

Confidentiality Requested:

Yes No

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

1225783

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		
Address 2:			Feet from North / South Line of Section		
City:	State: Z	ip:+	Feet from East / West Line of Section		
Contact Person:			Footages Calculated from	Nearest Outside Section C	Corner:
Phone: ()			□ NE □ NW	V □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:	W	ell #:
	e-Entry	Workover	Field Name:		
	_		Producing Formation:		
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW ∏ SIGW	Elevation: Ground:	Kelly Bushing:	
	GSW	Temp. Abd.	Total Vertical Depth:	Plug Back Total D	epth:
CM (Coal Bed Methane)	dow	Temp. Abd.	Amount of Surface Pipe Se	et and Cemented at:	Feet
☐ Cathodic ☐ Other (Co	ore, Expl., etc.):		Multiple Stage Cementing	Collar Used? Yes	No
If Workover/Re-entry: Old Well I			If yes, show depth set:		Feet
Operator:			If Alternate II completion, c	cement circulated from:	
Well Name:			feet depth to:	w/	sx cmt.
Original Comp. Date:					
Deepening Re-perf	J	ENHR Conv. to SWD	Drilling Fluid Managemer	nt Dlan	
☐ Plug Back	Conv. to G		(Data must be collected from to		
Commingled	Pormit #:		Chloride content:	ppm Fluid volume	: bbls
Dual Completion			Dewatering method used: _		
SWD			Location of fluid disposal if	f hauled offsite:	
☐ ENHR					
GSW	Permit #:		Operator Name:		
_ <del>_</del>			Lease Name:	License #:_	
Spud Date or Date R	eached TD	Completion Date or	QuarterSec	TwpS. R	East West
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 Approved by: Date:					



Operator Name:			Lease Name:			Well #:	
Sec Twp	S. R	East West	County:				
open and closed, flow	ing and shut-in pressu	ormations penetrated. Dures, whether shut-in preith final chart(s). Attach	ssure reached stati	c level, hydrosta	itic pressures, bott		
		otain Geophysical Data a or newer AND an image t		gs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electronic log
Drill Stem Tests Taken (Attach Additional S		Yes No			on (Top), Depth an		Sample
Samples Sent to Geol	ogical Survey	Yes No	Nam	Э		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING	RECORD Ne	w Used			
		Report all strings set-			ion, etc.		
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
_	5 "	ADDITIONAL	CEMENTING / SQU	EEZE RECORD			
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used		Type and P	ercent Additives	
	ılic fracturing treatment or	n this well?		Yes	No (If No, ski	p questions 2 aı	nd 3)
Does the volume of the to	otal base fluid of the hydra	aulic fracturing treatment ex submitted to the chemical of	=	= =	No (If No, ski	p question 3) out Page Three	
Shots Per Foot	PERFORATIO Specify Fo	N RECORD - Bridge Plug potage of Each Interval Perl	s Set/Type forated		cture, Shot, Cement mount and Kind of Ma		d Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No		
Date of First, Resumed	Production, SWD or ENH	IR. Producing Meth		Gas Lift (	Other (Explain)		
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf Wate	er B	bls. G	as-Oil Ratio	Gravity
DISPOSITIO	ON OF GAS:	N Open Hole		Comp. Cor	mmingled	PRODUCTIO	DN INTERVAL:
(If vented, Sub	omit ACO-18.)	Other (Specify)	(Submit A	(Sub	mit ACO-4)		

Form	ACO1 - Well Completion
Operator	Quail Oil & Gas, LC
Well Name	AJ 1-23
Doc ID	1225783

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.250	8.625	28	606	Class A	350	6% gel, 3%cc
Production	7.875	5.5	15.5	6481	ACS	285	

# ALLIED OIL & GAS SERVICES, LLC 063151 Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999

SERVICE POINT:

SOUTH		EXAS 760	92			MEDICINA	E LODGE K
DATE 8-5-14	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE AJ	WELL#	1-23	LOCATION PRETE	erion Ks	5 12 W	CLARK	STATE
OLD OR NEW (Cir	cle one)		4 N E+3	INTO			
CONTRACTOR A	AUPPIAN	, 11	16		UAIL OIL + G	AS	
TYPE OF JOB				OWINER	STILL OF		
HOLE SIZE 12			. 610	CEMENT			
CASING SIZE	8 5/8	100000000000000000000000000000000000000	PTH 606.10	_ AMOUNT O	RDERED		
TUBING SIZE			PTH				
DRILL PIPE TOOL	-		PTH PTH				
PRES. MAX	-		NIMUM	COMMON		@	
MEAS. LINE			DE JOINT 39, 82				
CEMENT LEFT IN	CSG.	39-82	/	and .		@	
PERFS.				_ CHLORIDE			
DISPLACEMENT			20	_ ASC			
	EQU	IPMENT		-			
						@	-
			PRIDDY			@	
#471/302 1 BULK TRUCK	HELPER	RON G	ILLEY	-		_ @	
	DRIVER	TAMAS	BOWEN			_ @	
BULK TRUCK		41.0-	100001				
#	DRIVER			- HANDLING			
	RE	MARKS:				TOTAL	
ON LOCATION,	SAFTEY	MERTIN	6/570TIN REG	JP GI		TOTAL	
			TEST, PUMP SA		SERVI	CE	
			THIL COMBAT				
SHUT SOUN A	OLIESE -	1246, 5	THAT DISTERES IN		JOB	Marille House	
THE BEEF	5)57 (VV) 5 (VG) 5	EUNI DI	7 9100	PUMPTRU	CK CHARGE	No. of the last of	
DID CIRCULATION	G CAMO	JUT 6 15	BELS)	_ EXTRA FOO	OTAGE		
					)		
CHARGE TO:	VAIL (	ONL + GI	+5				
STREET						TOTAL	
CITY	ST.	ATE	ZIP		PLUG & FLOA	T EQUIPME	NT
				-		@	
To: Allied Oil & O	Gas Servi	ces, LLC				@	
You are hereby re	quested t	o rent cer	nenting equipment			@	
and furnish cemer	nter and h	elper(s) t	o assist owner or			@	
			he above work was				
			of owner agent or			TOTAL	
			nd the "GENERAL d on the reverse side		(If Any)		
	-			TOTAL GILL			
	Crair	1/	Henbach		ARGES		THE REAL PROPERTY.
PRINTED NAME_	1019	1241	1811/100 1	_ DISCOUNT		IF PA	ID IN 30 DAYS

#### GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "ALLIED" shall mean Allied Oil & Gas Services, LLC, and "CUSTOMER" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "Merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

—TERMS: Unless satisfactory credit has been established, CUSTOMER must tender full cash payment to ALLIED before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, CUSTOMER agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that CUSTOMER may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate. Any amounts previously paid as excess interest shall be deducted from the amounts owing from the CUSTOMER or at the option of ALLIED, refunded directly to CUSTOMER. For purposes of this paragraph, ALLIED and CUSTOMER agree that Kansas law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

—ATTORNEY FEES: In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including,

but not limited to, a reasonable sum as and for attorney's fees.

- —PRICES AND TAXES: All merchandise listed in ALLIED'S current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.
- —TOWING CHARGES: ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by CUSTOMER.
- —PREPARATION CHARGES: If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation,
- —DEADHAUL CHARGES: Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED's current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.
  - —SERVICE CONDITIONS AND LIABILITIES:
- ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. CUSTOMER shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:
- (A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and
- (B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.
- 2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.
- ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.
- WARRANTIES:
- 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.
  - 2. More specifically:
- (A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.
- (B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.

(C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent, and ALLIED will

accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.



# CEMENTING LOG STAGE NO.

8-5-1	121	mark a seed	lonit -	cket No. 631		CEMENT DATA: Spacer Type: FRESH H10	
Date				MAVERIC	106	Amt. Sks Yield ft³/sk Dens	and the pro-
Lease 1	世	077		ell No. 1-2	3	Amt Sks field ft <sup>3</sup> /sk Dens	ityPPC
County CLAS	K			ate /45			100
Location PROF	ECTION A	15 51	12 W FH	eld		LEAD: Pump Time hrs. Type _	65:35 6 % 6
4 N	E 15	INTU				3 % te 1/4 Flo SGAL Exce	
CASING DATA:	Conductor		The state of the s	A STATE OF THE PARTY OF THE PAR		Amt. 25 Sks Yield 1 99 ft³/sk Dei	nsity 12 4 PPC
05%		Intermed	Control of the same			TAIL: Pump Time hrs. Type	
Size 8 76	Type	Weig	ght	Collar		LACC	
						Amt. 100 Sks Yield 1.35 ft <sup>3</sup> /sk De	Maria de la companya del companya de la companya de la companya del companya de la companya de l
-			-			WATER: Lead gals/sk Tail gals/sk	Total Bbls
Casing Depths: T	on EOE 12	()	Rottom			Pump Trucks Used 471/301	
Coang Depuis.	ор		. Bottom			Bulk Equip. 421 / 290	
The state of the s			WILLIAM	- vicina		buk Equip. 22-22-22-22-22-22-22-22-22-22-22-22-22-	
Drill Pipe: Size		Weight		Collars			
Open Hole: Size				P.B. to		Float Equip: Manufacturer WEATHGREORD	
CAPACITY FACT						Shoe: Type	Depth
Casing:	Bbls/Lin. ft	.0624	Lin. ft./B	ы. 16.02		Float: Type AF V TINSERY	Depth 39.82
Open Holes:	Bbls/Lin. ft		Lin. ft./B	bl		Centralizers: Quantity Plugs Top	Btm
Drill Pipe:	Bbls/Lin. ft		Lin. ft./B	bl		Stage Collars	
Annulus:	Bbls/Lin. ft	0735	Lin. ft./B	bl. 13.60		Special Equip. 3 CENTAGEIZER L B.	
	Bbls/Lin. ft		Lin. ft./B	ы		Disp. Fluid Type FRESE N. O Amt. 36 Bt	ols. Weight 8.33 PPC
Perforations: F	rom	ft. to		ft. Amt		Mud Type	Weight PPC
			1				Tile
COMPANY REPR	ESENTATIVE	thy				CEMENTER SCOTT PRIDBY	***
TIAAC	DDECCH	DEC DCI	FILE	IID DI IMPED	DATA		-
TIME	PRESSU DRILL PIPE		TOTAL	Pumped Per	RATE	REMARKS	1000
AM/PM	CASING	ANNULUS	FLUID	Time Period	Bbls Min.		
900 AM	F	14				ON LOCATION /RUN CASING	
1250 PM						SAFTEY MEETING	4
100 PM	1500				1	TRESSURE TEST	1
100 7	200		3		1-0	PUMP SPACER	
103 PM	200		0.0		2	PUMP LEAD CEMEUT	
120 PM	390		24		7	BANT DOWN / RELIES FLORE	
130 PM 132 PM	200				-	STATE DISPLATINGUE	
140 71	300		.30		3	SLOW RATE	
143 Pm	800		351/2		3 3	BURIP PLUG	Sale.
145 PM	0		2012			RELIESE PRESSURE	7000
						7,000	
						FLORI DID HOLD	Same.
			15			DID CIRCULATE CEMENT	1
					1		
-							
-							
	-						
							No.
					-	1.4	
FINAL DISP. PRES	ss: 300	PSI	BUMP PLUC	TO 8 00	)	PSI BLEEDBACK BBLS.	THANK YOU

MILLER PRINTERS, INC - Great Band, KS



# **GEMENTING LOG**

STAGE NO.

OII	L & GAS SEK	VICES, LLC	•		,	CEMENT DATA:
Date 8-16-1	Distric	MEDICA	18 1006	cket No. 634	part.	Spacer Type: ASE + WAYER FROSH
Company Our	del de de	H-GAS	The state of the s	g MAUBRIC	4 750	Amt Sks Yield ft <sup>3</sup> /sk Density PPG
Lease AJ			W	/ell No. 1-23		
County CLAR	16	1 = 1	1.1	tate KS	ef 1	
Location YRO'S	ETTION 19		The second secon	eld	da 1	EAD: Pump Time hrs. Type
CASING DATA:	Conductor [			`		Excess Amt Sks Yield ft ³/sk Density PPG
CACINO DATA.	Surface [			Squeeze Mis		Amt Sks Yield ft 3/sk Density PPG TAIL: Pump Time hrs. Type #5 c.
Size 5 1/2				Collar	cı 🗖	5" KOLSEAL 6"SALT 5.5 % CVP 1760 Excess 5% CAS BLOCK
0120	_ 1,400		J	oonar		Amt. 285 Sks Yield 1, 55 ft 3/sk Density 14,6 PPG
				4 34		WATER: Lead gals/sk Tail <u>6.9</u> gals/sk Total <u>96.34/</u> Bbls.
Casing Depths: To	op		Bottom			Pump Trucks Used 872 = 553
						Bulk Equip. 819 · 823
Drill Pipe: Size	mile			Collars		gr. and gr. and
Open Hole: Size _	1.18	T.D. <u>6</u>	484 ft. 1	P.B. to	ft f	Float Equip: Manufacturer
CAPACITY FACTO		1020		419-01		Shoe: Type AFV FLORT SNOT Depth
Casing:	The state of the s			bi. 4201		Float: Type 10 Plug TNSGRY Depth
Open Holes:				Bbl		Centralizers: Quantity Plugs Top Btm
Drill Pipe:	Bbls/Lin. ft			Bbl. 32.406	5	Special Equip. BASKET **2
Annulus:				Bbl.		Disp. Fluid Type 2 % 18 6 Amt. 15 bls. WeightPPG
Perforations: Fr				ft. Amt		Mud Type WeightPPG
COMPANY REPRE	ESENTATIVE					CEMENTER SCOTT PRIDDY
TIME	PRESSUI	RES PSI	FLU	JID PUMPED D	DATA	REMARKS
AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	TENPARO
930 0111						ON LOCATION SM. SPOT IN RIGUP
400 PM						SAFTEY MESTING
430 PM					41	PRESSURE TEST
430 PM	500		18		9	PUMP SPACER
440 PM						Plus RAT HOLE
450 FF	300		79		6.5	PLUG mouse HOLE
450 PM 455 PM 540 PM	300	- 10	11		\$67 Thi?	SHUT DOWN, CLEAN LINES
E SE PM						8 RELIECE PLUG
555 PM 555 PM					7	START DISPLACEMENT
034					1	
615 PM	700		144		-3	SLOW RATE
620 PM	1400		154		3	Bum? Plua
615 PM						RELIECT PRESSURE
644 1						
						FLOAT DID HOLD
-						
3		-				
	2					
	ung			111.	12	
FINAL DISP. PRES	ss: 100	PSI	BUMP PLU	g то <u>14</u> 0	0	PSI BLEEDBACK BBLS. THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS



#### **DIAMOND TESTING** P.O. Box 157

HOISINGTON, KANSAS 67544 (800) 542-7313

#### **DRILL-STEM TEST TICKET** FILE: AJ1-23 DST1

TIME ON: 8-10 21:46

TIME OFF: 8-11 06:29

Company Quail Oil & Gas	_Lease & Well No. AJ #1	-23		
Contractor Maverick #106	Charge to Quail Oil &	Gas		
Elevation 2039 KB Formation Marro	N_Effective Pay	Ft	. Ticket No	S0477
Date 8-11-14 Sec. 23 Twp. 32 S R	ange21 w	County	Clark State	KANSAS
Test Approved By Aarron Young	_ Diamond Representative	Jac	ob McCallie	
Formation Test No. 1 Interval Tested from 52	57 ft. to 52	284 <sub>ft.</sub> Total De	pth	5284 ft.
Packer Depth 5251_ft. Size6 3/4 in.	Packer depth	ft.	Size 6 3/4	in.
Packer Depth 5257 ft. Size6 3/4 in.	Packer depth	ft.	Size6 3/4	in.
Depth of Selective Zone Set				
Top Recorder Depth (Inside) 5237 ft.	Recorder Number	5515 Cap	o5,0	<u>00</u> P.S.I.
Bottom Recorder Depth (Outside)ft.	Recorder Number	5586_Ca	ip5,0	000 <sub>P.S.I.</sub>
Below Straddle Recorder Depthft.	Recorder Number	Cap	0	P.S.I.
Mud Type Chem Viscosity64	Drill Collar Length	ft.	I.D. 2	<u>1/4</u> in.
Weight 9.4 Water Loss 8.4 cc.	Weight Pipe Length	ft.	I.D2	7/8 in
Chlorides 4900 P.P.M.	Drill Pipe Length	5224 <sub>ft.</sub>	I.D3	1/2 in
Jars: Make STERLING Serial Number 4	Test Tool Length	33 <sub>ft.</sub>	Tool Size3	1/2-IF in
Did Well Flow? NO Reversed Out NO	Anchor Length	27_ <sub>ft.</sub>	Size4	1/2-FH in
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in.	Surface Choke Size	1 in	Bottom Choke	Size 5/8 in
Wall Tible Gize	Surface Choke Size		DOMOITI CHOKE	JIZOIII
Blow: 1st Open: BB Immediately (Gas to surfac				5126
			В	
Blow: 1st Open: BB Immediately (Gas to surfac		NOBI	В	
Blow: 1st Open:BB Immediately (Gas to surfaction of the Open:BB Immediately		NOBI	В	
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered		NOBI	В	, , , , , , , , , , , , , , , , , , ,
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface  Recovered 186 ft. of SLMCW 93% W 7% M  Recovered 186 ft. of TOTAL FLUID	e in 3 min)	NOBI	В	,
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface  Recovered 186 ft. of SLMCW 93% W 7% M  Recovered 186 ft. of TOTAL FLUID  Recovered 122 ft. of	e in 3 min)	NOBI	В	
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface  Recovered 186 ft. of SLMCW 93% W 7% M  Recovered 186 ft. of TOTAL FLUID	e in 3 min)	NOBI NOBI	B B	7
Blow: 1st Open: BB Immediately (Gas to surfact 2nd Open: BB Immediately  Recovered ft. of Gas to Surface  Recovered 186 ft. of SLMCW 93% W 7% M  Recovered 186 ft. of TOTAL FLUID  Recovered 122 ft. of Recovered ft. of ft	e in 3 min)	NOBI NOBI	B B	
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface  Recovered 186 ft. of SLMCW 93% W 7% M  Recovered 186 ft. of TOTAL FLUID  Recovered 122 ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de	e in 3 min)	NOBI NOBI	B  B  e Job  er Charges	
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface  Recovered 186 ft. of SLMCW 93% W 7% M  Recovered 186 ft. of TOTAL FLUID  Recovered 122 ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de Remarks: CHLORIDES: 59,000 ppm	e in 3 min) grees F	NOBI NOBI Price Othe Insu	B  B  e Job  er Charges	
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface Recovered 186 ft. of SLMCW 93% W 7% M Recovered 186 ft. of TOTAL FLUID  Recovered 122 ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de Remarks: CHLORIDES: 59,000 ppm	e in 3 min) grees F	Price Other Insurant	B  B  e Job  er Charges	119
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface Recovered 186 ft. of SLMCW 93% W 7% M Recovered 186 ft. of TOTAL FLUID  Recovered 122 ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de Remarks: CHLORIDES: 59,000 ppm  TOOL SAMPLE: Blew Out	grees F	Price Other Insurant	B B e Job er Charges arance	
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface Recovered 186 ft. of SLMCW 93% W 7% M Recovered 186 ft. of TOTAL FLUID  Recovered 122 ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de Remarks: CHLORIDES: 59,000 ppm  TOOL SAMPLE: Blew Out  Time Set Packer(s) 1:14 AM A.M. P.M. Time Started Off Both	grees F  ttom 2:49 AM f	Price Other Insurance Total	B B e Job er Charges arance at	
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface Recovered 186 ft. of SLMCW 93% W 7% M Recovered 186 ft. of TOTAL FLUID  Recovered ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de CHLORIDES: 59,000 ppm  TOOL SAMPLE: Blew Out  Time Set Packer(s) 1:14 AM A.M. P.M. Time Started Off Boundard Pressure.	e in 3 min)  grees F  httom 2:49 AM from 26 (B) 6	Price Othe Insurant Total	B B e Job er Charges brance al m Temperature _	119 3_P.S.I.
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface  Recovered 186 ft. of SLMCW 93% W 7% M  Recovered 186 ft. of TOTAL FLUID  Recovered ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de CHLORIDES: 59,000 ppm  TOOL SAMPLE: Blew Out  Time Set Packer(s) 1:14 AM A.M. P.M. Time Started Off Boundard Flow Period Minutes 20	e in 3 min)  grees F  ttom 2:49 AM 6  (B) 6  (D) 15	Price Othe Insu  Tota  A.M. P.M. Maximur  06 P.S.I.  17 P.S.I. to (C)	B B e Job er Charges irance al m Temperature _	119
Blow: 1st Open: BB Immediately (Gas to surface 2nd Open: BB Immediately  Recovered ft. of Gas to Surface Recovered 186 ft. of SLMCW 93% W 7% M Recovered 186 ft. of TOTAL FLUID  Recovered ft. of Recovered ft. of PH: 7 RW: .12 @ 69 de CHLORIDES: 59,000 ppm  TOOL SAMPLE: Blew Out  Time Set Packer(s) 1:14 AM A.M. P.M. Time Started Off Both Initial Hydrostatic Pressure.  Initial Flow Period Minutes 20  Initial Closed In Period Minutes 30	e in 3 min)  grees F  attom 2:49 AM from 26 (B) 6 (C) 15 (C) 6 (C) 158	Price Othe Insu  Tota A.M. P.M. Maximur  06 P.S.I. 17 P.S.I. to (C) 88 P.S.I.	B B e Job er Charges irance al m Temperature _	119 3_P.S.I.

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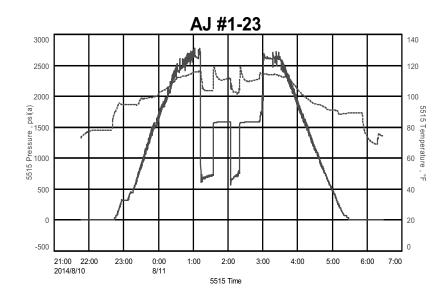
# Diamond Testing LLC

## **General Information Report**

Jacob McCallie 620-617-7116 mccallie.dtllc@gmail.com

### **General Information**

Company Name Quail Oil & Gas **Wray Valentine** Contact **Well Name** AJ #1-23 **Unique Well ID** DST #1 Marrow 5257-5284' Surface Location SEC 23-32S-21W Clark County **Morrison Northwest** Field Well Type Vertical **Test Type Drill Stem Test Formation** DST #1 Marrow 5257-5284' **Well Fluid Type** 02 Gas **Start Test Date** 2014/08/10 **Start Test Time** 21:46:00 **Final Test Date** 2014/08/11 **Final Test Time** 06:29:00 Job Number S0477 Representative Jacob McCallie Report Date 2014/08/11 **Qualified By Aarron Young** 



#### **Test Results**

#### **RECOVERED:**

Gas to surface

186' SLMCW 93% W 7% M

186' TOTAL FLUID

PH: 7

RW: .12 @ 69 degrees F Chlorides: 59,000 ppm

TOOL SAMPLE: Blew Out



### **DIAMOND TESTING** P.O. Box 157

HOISINGTON, KANSAS 67544 (800) 542-7313

# **DRILL-STEM TEST TICKET**

TIME ON: 09:35 TIME OFF: 22:37

FILE: AJ1-23 DST2

Company Quail Oil & Gas	_Lease & Well No. AJ #1-23	
Contractor Maverick #106	_ Charge to Quail Oil & Gas	
Elevation 2039 KB Formation Vic	a Effective Pay 7	Ft. Ticket NoS0478
Date 8-14-14 Sec. 23 Twp. 32 S F	ange21 W Cou	ntyClarkStateKANSAS
Test Approved By Aarron Young	Diamond Representative	Jacob McCallie
Formation Test No. 2 Interval Tested from 63	881 ft. to 6410 ft.	Total Depth6410 ft.
Packer Depth6375 ft. Size6 3/4in.	Packer depth	ft. Size6 3/4in.
Packer Depth6381_ft. Size6_3/4in.	Packer depth	ft. Size6 3/4in.
Depth of Selective Zone Set		
Top Recorder Depth (Inside)6361_ft.	Recorder Number	5515 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside)6384_ft.	Recorder Number	5586_Cap5,000_P.S.I.
Below Straddle Recorder Depthft.		Cap P.S.I.
Mud Type Chem Viscosity 60	Drill Collar Length	ft. I.D. <u>2 1/4</u> in.
Weight         9.4         Water Loss         11.6         cc	Weight Pipe Length	ft. I.D2 7/8in
Chlorides 4,500 P.P.M.	Drill Pipe Length	6348 ft. I.D. 3 1/2 in
Jars: Make STERLING Serial Number 4	Test Tool Length	33 ft. Tool Size 3 1/2-IF in
Did Well Flow? NO Reversed Out YES	Anchor Length	29 ft. Size 4 1/2-FH in
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in.	Surface Choke Size 1	in. Bottom Choke Size 5/8 in
Blow: 1st Open: BB Immediately (Gas to surface	e in 4 min)	BBBB
Blow: 1st Open:BB Immediately (Gas to surface 2nd Open:BB Immediately	e in 4 min)	BBBB BBBB
•	e in 4 min)	
<sup>2nd Open:</sup> BB Immediately		BBBB
2nd Open:BB Immediately  Recovered ft. of GTS in 4 min	c to truck) Gravity: 38 @	BBBB
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O         (10 bbls. (cir.))	c to truck) Gravity: 38 @ mate lost down hole)	BBBB
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O (10 bbls. (circle))           Recovered         700 ft. of CO         100% O (esting)	c to truck) Gravity: 38 @ mate lost down hole)	BBBB
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O (10 bbls. (cir)           Recovered         700 ft. of CO         100% O (esti)           Recovered         342 ft. of SLOCMCW 2% O 81% W 17	c to truck) Gravity: 38 @ mate lost down hole) % M	BBBB  60 degrees F  Price Job
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O (10 bbls. (cir. of CO)           Recovered         700 ft. of CO         100% O (esti. of CO)           Recovered         342 ft. of CO         2% O 81% W 17           Recovered         1746 ft. of CO         100% O (esti. of CO)	c to truck) Gravity: 38 @ mate lost down hole) % M	BBBB  60 degrees F  Price Job
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O (10 bbls. (cir. of CO)           Recovered         700 ft. of CO         100% O (esti. of CO)           Recovered         342 ft. of SLOCMCW         2% O 81% W 17           Recovered         1746 ft. of TOTAL FLUID           Recovered         ft. of PH: 7         RW: .08 @ 82 ft. of CALL ORDERS (2000 pages)	c to truck) Gravity: 38 @ mate lost down hole) % M	BBBB 2 60 degrees F  Price Job Other Charges
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O (10 bbls. (cir. of CO)           Recovered         700 ft. of CO         100% O (esti. of CO)           Recovered         342 ft. of SLOCMCW         2% O 81% W 17           Recovered         1746 ft. of TOTAL FLUID           Recovered         ft. of PH: 7         RW: .08 @ 82 ft. of CHLORIDES: 76,000 ppm           TOOL SAMPLE: Blew out         Estimated Perocity	c to truck) Gravity: 38 @mate lost down hole)  M M  degrees F	BBBB 2 60 degrees F  Price Job Other Charges
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O (10 bbls. (cir)           Recovered         700 ft. of CO         100% O (esti)           Recovered         342 ft. of SLOCMCW 2% O 81% W 17           Recovered         1746 ft. of TOTAL FLUID           Recovered         ft. of PH: 7 RW: .08 @ 82 ft           Remarks:         CHLORIDES: 76,000 ppm	c to truck) Gravity: 38 @ mate lost down hole) % M degrees F	Price Job Other Charges Insurance
2nd Open: BB Immediately           Recovered         ft. of GTS in 4 min           Recovered         704 ft. of CO         100% O (10 bbls. (cir. of CO)           Recovered         700 ft. of CO         100% O (esti. of CO)           Recovered         342 ft. of SLOCMCW         2% O 81% W 17           Recovered         1746 ft. of TOTAL FLUID           Recovered         ft. of PH: 7 RW: .08 @ 82 ft. of CHLORIDES: 76,000 ppm           TOOL SAMPLE: Blew out         Estimated Perocity           12:40 DM A.M.	c to truck) Gravity: 38 @ mate lost down hole) % M degrees F : 12% ottom 4:25 PM A.M. P.M.	BBBB 2 60 degrees F  Price Job Other Charges Insurance Total  Maximum Temperature 139
Recovered	c to truck) Gravity: 38 @ mate lost down hole) % M  degrees F  : 12% cto truck) A.M. P.M. 269 P	Price Job Other Charges Insurance Total Maximum Temperature 139 S.I. S.I. to (C) 401 P.S.I.
Recovered	c to truck) Gravity: 38 @ mate lost down hole) % M  degrees F  : 12% ottom 4:25 PM A.M. P.M.  (A) 3112 P. (B) 269 P. (D) 1556 P.	Price Job Other Charges Insurance Total Maximum Temperature 139 S.I. S.I. to (C) 401 P.S.I. S.I.
Recovered	c to truck) Gravity: 38 @ mate lost down hole) % M  degrees F  : 12%  ottom 4:25 PM A.M. P.M.  (A) 3112 P. (B) 269 P. (C) 1556 P. (E) 457 P.	Price Job Other Charges Insurance Total Maximum Temperature 139 S.I. S.I. to (C) 401 P.S.I. S.I. to (F) 667 P.S.I.
Recovered	c to truck) Gravity: 38 @ mate lost down hole) % M  degrees F  : 12% ottom 4:25 PM A.M. P.M.  (A) 3112 P. (B) 269 P. (D) 1556 P.	BBBB  2 60 degrees F  Price Job Other Charges Insurance Total  Maximum Temperature139  S.I. S.I. to (C)401 P.S.I. S.I. S.I. to (F)667 P.S.I. S.I.

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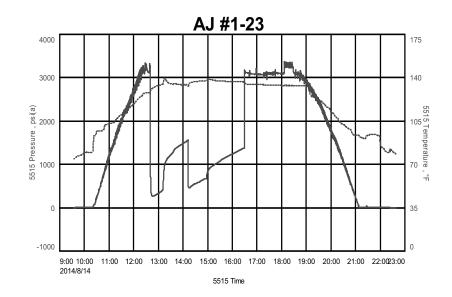
## **General Information Report**

# Diamond Testing LLC

Jacob McCallie 620-617-7116 mccallie.dtllc@gmail.com

#### **General Information**

Company Name Contact	Quail Oil & Gas Wray Valentine
Well Name	AJ #1-23
Unique Well ID	DST #2 Viola 6381-6410'
•	SEC 23-32S-21W Clark County
	_
Field	Morrison Northwest
Well Type	Vertical
Test Type	Drill Stem Test
Formation	DST #2 Viola 6381-6410'
Well Fluid Type	01 Oil
Start Test Date	2014/08/14
Start Test Time	09:35:00
Final Test Date	2014/08/14
Final Test Time	22:37:00
Job Number	S0478
Representative	Jacob McCallie
Report Date	2014/08/14
Qualified By	Aaron Young



#### **Test Results**

**RECOVERY:** 

GTS in 4 min

704' CO 100% O (10 bbls. circ to truck) GRAVITY: 38 @ 60 degrees F

700' CO 100% O (estimate lost down hole)

342' SLOCMCW 2% O 81%W 17% M

1746' TOTAL FLUID

PH: 7

RW: .08 @ 82 degrees F Chlorides: 76,000 ppm Est. Perocity: 12%

TOOL SAMPLE: Blew out