

Confidentiality Requested:

Yes No

#### Kansas Corporation Commission Oil & Gas Conservation Division

1076271

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

# WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #		API No. 15
Name:		Spot Description:
Address 1:		SecTwpS. R 🗌 East 🗌 West
Address 2:		Feet from North / South Line of Section
City: State: Zip: _	+	Feet from _ East / _ West Line of Section
Contact Person:		Footages Calculated from Nearest Outside Section Corner:
Phone: ()		□NE □NW □SE □SW
CONTRACTOR: License #		GPS Location: Lat:, Long:
Name:		(e.g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:		Datum: NAD27 NAD83 WGS84
Purchaser:		County:
Designate Type of Completion:		Lease Name: Well #:
☐ New Well ☐ Re-Entry	Workover	Field Name:
□ Oil □ WSW □ SWD	SIOW	Producing Formation:
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW		Elevation: Ground: Kelly Bushing:
☐ OG ☐ GSW	Temp. Abd.	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)		Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):		Multiple Stage Cementing Collar Used? Yes No
If Workover/Re-entry: Old Well Info as follows:		If yes, show depth set: Feet
Operator:		If Alternate II completion, cement circulated from:
Well Name:		feet depth to:w/sx cmt.
Original Comp. Date: Original Tota	I Depth:	
☐ Deepening ☐ Re-perf. ☐ Conv. to ENH	R Conv. to SWD	Drilling Fluid Management Plan
☐ Plug Back ☐ Conv. to GSW	Conv. to Producer	(Data must be collected from the Reserve Pit)
Commingled Permit #:		Chloride content: ppm Fluid volume: bbls
_		Dewatering method used:
SWD Permit #:		Location of fluid disposal if hauled offsite:
☐ ENHR Permit #:		Operator Name:
GSW Permit #:		Operator Name: License #:
	Completion Date or	QuarterSecTwpS. R EastWest
Recompletion Date	Recompletion Date	County: Permit #:

#### **AFFIDAVIT**

I am the affiant and I hereby certify that 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.

**Submitted Electronically** 

KCC Office Use ONLY		
Confidentiality Requested		
Date:		
Confidential Release Date:		
Wireline Log Received		
Geologist Report Received		
UIC Distribution		
ALT I II III Approved by: Date:		

Page Two



Operator Name:			L	ease Name: _			Well #:	
Sec Twp	S. R	East We	est C	County:				
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in pres	sures, whether sh	ut-in pressur	e reached stati	c level, hydrosta	tic pressures, bott		
Final Radioactivity Lo files must be submitted					gs must be ema	iled to kcc-well-log	gs@kcc.ks.go	. Digital electronic log
Drill Stem Tests Taker (Attach Additional		Yes	No	L		n (Top), Depth an		Sample
Samples Sent to Geo	logical Survey	Yes	No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		Yes Yes	No No					
List All E. Logs Run:								
		(	CASING REC	ORD Ne	w Used			
		· ·		ıctor, surface, inte	ermediate, producti		T	
Purpose of String	Size Hole Drilled	Size Casin Set (In O.D		Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
		ADD	ITIONAL CEN	MENTING / SQL	JEEZE RECORD			
Purpose:	Depth Top Bottom	Type of Cem	ent #	Sacks Used		Type and Pe	ercent Additives	
Perforate Protect Casing	100 20111111							
Plug Back TD Plug Off Zone								
1 lag on zono								
Did you perform a hydrau	ulic fracturing treatment	on this well?			Yes	No (If No, ski)	o questions 2 ar	nd 3)
Does the volume of the to		•				_	o question 3)	(" 100 ")
Was the hydraulic fractur	ing treatment information	on submitted to the c	hemical disclo	sure registry?	Yes	No (If No, fill o	out Page Three	of the ACO-1)
Shots Per Foot		ION RECORD - Bri Footage of Each Int				cture, Shot, Cement		d Depth
	, ,				,		,	
TUBING RECORD:	Size:	Set At:	Pa	acker At:	Liner Run:			
						Yes No		
Date of First, Resumed	Production, SWD or Ef		cing Method: owing	Pumping	Gas Lift C	ther <i>(Explain)</i>		
Estimated Production Per 24 Hours	Oil	Bbls. G	as Mcf	Wate	er Bl	ols. G	ias-Oil Ratio	Gravity
DIODOCITI	ON OF CAS:		, 4 CT - 1		TION:		DRODUCTIO	AN INTEDVAL.
Vented Solo	ON OF GAS:  Used on Lease	Open Ho		IOD OF COMPLE $\Box$		nmingled	PHODUCIIC	ON INTERVAL:
	bmit ACO-18.)	Other (S	necify)	(Submit		mit ACO-4)		

Form	ACO1 - Well Completion
Operator	New Gulf Operating LLC
Well Name	Zerr 2
Doc ID	1076271

## Tops

Name	Тор	Datum
Anhydrite		
Base Anhydrite		
Stotler		
Topeka		
Heebner		
Toronto		
Lansing		
Muncie Creek		
Stark		
BKC		
Marmaton		
Altamont		

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner

March 22, 2012

New Gulf Operating LLC 6310 E. 102nd St. TULSA, OK 74137

Re: ACO1

Sec.-S-County, Kansas

### **Dear Production Department:**

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,



**TICKET NUMBER** LOCATION FOREMAN

DATE

PO Box 884, Chanute, KS 66720

## FIELD TICKET & TREATMENT REPORT

	or 800-467-867			CEMEN				
DATE	CUSTOMER#		LL NAME & NUN	BER	SECTION	TOWNSHIP	RANGE	COUNTY
12-11-11	5661	Zor	r #2		_17	123	324	Locar
CUSTOMER			372	Oaklay				
MAILING ADDR	Solf Golf		•	55	TRUCK#	DRIVER	TRUCK#	DRIVER
A.547.				30	399	Damon	Millow	
CITY		STATE	ZIP CODE	_  33	566	Dariele	Glassma	
		BINIE	ZIP CODE	3/46				
OR TYPE S	irteco	HOLE SIZE	1014		0501	CASING SIZE & I		·
ASING DEPTI					_A().T	CASING SIZE &		8-234
	HT				***	APERENT APPAR	OTHER	
	T 15 14		NT PSI	_		CEMENT LEFT IN		-20'
FMARKS:	Sa P. J. and	DISPLACEME	ui Lai	MIX POL		RATE 5 B	PM	
14 4	Safety Mo 1.80 sks c	301	rig tro at	Val "4	, ewa	Casinza	Do Hom	
M.CA.	LOU SKS C	DW, SYM	C-27660	Livelease	Plug # Di	splace 15	14 BBL H	02 150
			JAN.	(ia	1.87			
				200				
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	333233					wals	- Q Cro. /	
ACCOUNT	OUANIES.		T	~ 41	1.0		Γ'	
CODE	QUANITY	OF UNITS	DE	SCRIPTION OF S	SERVICES or PRO	ODUCT	UNIT PRICE	TOTAL
54015			PUMP CHARC	3E		,	1,02500	1025 05
5406	LO_		MILEAGE				5 80	50.00
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1102	507	#		um Chlo			184	425
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n 9797	<u> </u>			70 772		- 1-W	SALES TAX ESTIMATED	43Y, 9
7/4/2	11 11	100	1				TOTAL	4855 4

LIFE MOITSINGHTUA I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

TITLE\_



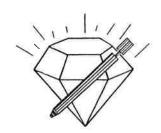
TICKE ( NUMBER	33784
LOCATION ONE	104
FOREMAN_ Tu	24

	FIELD TICKET & TREATMENT
PO Box 884, Chanute, KS 66720	LIEFO HOVEL & HVEVIMENT
PO Box obe, Ollandic, No obize	CEMENT

REPORT 125 620-431-9210 or 800-467-8676 COUNTY TOWNSHIP RANGE WELL NAME & NUMBER SECTION **CUSTOMER#** DATE LUSSIN 12 Zerr #2 17 12-21-11 OSKINY CUSTOMER DRIVER TRUCK# DRIVER TRUCK # MAILING ADDRESS 5 = 5 with las 463 300 439 35 ZIP CODE STATE 528 CITY 64 N. CASING SIZE & WEIGHT 51/2 - 15.5 7718 HOLE DEPTH JOB TYPE 2.5446 HOLE SIZE + SOOTHER DU TOOL . 2621 TUBING CASING DEPTH 4758 DRILL PIPE 20 03 CEMENT LEFT in CASING\_ WATER gal/sk 6.7 - (0.8 SLURRY VOL\_1.42 . 1.9 SLURRY WEIGHT 13.8-12.5 MIX PSI DISPLACEMENT 12.7 · Cent 1 DU. TODOS 50 mud 800+ 1:64 1300+ 1And NE 5083 Luxure, 63"2 855 ISMIN apartool @ 1100 Circ 4hts. MIY 205 to MH Mix 4005Ks 60/40 290000 1/4 Closen displace 6212 Balunter. Coment did circulate ADDION

ACCOUNT	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CODE		PUMP CHARGE	285000	255000
54016	<del></del>	MILEAGE	500	36 00
5406		Tow miluage Dolivery (min)	41000	41000
5407	27.57	100 Milas Contract		
1101	175 5F5	owe	21 48	3759
1126	875	1201.5041	53	463 75
1110 A	3256*	Bendow te	124	781 41
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1107	113 **	2 losex1	413 00	41305
4159	\	512. ATO Flow shoe	58 00	58005
4130	10	5 12 · centralizues	276 00	276
4104		512- Baskot	3850	38500
4283	1	312- DO (201 11/14 - 100 11/1	1303	
		5	es hodal	20676
		EAS 1007	0 dr.56	2067
		509	1000	18608
	<i>p</i> :	246686	SALES TAX	1220.1
avin 3737	11/1	1, 11	ESTIMATED TOTAL	19 828.8
AUTHORIZTION_	//X4/34	Lion Har KAINE	DATE	

AUTHORIZTION\_< I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



#### DIAMOND TESTING

Page 1 of 2 Pages

#### P.O. Box 157 HOISINGTON, KANSAS 67544 (620) 653-7550 • (800) 542-7313

Company New Gulf Operating, LLC Lease & Well No. Zerr No. 2 Elevation 2970 EST Formation Lansing/Kansas City "A" - "B" Ticket No. 2832 Effective Pay \_\_\_\_Ft. 12-17-11 Sec. 17 Twp. 12S Range 32W County Logan State\_\_\_ Kansas Test Approved By Stephen Murphy Roger D. Friedly Diamond Representative 4,100 ft. 4,100 ft. Formation Test No. 1 Interval Tested from 4,050 ft. to Total Depth\_\_\_\_\_ -- ft. 4,045 ft. Size 63/4 in. Size -- in. Packer Depth\_\_\_\_\_ Packer Depth\_\_\_\_ Packer Depth -- ft. Size -- in. 4,050 ft. Size 63/4 in. Packer Depth Depth of Selective Zone Set\_ ft. Recorder Number 8471 Cap. 10,000 psi 4,031 ft. Top Recorder Depth (Inside) Recorder Number 11029 Cap. 5,025 psi 4,097 ft. Bottom Recorder Depth (Outside) ft. Cap. Recorder Number Below Straddle Recorder Depth -- ft. I.D.\_\_\_\_\_ -- in. Drilling Contractor Val Energy, Inc. - Rig 4 Drill Collar Length\_\_\_\_\_ Weight Pipe Length \_\_\_\_\_ft. 51 I.D. -- in. Mud Type Chemical Viscosity\_\_\_\_ 4,017 ft. I.D. \_\_\_\_\_\_3 1/2 in. 5.6 cc. 9.1 Water Loss\_\_\_\_ Drill Pipe Length \_\_\_\_\_ Weight Test Tool Length \_\_\_\_\_ Tool Size 3 1/2 - IF in. 33 ft. 2,500 P.P.M. Chlorides\_\_ Anchor Length 20' perf. w/ 30' drill pipe Size 4 1/2 - FH in. Jars: Make\_\_ Sterling\_\_\_ Serial Number\_\_\_\_ Did Well Flow? No Reversed Out No Bottom Choke Size \_\_\_\_5/8 in. Surface Choke Size \_\_\_\_\_1 in. 7 7/8 in. Tool Joint Size 4 1/2-XH in. Main Hole Size \_\_ Blow: 1st Open: Weak, 2 in., blow increasing. Off bottom of bucket in 19 mins. No blow back during shut-in. 2nd Open: Weak, surface blow increasing. Off bottom of bucket in 23 mins. No blow back during shut-in. Recovered 30 ft. of gas in pipe 15 ft. of oil cut watery mud = .213450 bbls. (Grind out: 15%-oil; 20%-water; 65%-mud) Recovered\_ 159 ft. of oil cut watery mud = 2.262570 bbls. (Grind out: 4%-oil; 47%-water; 49%-mud) Recovered \_\_\_ 124 ft. of oil cut muddy water = 1.764520 bbls. (Grind out: 2%-oil; 84%-water; 14%-mud) Recovered\_\_\_ Recovered 298 ft. of TOTAL FLUID = 4.240540 bbls. Chlorides: 46,500 Ppm PH: 6.0 RW: .12 @ 62° Tool Sample Grind Out: 2%-oil; 97%-water; 1%-mud Remarks\_\_\_\_ Diesel in bucket. A.M. A.M. Time Set Packer(s) 2:40 Maximum Temperature 117° 5:10 Time Started Off Bottom\_ PXIXI. XXXI. P.S.I. 1960 Initial Hydrostatic Pressure ......(A)\_ P.S.I. to (C) 96 P.S.I. 24 30 Initial Flow Period ...... Minutes\_\_\_\_ (B)\_\_\_\_ 45 \_\_(D)\_\_\_ 1190 P.S.I. Initial Closed In Period ..... Minutes\_\_\_ P.S.I. to (F) 161 P.S.I. 98 Final Flow Period ..... Minutes 30 (E)\_\_\_ 45 \_\_\_\_(G)\_\_\_ 1171 Final Closed In Period ...... Minutes\_\_\_\_ P.S.I. 1956 Final Hydrostatic Pressure ..... (H)\_\_\_\_\_ P.S.I.

**ROGER D. FRIEDLY** 

# DIAMOND TESTING

#### General Information Report

Representative

#### **General Information**

Contact	DANNY BIRDWELL	Well Operator	NEW GULF OPERATING, LLC
Well Name	ZERR #2	Report Date	2011/12/17
Unique Well ID	DST #1 LKC 'A-B' 4,050' - 4,100'	Prepared By	ROGER D. FRIEDLY
Surface Location	SEC. 17-12S-32W LOGAN CO. KS		
Field	WILDCAT	Qualified By	STEVE MURPHY
Well Type	Vertical	•	
Test Type	CONVENTIONAL DRILL-STEM TEST		
Formation	DST #1 LKC 'A-B' 4,050' - 4,100'		
Well Fluid Type	01 Oil		
Start Test Date	2011/12/17	Start Test Time	00:25:00
Final Test Date		Final Test Time	07:41:00

#### **Test Recovery:**

**Company Name** 

	RECOVERED:	30'	GAS IN PIPE
--	------------	-----	-------------

15' OCWM 15% OIL, 20% WTR, 65% MUD 159' OCWM 4% OIL, 47% WTR, 49% MUD 124' OCWM 2% OIL, 84% WTR, 14% MUD

**NEW GULF OPERATING, LLC** 

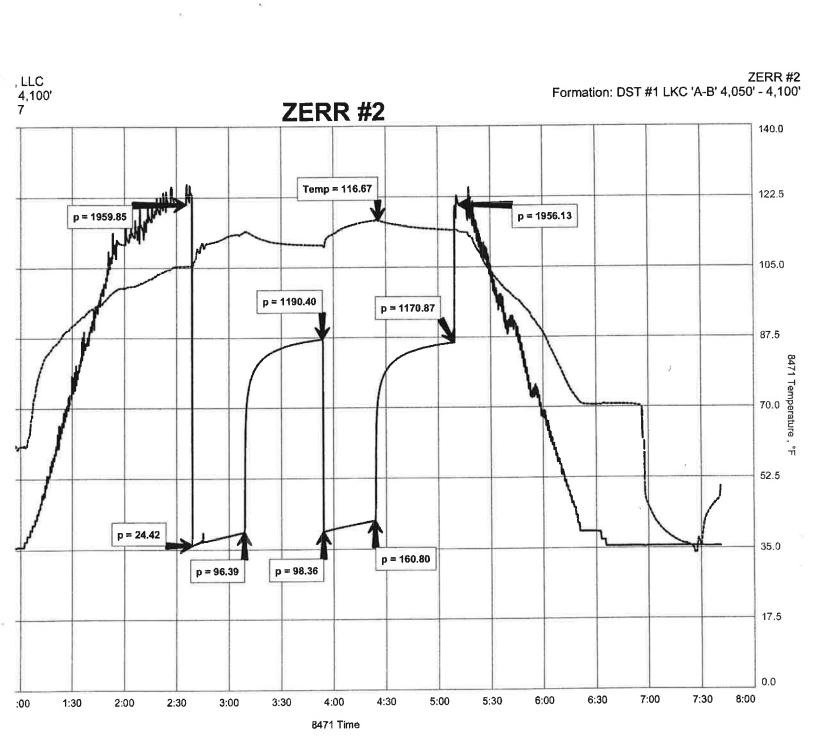
298' TOTAL FLUID

TOOL SAMPLE: 2% OIL, 97% WTR, 1% MUD

CHLORIDES: 46,500 Ppm

PH: 6.0

RW: .12 @ 62 deg



DIT #1 OUTSIDE 11029

LXC A-B' LOC 4097

1



## **DIAMOND TESTING**

Page 1 of 2 Pages

## P.O. Box 157 HOISINGTON, KANSAS 67544

(620) 653-7550 • (800) 542-7313

Company New Gulf Operating, LLC	_Lease & Well NoZerr No. 2
Elevation 2970 EST Formation Lansing/Kansas City	"I" - "K" Effective PayFt. Ticket No. 2833
Date 12-18-11 Sec. 17 Twp. 12S Range 32W	County Logan State Kansas
Test Approved By Stephen Murphy	Diamond Representative Roger D. Friedly
Formation Test No. 2 Interval Tested from 4,262 f	t. to 4,320 ft. Total Depth 4,320 ft.
Packer Depth 4,257 ft. Size 63/4 in.	Packer Depthft. Size in.
Packer Depth 4,262 ft. Size 63/4 in.	Packer Depthft. Size in.
Depth of Selective Zone Setft.	
Top Recorder Depth (Inside) 4,243 ft.	Recorder Number 8471 Cap. 10,000 psi
Bottom Recorder Depth (Outside) 4,317 ft.	Recorder Number 11029 Cap. 5,025 psi
Below Straddle Recorder Depthft.	Recorder Number Cappsi
Drilling Contractor Val Energy, Inc Rig 4	orill Collar Length ft. I.D in.
Mud Type Chemical Viscosity 50	Veight Pipe Length ft. I.D in.
Weight 9.3 Water Loss 7.2 cc. E	Orill Pipe Length4, 229 ft. I.D3 1/2 in.
Chlorides 3,000 P.P.M.	est Tool Length 33 ft. Tool Size 3 1/2 - IF in.
	Anchor Length 26' perf. w/ 32' drill pipe Size 4 1/2 - FH in.
Did Well Flow? No Reversed Out No S	furface Choke Size1 in. Bottom Choke Size5/8 in.
N	Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.
Blow: 1st Open: Weak, ½ in., blow increasing. Off bottom 2nd Open: Weak, ½ in., blow increasing. Off bottom	of bucket in 10 mins. Fair, 2½ in., blow back during shut-in. of bucket in 12½ mins. No blow back during shut-in.
Recovered 435 ft. of gas in pipe	
Recovered63 ft. of clean oil = .896490 bbls. (Gravity:	39.8 @ 60°)
Recovered 62 ft of gas & oil cut watery mud = .882260 b Recovered 62 ft. of gas & oil cut muddy water = .882260	bls. (Grind out: 8%-gas; 10%-oil; 34%-water; 48%-mud) bbls. (Grind out: 4%-gas; 6%-oil; 65%-water; 25%-mud)
Recovered 62 ft. of oil cut muddy water = .882260 bbls.	
Recovered 249 ft. of TOTAL FLUID = 3.543270 bbls.	Chlorides: 54,500 Ppm PH: 6.0 RW: .15 @ 58°
Remarks Tool Sample Grind Out: 4%-oil; 9	6%-water
Diesel in bucket.	
	1700
Time Set Packer(s) 9:29 A.M.  Time Started Off	Bottom 12:14 P.M. Maximum Temperature 119°
Initial Hydrostatic Pressure	(A) 2089 P.S.I.
Initial Flow Period Minutes 30	(B) 29 P.S.I. to (C) 83 P.S.I.
Initial Closed In Period	(D) 1256 P.S.I.
Final Flow Period Minutes 30	(E) 89 P.S.I. to (F) 130 P.S.I.
Final Closed In Period Minutes 60	(G) 1251 P.S.I.
Final Hydrostatic Pressure	(H) 2067 P.S.I.

#### Page 2 of 2 Pages

# **DIAMOND TESTING**

#### General Information Report

#### **General Information**

Company Name Contact Well Name Unique Well ID Surface Location	NEW GULF OPERATING, LLC DANNY BIRDWELL ZERR #2 DST #2 LKC 'I,J,K," 4,262' - 4,320' SEC. 17-12S-32W LOGAN CO. KS	Representative Well Operator Report Date Prepared By	ROGER D. FRIEDLY NEW GULF OPERATING IIC 2011/12/18 ROGER D. FRIEDLY
Field Well Type Test Type Formation Well Fluid Type	WILDCAT Vertical CONVENTIONAL DRILL-STEM TEST DST #2 LKC 'I,J,K," 4,262' - 4,320' 01 Oil	Qualified By	STEVE MURPHY
Start Test Date Final Test Date	2011/12/18 2011/12/18	Start Test Time Final Test Time	07:40:00 14:28:00

#### **Test Recovery:**

RECOVERED: 435' **GAS IN PIPE** 

CLEAN OIL 39.8 GRAVITY @ 60 deg 63'

G&OCWM 8% GAS, 10% OIL, 34% WTR, 48% MUD G&OCMW 4% GAS, 6% OIL, 65% WTR, 25% MUD 62' 62'

62' OCMW 1% OIL, 95% WTR, 4% MUD

**TOTAL FLUID** 249'

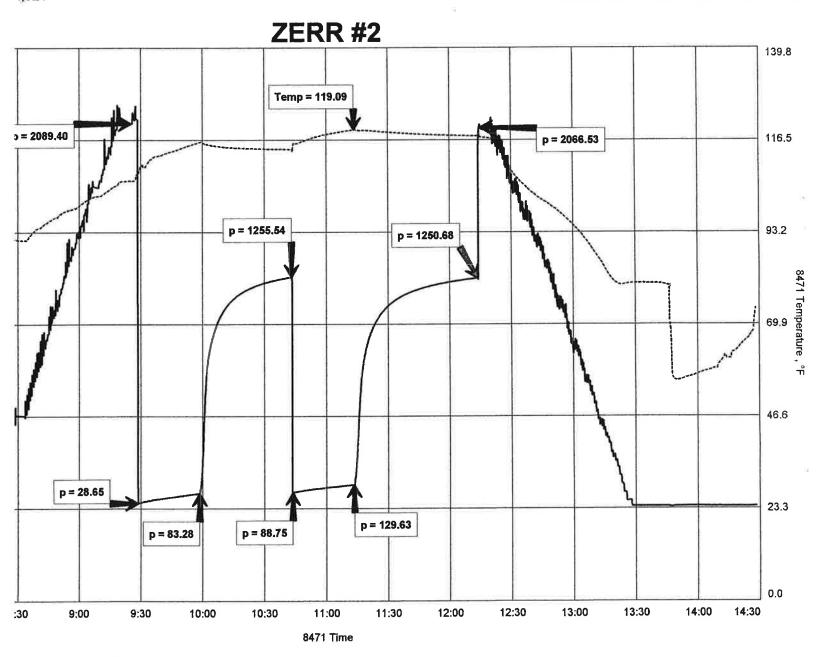
TOOL SAMPLE: 4% OIL, 96% WTR

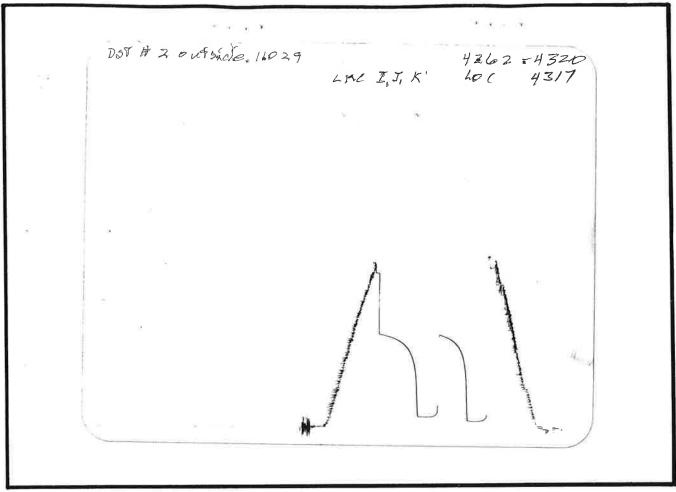
CHLORIDES: 54,500 Ppm

PH: 6.0

RW: .15 @ 58 deg.

LC 4,320' ZERR #2 Formation: DST #2 LKC 'I,J,K," 4,262' - 4,320'





This is an actual photograph of recorder chart.

	PRESSURE Elec.			
		Field	Office	
POINT		Reading	Reading	
(A)	Initial Hydrostatic Mud	2089	2089	PSI
(B)	First Initial Flow Pressure	29		PSI
(C)	First Final Flow Pressure	83	83	PSI
(D)	Initial Closed-in Pressure	1256	1256	PSI
(E)	Second Initial Flow Pressure	89		PSI
(F)	Second Final Flow Pressure	130		PSI
(G)	Final Closed-in Pressure	1251	1251	PSI
(H)	Final Hydrostatic Mud	2067	2067	PSI

# DIAMOND TESTING

General Information Report

**Final Test Time** 

09:16:00

#### **General Information**

**Company Name NEW GULF OPERATING LLC** Representative **ROGER D. FRIEDLY** Well Operator Contact **DANNY BIRDWELL NEW GULF OPERATING LLC Well Name** ZERR #2 **Report Date** 2011/12/20 Unique Well ID DST #3 JOHNSON 4,590' - 4,640' **Prepared By ROGER D. FRIEDLY** Surface Location SEC 16-12S-32W LOGAN COUNTY, KS **Field WILDCAT Qualified By STEVE MURPHY Well Type** Vertical **CONVENTIONAL DRILL-STEM TEST Test Type DST #3 JOHNSON 4,590' - 4,640' Formation Well Fluid Type** 01 Oil 2011/12/20 **Start Test Date Start Test Time** 00:45:00

2011/12/20

#### **Test Recovery:**

**Final Test Date** 

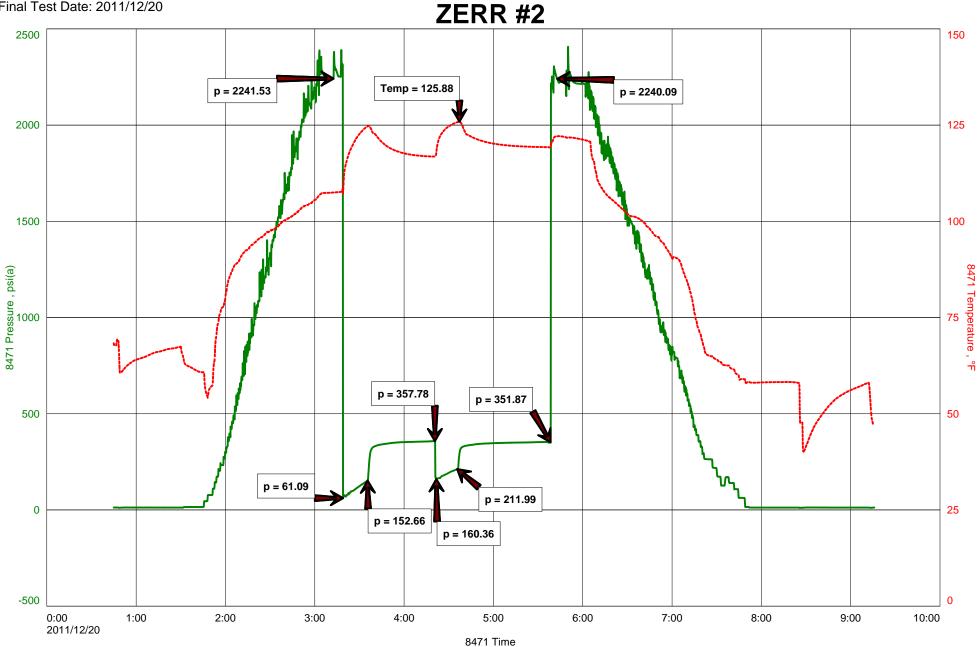
RECOVERED: 1,170' GAS IN PIPE

464' CLEAN OIL 31 GRAVITY @ 60 deg. 72' G&OCM 4% GAS, 8% OIL, 88% MUD

536' TOTAL FLUID

**TOOL SAMPLE: GAS BLEW OUT** 

Start Test Date: 2011/12/20 Final Test Date: 2011/12/20





# P.O. Box 157 HOISINGTON, KANSAS 67544 (800) 542-7313

# **DRILL-STEM TEST TICKET**

IME ON:	
IME OFF:	

Company			Lease & Well No					
Contractor								
Elevation	Formation		_Effective Pay		Ft.	Ticket No	D	
Date Sec	Twp	S Ra	nge	_W County			State_	KANSAS
Test Approved By			Diamond Representative	e				
Formation Test No	Interval Tested from		ft. to	ft. To	tal Dept	th		ft.
Packer Depth	ft. Size6 3/4	_ in.	Packer depth		ft.	Size6	3/4	in.
Packer Depth	ft. Size6 3/4	_ in.	Packer depth		ft.	Size6	3/4	in.
Depth of Selective Zone Set_								
Top Recorder Depth (Inside)		ft.	Recorder Number		Cap.			_P.S.I.
Bottom Recorder Depth (Out	side)	ft.	Recorder Number		Cap			P.S.I.
Below Straddle Recorder De	pth	ft.	Recorder Number		Сар.			_ P.S.I.
Mud Type	Viscosity		Drill Collar Length		ft.	.D	2 1/4	4 in
Weight	Water Loss	cc.	Weight Pipe Length_		ft.	I.D	2 7/8	<u>8</u> ir
Chlorides	F	P.P.M.	Drill Pipe Length		ft. I	.D	3 1/2	2 ir
Jars: MakeSTERLING	Serial Number		Test Tool Length		ft. ^	Tool Size	3 1/2	2-IF ir
Did Well Flow?	Reversed Out		Anchor Length		ft.	Size	4 1/2	2-FHi
Main Hole Size 7 7/8	Tool Joint Size4 1/2	in.	Surface Choke Size_	1	in l	Bottom Ch	noke Siz	e_5/8_i
Blow: 1st Open:								
2nd Open:								fa .
Recoveredft. of								
Recoveredft. of _								
Recoveredft. of _								
Recoveredft. of _								
Recoveredft. of _					Price	Job		
Recoveredft. of _					Other	Charges		
Remarks:					Insura	ance		
	A 14				Total			
Time Set Packer(s)	A.M. P.M. Time Sta	rted Off Bot	tom	A.M. P.M. Ma	ximum	Temperat	ure	
Initial Hydrostatic Pressure			(A)	P.S.I.				
Initial Flow Period	Minutes		(B)	P.S.I. t	o (C)		F	P.S.I.
Initial Closed In Period	Minutes		(D)	P.S.I.				
Final Flow Period	Minutes		(E)	P.S.I. to	o (F)		P	.S.I.
Final Closed In Period	Minutes		(G)	P.S.I.				
Final Hydrostatic Pressure			(H)	P.S.I.				

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

#### **DRILLING REPORT**

## **NEW GULF ENERGY**

6310 E. 102<sup>nd</sup> Street Tulsa, Oklahoma 74137 Office (918) 728-3020

#2ZERR

470'FSL 356'FEL Section 17-T12S-R32W Logan County, Kansas

Elevation: GL 3052 KB 3062

API # 15-109-21055

Drilling Contractor: **VAL DRILLING RIG 4** 620-617-2793 Larry Hinderliter (Toolpusher) 620-804-0097

Well-site Geologist: Steven P. Murphy 620-639-3030 New Gulf Geologist: Joe Baker 316-253-9696 (cell) 316-733-5826 (home)

Reference Well: New Gulf Energy

# 1 Zerr 2068'FSL' 1260'FEL 17-12S-32W Logan Co., Kansas

New Gulf Drilling Supervisor: Jim Henkle 620-617-2868

	E-LOG TOPS	DATUM	#1 ZERR Reference Well
ANHYDRITE	2578	+484	+6
BASE ANHYDRITE	2602	+460	+6
STOTLER	3676	-614	+2
TOPEKA	3801	-739	+3
HEEBNER	4022	-960	+4
TORONTO	4051	-989	+3
LANSING	4064	-1002	+2
MUNCIE CREEK	4207	-1145	+5
STARK	4296	-1234	+2
вкс	4361	-1292	+8
MARMATON	4388	-1326	+5
ALTAMONT B	4435	-1373	+5
PAWNEE	4489	-1427	+4
FT SCOTT	4542	-1480	+6
CHEROKEE	4569	-1507	+5
JOHNSON	4602	-1540	+6
MORROW SHALE	4637	-1575	+3
MORROW SAND	4665	-1603	
MISS	4678	-1616	-32
RTD	4758	-1696	
LTD	4757	-1695	

12/10/11 Move In 12/11/11 Spud @ 1:45 PM Set Surface: 6 Jts New 24# 85/8" Tally 243.14 Set @ 255' cement w/ 180 Sxs Common 3% CC 2% gel Plug down 9:45 PM Cement Did Circulate 12/12/11 259' SHS 3/4 degree @ 259' SHS 2 degree @1260' 12/13/11 1850' 2885' Drilling ahead 12/14/11 12/15/11 3505' Drilling Ahead 12/16/2011 4050' Bit Trip To Surface 12/17/2011 4100' Dst #1 12/18/2011 4320' Dst # 2 12/19/2011 4500' Drilling Ahead ~ 100 off the Johnson Estimated Johnson depth @ 4608 12/20/2011 4640' Dst # 3 Johnson

Comments: Good strong blows on opens and blowback on shut-in pulling test Should be oil.

#### DST #1 Lansing A & B Zones

12/21/2011 4758' RTD-Logging

4050-4100 30-45-30-45

Ist Open: BOB in 19" Ist Shut-In: No Blow 2<sup>nd</sup> Open: BOB 23" 2<sup>nd</sup> Shut-In: No Blow

RECOVERY: 30' Gas In Pipe,

15'OCWM (15%0il,20%Wtr,65% Mud) 159' OCWM (4% Oil,47% Wtr,49%Mud) 124' OCMW (2%Oil,84%Wtr,14%Mud)

**TOTAL FLUID: 298'** 

 IFP/FFP:
 24-96/98-161#
 Recovery Chlorides: 46,500 ppm

 ISP/FSP:
 1190/1171#
 PH 6 RW .12@ 62 deg F

 IHP/FHP:
 1960/1956#
 System Chlorides 2,500 ppm

BHT: 117 deg.F

#### DST #2 Lansing I, J, K Zones

4262-4320 30-45-30-60

2nd Open: Building Blow OBB in 121/2 min 2nd Shut-In: BB

**RECOVERY:** 

435' Gas In Pipe

63' Clean Oil (39 grav)

62' G&OCWM (8% Gas, 10% Oil,34% Wtr,48% Mud) 62'G&OCMW (4% Gas,6% Oil, 65% Wtr,25% Mud)

62' OCWM (1% Oil, 95% Wtr, 4% Mud)

**TOTAL FLUID 249** '

IFP/FFP: 29-83/89-130 Recovery Chlorides: 54,500 PPM

ISP/FSP: 1256/1251# PH 6 RW.15@58deg

IHP/FHP: 2089/1067# System Chlorides 3000 ppm

BHT: 119 deg F

**DIAMOND TESTING** 

DIAMOND TESTING

#### DST#3 JOHNSON

#### **DIAMOND TESTING**

4590-4640 15-45-15-60

Ist Open: Building Blow OBB in 1 ¼ min

Ist Shut-In: Blow Back OBB 2nd Open: Building Blow OBB in 1 3/4 min

2nd Shut-In: Blow Back OBB

RECOVERY: 1170' Gas In Pipe 464' Clean Oil (31 grav) 72' G&OCM (4% Gas, 8% Oil, 88% Mud) TOTAL FLUID 536'

IFP/FFP: 61-153/160-212 ISP/FSP: 358/353# IHP/FHP: 2241/2240# BHT: 126 deg F

System Chlorides 3500 ppm

#### **Johnson Zone Pressure Comments:**

#1 Sheetz Spud 2/4/2011 ISP/FSP: 1139/1135# #1 Zerr Spud 9/19/2011 ISP/FSP: 1051/1025# #2 Zerr 12/20/2011 ISP/FSP: 358/353#

#### **SHOWS**

Lansing A (4066-68) Ls finexln, oolitic/ vuggy porosity ssfo, lt. stain, faint odor (DST 1)

Lansing B (4098-4102) Ls wh-cream fossil, oolitic, rare interxln porosity SSFO on break, spotty stain ,slight

odor(DST1

Lansing E/F (4138-4148) Ls crm-tan, rare interxln porosity, vssfo on break, no odor, spotty stain

Ls wh, fine xln, fossil, oolitic, chalky ,rare gd vuggy porosity, ssfo, fair stain, slight odor

Lansing H(4223-4226)
Lansing I (4254-4256)
Lansing J (4269-72)

strong odor(DST 2)

Lansing K 4302 Ls wh-crm, fnxln oolitic, mostly dense, rare fr vuggy porosity, ssfo, gassy on break, spotty stn,

strong odor (Dst 2)

Johnson (4614-17,4624-37) Ls wh/tan fine-interxln sl.foss -pinpt porosity, FSFO,, Sat Staining, Fr Odor 57 unit gas kick

Morrow/Cherokee Sand (4665-70) Sd clear f-medgrn, subang, prly srtd, friable, FSFO, ODOR, gil staining