set and Cemented at 300 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from 2975'
feet depth to surface w/ 435 sx cmt.

Drilling Fluid Management Plan ALT 2 9/4 12-18-00
(Data must be collected from the Reserve Pit)
Chloride content 6000 ppm Fluid volume 10,000 bbls
Dewatering method used evaporation
Location of fluid disposal if hauled offsite:
Operator Name: _____
Lease Name: _____ License No.: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Docket No.: _____

RECEIVED
09-18-00
SEP 18 2000
CONSERVATION DIVISION
Wichita, Kansas

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Philip J. Wade
Title: President Date: 9/15/00
Subscribed and sworn to before me this 15th day of September,
19 2000
Notary Public: Kim M. Miller
Date Commission Expires: 9-11-2004

KCC Office Use ONLY
 Letter of Confidentiality Attached
 If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution

X

Operator Name: Bluegrass Energy, Inc. Lease Name: Edrun Well #: 3-17
 Sec. 17 Twp. 19 S. R. 40 East West County: Greeley

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken Yes No
 (Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
 (Submit Copy)

List All E. Logs Run: DUAL INDUCTION
COMPENSATED DENSITY/NEUTRON

Log Formation (Top), Depth and Datum Sample

Name	Top	Datum
Base Stone Corral	2492	+1108
Upper Winfield	2830	+ 770
Lower Winfield	2849	+ 751
Upper Ft. Riley	2898	+ 702
Lower Ft. Riley	2934	+ 666

CASING RECORD New Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacs Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	23#	302	Class C	160	2% CC, 1/8# Floccle
Production	7 7/8"	4 1/2"	10.5#	2974	50/50 FOZ	435	5% Calseal, 1/4# Floccle

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

PERFORATION RECORD - Bridge Plugs Set/Type
 Specify Footage of Each Interval Perforated

Acid, Fracture, Shot, Cement Squeeze Record
 (Amount and Kind of Material Used)

Shots Per Foot	Footage	Material	Depth
1 SPF	2866' - 2871'	780 gals 15% HCL	2866-2871
		7500 gals 25# gel w/11,150 lbs	
		16/30 sand	

TUBING RECORD Size 2 3/8 Set At 2896 Packer At N/A Liner Run Yes No

Date of First, Resumerd Production, SWD or Enhr. 8/19/2000 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours Oil Bbls. 0 Gas Mcf 299 Water Bbls. 30 Gas-Oil Ratio 7985 Gravity 7985

Disposition of Gas **METHOD OF COMPLETION** Production Interval 2866' - 2871'

Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled Other (Specify)

ORIGINAL

15-071-20728-00-00

Comments:
 Cheyenne turnkey surface
 Edmun 3-17

Fluid Systems:

LEAD			
50 SK 65.35(C:POZ) + 6% D20 + 2% S1 + 1/4 PPS D29			
Density:	12.3 lb/gal	Thickening Time:	
Yield:	2.1 ft ³ /sk	Viscosity:	cp
H2O Mix:	11.66 gal/sk	Break Time:	
H2O:	583 gal	Eq. Sack Weight:	88.75 lb
Dowell Code	Concl/Amount	Total Quantity	
D029	0.25 lbs/sk	12.5	
D903 'C'	61.1 lbs/sk	3055	
D132	27.65 lbs/sk	1382.5	
D020	6 % BWOB	266.25	
S001	2 % BWOB	88.75	

Cell of flake
 class c
 ps 2
 gel
 cgel

TAIL			
110 SK C + 2% S1 + 1/4 PPS D29			
Density:	14.8 lb/gal	Thickening Time:	
Yield:	1.34 ft ³ /sk	Viscosity:	cp
H2O Mix:	6.36 gal/sk	Break Time:	
H2O:	699.6 gal	Eq. Sack Weight:	94 lb
Dowell Code	Concl/Amount	Total Quantity	
D903 'C'	94 lbs/sk	10340	
S001	2 % BWOB	206.8	
D029	0.25 lbs/sk	27.5	

class c
 cad
 cell.

RECEIVED
 STATE CORPORATION COMMISSION
 SEP 18 2000
 CONSERVATION DIVISION
 Wichita, Kansas

ORIGINAL

15-071-20728-0000

Well EDMUN #3-17		Field BRADSHAW		Service Date		Customer CHEYENNE DRILLING		Job Number 20169756	
Time 24 hr clock	Cum/Vol bbl	Density ppg	Pressure U1 psi	Pump bpm	Reset Vol bbl	Message			
Post Job Summary									
Average Pump Rates, bpm				Volume of Fluid Injected, bbl					
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2		
3	0	0	43	42.5	0	10	0		
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density		
288	50	140	0	0		0 bbl	0 lb/gal		
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	<input checked="" type="checkbox"/> Cement Circulated to Surface? Volume 5 bbl <input type="checkbox"/> Washed Thru Perfs To 0 ft					
0 %	71 bbl	16 bbl	75 °F						
Customer or Authorized Representative Domosio Castillo			Dowell Supervisor Brennon Fica			<input type="checkbox"/> Circulation Lost <input type="checkbox"/> Job Completed			

SEP 18 2000

SEP 18 2000

CONSERVATION DIVISION
Wichita, Kansas



JOB LOG

ORDER NO. 70006

TICKET #	779567	TICKET DATE	7-30-00
BDA / STATE		COUNTY	Greene
PSL DEPARTMENT	21 ORIGINAL		
CUSTOMER REP / PHONE	Mark Rapaski		
API / UWI #			
JOB PURPOSE CODE	035		

REGION	North America	NWA/COUNTRY	MidCont U.S.A.
MBU ID / EMP #	MCL10110 106328	EMPLOYEE NAME	Nick Korbe
LOCATION	Liberal	COMPANY	Bradshaw Energy LLC
TICKET AMOUNT	\$10,462.07	WELL TYPE	02
WELL LOCATION	45 of Tribune	DEPARTMENT	Cement
LEASE / WELL #	Edman 3-17	SEC / TWP / RNG	17-19S-40W

HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS
M. Korbe 106328							
R. Howard 106270							
S. Howell 106949							
D. Wymer 209947							

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
	0700							called out
	1100							on loc
								Hold safety mtg
								set up trucks
								logging well
	1400							st FE
	1610							Break circ
	1642	0				2500		Test
	1644	5	0			200		st AM F
	1647	7	15/0			250		st L cement 305 sks @ 11.2"
	1811	7	164/0			125		st T cement 130 sks @ 15"
	1715		27					cad cement / wash pump / line / rel plug
	1720	7	0			25		st disp
	1722	7	12			75		catch cement
	1723	3	20			75		slow rate
	1729	2	40			400		slow rate
	1732	2	47			450		Bump plug
	1733					700		rel plug
								float hold
								CIFC 20 bbl cement to pit

Job complete
Thank you
Nick

JOB SUMMARY

ORDER NO. 70006

TICKET # **779567**

TICKET DATE **7-30-00**

REGION North America	NWA/COUN MidCont U.S.A.	BDA / STATE Ks	COUNTY Greeley
MBU ID / EMP # MCL10110 106328	EMPLOYEE NAME Nick Korba	PSL DEPARTMENT 21 ORIGINAL	
LOCATION Liberia	COMPANY Bradshaw Energy LLC	CUSTOMER REP / PHONE Mark Rapaski	
TICKET AMOUNT \$10,462.07	WELL TYPE 02	API / UWI #	
WELL LOCATION 45 of Tribune	DEPARTMENT Cement	JOB PURPOSE CODE 035	
LEASE / WELL # Edman #3-17	SEC / TWP / RNG 17-19S-40W		

HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS
N. Korba, 106328	8						
R. Edward, 106270	8						
S. Howell, 106949	8						
D. Wynn, 209947	8						

HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES
421270	290						
54218/78202	290						
54225/75821	220						
52947/6611	220						

Form Name _____ Type: _____
 Form Thickness _____ From _____ To _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Misc. Data _____ Total Depth _____

DATE	TIME	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
		7-30-00	7-30-00	7-30-00	7-30-00
		0700	1100	1630	1730

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
Float Collar 1PV	1	H
Float Shoe	0	0
Guide Shoe Reg	1	0
Centralizers 5-24	5	4
Bottom Plug		C
Top Plug s-w Alum	1	0
Head fsgrip	1	0
Packer		
Other		

WELL DATA

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	N	10.5	4 1/2	0	2974	
Liner						
Liner						
Tbg/D.P.						
Tbg/D.P.						
Open Hole						
Perforations						
Perforations						
Perforations						

MATERIALS

Treat Fluid _____	Density _____	Lb/Gal _____
Disp. Fluid _____	Density _____	Lb/Gal _____
Prop. Type _____	Size _____	Lb. _____
Prop. Type _____	Size _____	Lb. _____
Acid Type _____	Gal. _____	% _____
Acid Type _____	Gal. _____	% _____
Surfactant _____	Gal. _____	In _____
NE Agent _____	Gal. _____	In _____
Fluid Loss _____	Gal/Lb _____	In _____
Gelling Agent _____	Gal/Lb _____	In _____
Fric. Red. _____	Gal/Lb _____	In _____
Breaker _____	Gal/Lb _____	In _____
Blocking Agent _____	Gal/Lb _____	Qty. _____
Perpac Balls _____	Qty. _____	
Other _____		
Other _____		
Other _____		

HOURS ON LOCATION

DATE	HOURS	OPERATING HOURS DATE	HOURS
7-30-00	8 hrs	7-30-00	1 hrs
TOTAL	8 hrs	TOTAL	1 hrs

DESCRIPTION OF JOB

035

HYDRAULIC HORSEPOWER
 ORDERED _____ Avail. _____ Used _____
AVERAGE RATES IN BPM
 TREATED _____ Disp. _____ Overall _____
CEMENT LEFT IN PIPE
 FEET **43** Reason **sh jt.**

CEMENT DATA

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
L	305	MidCont "C"	B	4# flocc	202	1620
T	130	60102 "H"	B	2#logel, 5% Calseal, 0.6% Halad-322, 4# flocc	116	152

Circulating _____	Displacement _____	Preflush: Gal - BBI _____	Type _____
Breakdown _____	Maximum _____	Load & Bkdn: Gal - BBI _____	Pad: BBI - Gal _____
Average _____	Frac Gradient _____	Treatment Gal - BBI _____	Disp: BBI - Gal 47
Shut In: Instant _____	5 Min _____	Cement Slurr _____	
	15 Min _____	Total Volume Gal - BBI 164/27	

Frac Ring #1 _____ Frac Ring #2 _____ Frac Ring #3 _____ Frac Ring #4 _____
THE INFORMATION STATED HEREIN IS CORRECT CUSTOMER'S REPRESENTATIVE SIGNATURE *[Signature]*

15-071-20728-000 ORIGINAL

STATE OF KANSAS - CORPORATION COMMISSION
MULTIFONT BACK PRESSURE TEST

FORM CG-1 Rev.

TYPE TEST: <input checked="" type="checkbox"/> Initial		<input type="checkbox"/> Annual		<input type="checkbox"/> Special		TEST DATE: 9-12-00	
COMPANY: BLUEGRASS ENERGY, INC				LEASE: EDMUN		WELL NO.: 3-17	
COUNTY: GREELEY		LOCATION: 17		TWP: 19S		RNG (E/W): 40W	
ACRES:		SECTION: 17		PIPELINE CONNECTION: BGS		RESERVOIR: LOWER WINFIELD	
API WELL NUMBER: 15-071-207280000		RESERVOIR: LOWER WINFIELD		PIPELINE CONNECTION: BGS		PACKER SET AT: NONE	
COMPLETION DATE: 8-31-00		TOTAL DEPTH: 2926		PERF TO: 2866-2871		METER RUN SIZE: 2.067"	
CASING SIZE: 4.5		ID: 4.052		SET AT: 2974		PERF TO: 2866-2871	
TUBING SIZE: 2.375		ID: 1.995		SET AT:		PERF TO:	
TYPE COMPLETION (Describe): SINGLE GAS				TYPE FLUID PRODUCTION: WATER			
PRODUCING THRU: Tubing		RESERVOIR TEMPERATURE F: 107		BAR PRESS - Ps: 14.4 Psia			
GAS GRAVITY - Gg: 0.799		% CARBON DIOXIDE:		% NITROGEN:		API GRAVITY OF LIQUID:	
VERTICAL DEPTH (ft): 2869		TYPE METER CONN: Flange		METER RUN SIZE: 2.067"			
REMARKS:							

OBSERVED DATA

DURATION OF SHUT-IN: 71.5 HR.

RATE No.	ORIFICE SIZE in.	METER PRESSURE psig	DIFF (in)	FLOWING TEMP (F)	WELL HEAD TEMP (F)	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DUR. ATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w) (P _c) psia	psig	(P _c) psia		
1	1.000	39.9	4.6	51	5.0	272.50	286.90			71.5	
2	1.000	41.2	17.6	56	5.0	266.80	281.20			1.0	1.0
3	1.000	43.9	49.5	58	5.0	259.10	273.50			1.0	1.0
4	1.000	49.5	110.0	61	5.0	244.90	259.30			1.0	1.0
5						221.10	235.50			1.0	1.0

RATE OF FLOW CALCULATIONS

RATE No.	COEFFICIENT F _b Mcfd	METER PRESSURE psia	DIFFERENTIAL (in)	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW Q Mcfd	GOR (ft ³ /Bbl)	G _m
1	5.0728	54.30	4.6	1.187	1.0088	1.0083	91.2	None	0.799
2	5.0728	55.60	17.6	1.187	1.0039	1.0083	179.7	None	0.799
3	5.0728	58.30	49.5	1.187	1.0019	1.0086	308.1	None	0.799
4	5.0728	63.90	110.0	1.187	0.9990	1.0093	481.5	None	0.799

PRESSURE CALCULATIONS

RATE No.	P _i psia	P _c psia	P _w psia	P _c ² THOUSANDS	(P _w) ² THOUSANDS	FLOWING POINTS		% SHUT-IN $100 \frac{P_w - P_c}{P_c - P_i}$
						(P _c) ² - (P _w) ² THOUSANDS	Q Mcfd	
1	14.4	286.9	281.2	82.3	79.1	3.24	91.2	97.91
2	14.4	286.9	273.5	82.3	74.8	7.51	179.7	95.08
3	14.4	286.9	259.3	82.3	67.2	15.08	308.1	89.87
4	14.4	286.9	235.5	82.3	55.5	26.85	481.5	81.14

INDICATED WELLHEAD OPEN FLOW

Mcfd @ 14.4 psia

α = 0.7859

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 13 day of September, 2000

COPY TO KCC WICHITA

Witness (if any)

COPY TO KCC DODGE CITY

For Commission

PRECISION WIRELINE AND TESTING
For Company

MARK BROCK

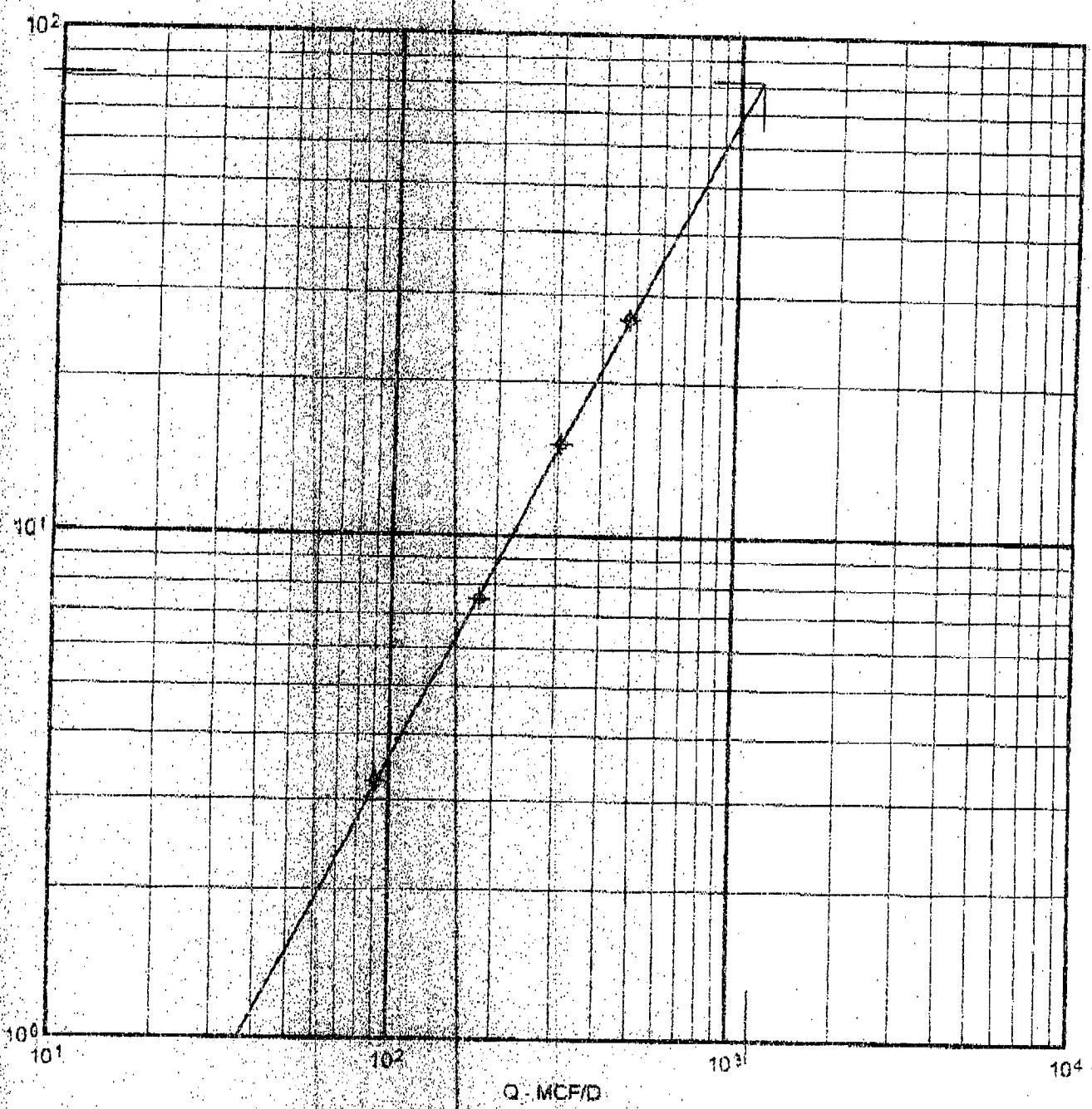
Checked by

(Rev. 10/96)

ORIGINAL

Operator: BLUEGRASS ENERGY INC
Well/Lease Name & No: EDMLEN 3417
API Well Number: 15-071-207280000
County: GREELEY

15-071-20728-000
Report Date: September, 13, 2000
Test Date: 9-12-00
Sec/Twp/Rge: 17 - 19S - 40W



WHACF = 1.161 MCF/D
(Pc2 - Pw2) = 81.74 (Thousands)

Slope = 1.2725
N = 0.7859

KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

ORIGINAL

Type Test:

- Open Flow
- Deliverability

Test Date: **9-13-00**

API No. IS -071-207280000

Company BLUEGRASS ENERGY, INC.		Lease EDMUN		Well Number 3-17	
Locality GREELY	Location L7	Section 19S	TWP 40W	Acres Atributed	
Field BRADSHAW		Basin/Pool LOWER WINFIELD		Gas Gathering Connection BGS	
Completion Date 8-31-00		Plug Back (out) Depth 2926		Packer Set at NONE	
tubing Size 4.5	Weight 10.5	Internal Diameter 4.052	Set at 2974	Perforations 2866	To 2871
tubing Size 2.375	Weight 4.7	Internal Diameter 1.995	Set at	Perforations	To
Type Completion (Describe) SINGLE GAS		Type Fluid Production		Pump Unit or Traveling Plunger? Yes / No	
Producing Thru (Annulus / Tubing) TUBING		% Carbon Dioxide		% Nitrogen	
Tubing Depth (ft) 2869		Pressure Taps FLANGE		Gas Gravity - G _s .799	
Pressure Buildup: Shut in 9-9		at 2000 or 0800		(AM) (PM) Taken 9-12	
Well on Line: Started 9-12		at 2000 at 0730		(AM) (PM) Taken 9-13	
				at 2000 at 0730	
				(AM) (PM)	

OBSERVED SURFACE DATA

Duration of Shut-in **71.5** Hours

Shut-in / Dynamic Property	Orifice Size (inches)	Circulation Meter or Prover Pressure (psig)	Pressure Differential (in Oil) (kches H ₂ O)	Flowing Temperature (°F)	Wellhead Temperature (°F)	Gas Flow - Wellhead Pressure (P _w) or (P ₁) or (P ₂)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P ₂)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in						272.5	286.9			71.5	
Flow	1.000	42.6	29.7	55	75.0	229.2	243.6			24.0	26.0

FLOW STREAM ATTRIBUTES

Plate Coefficient (P ₁) (P ₂) (Mcf)	Circle or Meter or Prover Pressure (psia)	Press. Expansion $\sqrt{P_1 \times P_2}$	Gravity Factor P _g	Flowing Temperature Factor F _t	Deviation Factor F _z	Metered Flow Q (Mcf)	GOR (Cubic Feet/Barrel)	Flowing Fluid Gravity G _s
0.0728	57.00	41.14	1.1187	1.0048	1.0085	236.6	NONE	0.799

OPEN FLOW (DELIVERABILITY) CALCULATIONS

$(P_1)^2 = 82.3$ $(P_w)^2 = 59.3$ $P_w =$ % $(P_w - 14.6) + 14.6 = 286.9$ $(P_1)^2 = 0.207$
 $(P_2)^2 =$ $(P_w)^2 =$

$(P_1)^2 - (P_2)^2$ or $(P_1)^2 - (P_w)^2$	$(P_w)^2 - (P_2)^2$	Circle to Meter Factor 1. $P_1^2 - P_2^2$ 2. $P_1^2 - P_w^2$ divided by: $P_w^2 - P_2^2$	LOG of (Circle to Meter Factor) \log_{10}	Backpressure Curve Slope = $3n$	$n \times 100$	Antilog	Open Flow Deliverability Equals Q x Antilog Mcfd
82.10	22.97	3.574	0.5532	0.786	0.4348	2.7215	644.01

Open Flow **644** Mcfd @ **14.65** psia Deliverability **644** Mcfd @ **14.65** psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this 13 day of SEPTEMBER 2000

COPY TO KCC WICHITA
Witness (if any)

COPY TO KCC DODGE CITY
For Commission

PRECISION WIRELINE & TESTING
For Company

MARK BROCK
Checked by

PRECISION WIRELINE and TESTING
 P.O. BOX 560
 LIBERAL, KANSAS 67905-0560
 316-624-4505
 CELLULAR: 316-629-0264

PRODUCER BLUEGRASS ENERGY, INC.
 WELL NAME EDMUN 3-17
 LOCATION 17-19S-40W
 COUNTY GREELEY STATE KS

CSG 4 1/2 WT 10.5 SET # 2974 TD 2975 PB 2926 GL 3593
 TBG 2 3/8 WT 4.7 SET # SN PKR KB 3599
 PERFS 2866 TO 2871 TO TO
 PROVER METER 2" TAPS FLANGE ORIFICE 1.000 PCR TCR
 GG .799 API GM RESERVOIR LOWER WINFIELD

DATE TIME OF READING	ELAP TIME HOURS	WELLHEAD PRESSURE DATA						MEASUREMENT DATA				LIQUIDS		TYPE TEST	INITIAL ANNUAL	SPECIAL RETEST	ENDING DATE
		CSG PSIG	Δ P CSG	TBG PSIG	Δ P TBG	BHP PSIG	Δ P BHP	PRESS. PSIG	DIFF.	TEMP	Q MCF/D	COND. BBL/S	WATER BBL/S				
SATURDAY 9-9-00																	9-13-00
0800																	1000# 250# AUTO PILOT
TUESDAY 9-12-00																	
0730	71.5	272.5															
0730																	
0735		270.3	- 2.2					39.5	3.3	44	77						
0740		269.8	- 0.5					39.7	3.1	46	74						
0745	.5	269.4	- 0.4					39.7	3.1	47	74						
0800		267.8	- 1.6					39.9	4.1	49	92						
0815		267.2	- 0.6					39.4	4.6	50	91						
0830	1.0	266.8	- 0.4					39.9	4.6	51	91	0	1.0				
0830																	
0835		264.1	- 2.7					41.0	18.1	50	183						
		263.2	- 0.9					41.0	18.2	53	182						
0845		262.5	- 0.7					41.0	18.2	53	182						
0900	1.5	261.0	- 1.5					41.2	17.9	55	181						
0915		259.4	- 0.6					41.3	17.7	56	180						
0930	2.0	259.1	- 0.3					41.2	17.6	56	180	0	2.0				
0930																	
0935		253.5	- 5.6					43.9	53.4	56	320						
0940		252.0	- 1.5					43.9	33.1	56	319						

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PRECISION WELL TEST

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Precision WIRELINE & TESTING BLUEGRASS ENERGY, INC. EDMUN 3-17

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PRECISION WELL TEST I

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Date Time of Reading	Elap Time Hours	Wellhead Pressure Data						Measurement Data			Liquids		Types Fest:	Initial Annual	Special Retest	Ending Date 9-13-00	
		Csg Psig	Δ P Csg	Tbg Psig	Δ P Tbg	BHP Psig	Δ P BHP	Press. Psig	Diff.	Temp	Oil mcf/D	Cond bbls					Water bbls
TUESDAY 9-12-00	(CONT'D)																
0945		250.6	- 1.4	PUMP ON				43.9	52.2	56	316						
1000	2.5	248.2	- 2.4	PUMP ON				44.0	51.3	56	314						
1015		245.9	- 2.3	PUMP ON				44.0	49.8	57	309						
1030	3.0	244.9	- 1.0	PUMP ON				43.9	49.5	58	308	0	3.0				
1030		WELL ON 4TH RATE OF MULTI-PT TEST THROUGH METER RUN															
1035		237.6	- 7.3					47.9	100.9	58	454						
1040		232.7	- 4.9					48.8	111.7	58	481						
1045		230.1	- 2.6					48.6	121.2	58	504						
1100	3.5	226.2	- 3.9					49.6	116.7	59	495						
1115		232.2	- 3.0					49.5	113.4	60	487						
1130	4.0	221.1	- 2.1					49.5	110.8	61	481	0	4.0				OBTAIN GAS SAMPLE
1130		WELL ON IPT TEST															
1145		212.5		PUMP ON				41.59	32.00	62	281						
0730	24.0	294.2		PUMP ON				42.69	69.70	55	297	0	26				SPOT

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