

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1071200

Form ACO-1 June 2009 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:	
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from Cast / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.): If Workover/Re-entry: Old Well Info as follows:	Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used?
Operator:	
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW Original Total Depth Original Total Depth Original Total Depth Plug Back: Plug Back Total Depth Plug Back Total Depth Commingled Permit #: Original Total Depth Dual Completion Permit #: Original Total Depth SWD Permit #: Original Total Depth ENHR Permit #: Original Total Depth	Chloride content: ppm Fluid volume: bbls Dewatering method used: Location of fluid disposal if hauled offsite: Operator Name: Lease Name: License #: Quarter Sec TwpS. R East _ West
GSW Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date Recompletion Date	

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					
Letter of Confidentiality Received					
Date:					
Confidential Release Date:					
Wireline Log Received					
Geologist Report Received					
UIC Distribution					
ALT I II III Approved by: Date:					

	Side Two	
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East West	County:	

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 complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional She	eets)	Yes	No		og Formatio	n (Top), Depth an	d Datum	Sample
Samples Sent to Geolog	ical Survey	Yes	No	Nam	ie		Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted E (If no, Submit Copy)	Electronically	☐ Yes ☐ Yes ☐ Yes	No No No					
List All E. Logs Run:								
		Depart all				ion etc		
Purpose of String	Size Hole Drilled	Size Ca Set (In C	sing	onductor, surface, inte Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD				
Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated						ement Squeeze Record I of Material Used)	Depth		
TUBING RECORD:	Siz	ze:	Set At:		Packer	At:	Liner R	un:	No	
Date of First, Resumed F	Product	ion, SWD or ENH	۲.	Producing N	_	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	ər	Bbls.	Gas-Oil Ratio	Gravity
									Ι	
DISPOSITIO	N OF C	BAS:			METHOD	OF COMPLE	TION:		PRODUCTION INTE	RVAL:
Vented Sold Used on Lease			Open Hole	Perf.	Dually (Submit)	Comp. Commingled (Submit ACO-4)				
(If vented, Subi	mit ACC)-18.)		Other (Specify)					

Form	ACO1 - Well Completion
Operator	Gra Ex, LLC
Well Name	Violet 1
Doc ID	1071200

All Electric Logs Run

Sonic	
Micro	
Bond	
CNL/CDL	
DIL	

			PAGE		CT	JCT NO	INVOICE DATE
- Aller		_	1 of 1			01703	11/30/2011
eagi Bagi	Careeren en					IVOICE NUMBI	
ENERGY SERVI	CES				171	8 - 9076528	5
Pratt B GRA-EX LLC I PO Box: 32 L KINGMAN KS US 67068 T o ATTN:	(620) ACCOUNTS	072-1201	J LEASE ⁰ LOCAT ^B COUNT ^S STATE ^I JOB D ^E JOB C	ION Y ESCRI	PTION	Violet l Stafford KS Cement-New We	ll Casing/Pi
JOB # EQ	UIPMENT #	PURCHA	ASE ORDER	NO.		TERMS	DUE DATE
40401437	20920					Cash Sale	11/30/2011
<i>For Service Dates: 11/2</i> 0040401437			QT	У	U of M	UNIT PRICE	INVOICE AMOUNT
171805479A Cement-New 8 5/8" Surface 60/40 POZ Cello-flake Calcium Chloride Wooden Cement Plug 8 5/8 Unit Mileage Charge-Pickup Heavy Equipment Mileage Proppant and Bulk Delivery Depth Charge; 0-500' Blending & Mixing Service Plug Container Utilization C Supervisor	8" ps, Vans & Cars [,] Charges Charge			205.00 52.00 531.00 20.00 40.00 177.00 1.00 205.00 1.00	ea ea hr Mi Mi Hr Mi	9.24 2.85 0.81 123.20 3.27 5.39 1.23 770.00 1.08 192.50 134.75	148.15 T 429.31 T 123.20 65.45 215.60 218.06 770.00 220.99 192.50
PLEASE REMIT TO: BASIC ENERGY SERV PO BOX 841903 DALLAS,TX 75284-1	VICES,LP B	END OTHER COR ASIC ENERGY S O BOX 10460 IDLAND,TX 797	ERVICES, I			SUB TOTAL TAX DICE TOTAL	4,412.22 180.43 4,592.65

	PAGE	CTTST NO	INVOICE DATE
	1 of 1	1001703	12/13/2011
		INVOICE NUME	3ER
ENERGY SERVICES		1718 - 9077610	D1
Pratt (620) 672-1203 B GRA-EX LLC ^I PO Box: 32 L KINGMAN KS US 67068 T O ATTN: ACCOUNTS PAYABLE	O LOCATION B COUNTY S STATE I JOB DESC E JOB CON	N Stafford KS CRIPTION Cement-New W	Vell Casing/Pi

JOB #	EQUIPMENT	# PURCHASE	ORDER NO.		TERMS	DUE DATE	
40406047	19905				Cash Sale	12/13/2011	
		ł	QTY	U of M	UNIT PRICE	INVOICE AMOUNT	
For Service Dates	: 12/07/2011 to	0 12/07/2011				1	
0040406047							
			•				
171805501A Ceme	nt-New Well Casing	/Pi 12/07/2011					
5 1/2" Longstring							
AA2 Cement			125.00	EA	13.09	1,636.25	
60/40 POZ			75.00	EA	9.24		
De-foamer (Powder)			30.00	EA	3.08		
Salt (Fine)			623.00	EA	0.39	[
Cement Friction Red	ucer		36.00	EA	4.62		
Gas-Blok			89.00	EA	3.97 5.78		
FLA-322			36.00 625.00	EA EA	0.52		
Gilsonite Super Flush II			500.00		1.18		
Latch Down Plug &	Baffle 5 1/2" (Blue)		1.00	EA	308.00		
Auto Fill Float Shoe			1.00		277.20		
Turbolizer 5 1/2" (Bl	ue)		6.00	EA	84.70	508.2	
5 1/2" Basket			1.00	EA	223.30		
Unit Mileago Charge	-Pickups, Vans & Ci	ars	20.00	HR	3.27		
Heavy Equipment M			40.00	MI	5,39		
Proppant and Bulk D			183.00		1.23		
Depth Charge; 4001			1.00		1,940.39 1.08		
Blending & Mixing S			200.00 1.00		154.00		
Casing Swivel Renta Plug Container Utiliz			1.00	EA	192.50		
Supervisor			1.00	HR	134.75		
PLEASE REMIT	то:	SEND OTHER CORRES	PONDENCE TO):	SUB TOTAL	8,760.60	
BASIC ENERGY	ICES,LP			313.93			
PO BOX 841903 DALLAS, TX 752	84-1903	PO BOX 10460 MIDLAND,TX 79702		INVO	TAX DICE TOTAL	9,074.51	

64 4113



DRILL STEM TEST REPORT

Prepared For: C

Gra Ex LLC

PO Box 32 Kingman, KS 67068

ATTN: Jeff Burk

Violet #1

31-24s-13w Stafford,KS

 Start Date:
 2011.12.01 @ 04:40:20

 End Date:
 2011.12.01 @ 13:52:35

 Job Ticket #:
 42313
 DST #:
 1

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.12.14 @ 14:17:03

10 PM		DRILL STEM TE	ST REP	PORT				
	RILOBITE	Gra Ex LLC		31	-24 s -13w	Stafford,KS		
	ESTING , INC	PO Box 32 Kingman, KS 67068			Violet #1 Job Ticket: 42313 DST#:1			
		ATTN: Jeff Burk				011.12.01 @ 04:40	·	
GENERAL	INFORMATION:							
	Lansing D,F No Whipstock: ened: 07:32:35 ded: 13:52:35	ft (KB)	,,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	Tes	iter: I	Conventional Botto Vike Slemp 53	m Hole (Initial)	
Interval: Total Depth: Hole Diamete	3687.00 ft (KB) To 37 3744.00 ft (KB) (T∖ r: 7.88 inchesHole			Ref	erence Ee KB ti	194	3.00 ft (KB) 3.00 ft (CF) 0.00 ft	
Serial #: Press@Runt Start Date: Start Time:		@ 3689.00 ft (KB) End Date: End Time:	2011.12.01 13:52:35	Capacity Last Cali Time On Time Off	b.: Вtm 2	800 2011.1 2011.12.01 @ 07:3 2011.12.01 @ 10:5	0:05	
TEST COM	IMENT: IF-BOB in 5 min ISI-No blow back FF-BOB in 7 min FSI-No blow bac	-						
	Pressura vs. Ti EV 2007 Finiture	TTIA [V] BD77 Tamperatura				E SUMMARY		
1720		0077 Turpentus 100 terrentu - 100	Time (Min.) 0 3 32	Pressure (psig) 1799.89 44.52 220.74	100.47	Annotation Initial Hydro-static Open To Flow (1) Shut-In(1)		
	AM		75	1158.37 214.85 445.92	109.72 109.17	End Shut-In(1) Open To Flow (2) Shut-In(2)		
			200 203	1154,32 1705.95	113.91	End Shut-In(2) Final Hydro-static		
† The Zoe 2011	CAAF DAM Time (Imm)	12644						
•	Recovery	·			Gas	Rates		
Length (ft)	Description	Valume (bbl)			Choke (inc	hes) Pressure (psig)	Gas Rate (Mcf/d)	
248.00 682.00	MCW 50%mu50%w ater sl MCW95%w ater5%mud	kim of oil 3.48 9.57						
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Trilobite Testing, Inc

Printed: 2011.12.14 @ 14:17:03

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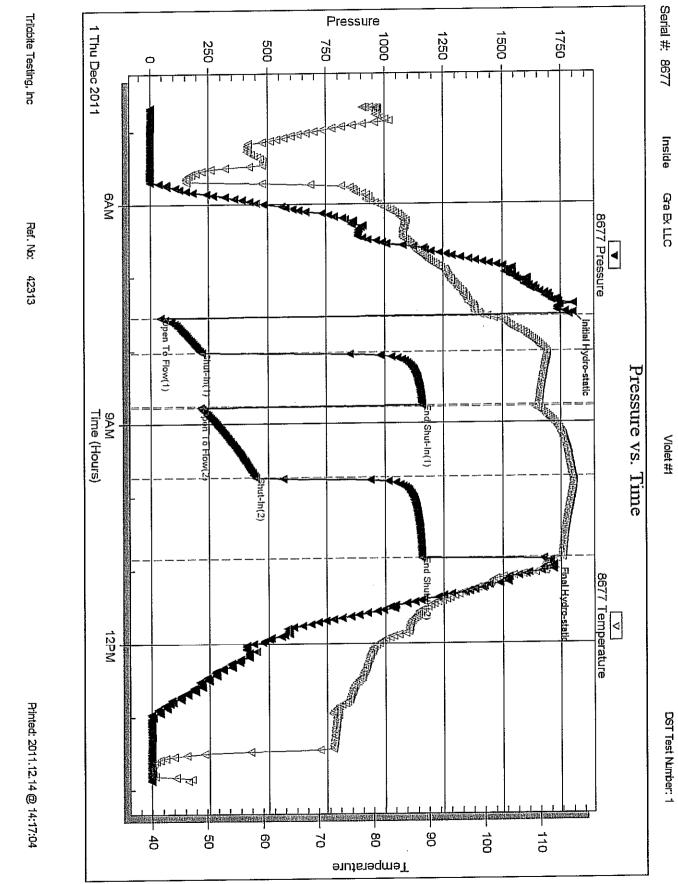
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RILOBITE	Gra Ex I				31-24s-13w Staf	ford,KS
TESTING, I	IC PO Box				Violet #1	DST#:1
	-	Jeff Burk			Job Ticket: 42313 Test Start: 2011.12.	
Tool Information						
Drill Fipe: Length: 3668.00 Heavy Wt. Fipe: Length: 0.00 Drill Collar: Length: 0.00 Drill Fipe Above KB: 7.00 Depth to Top Packer: 3687.00	ft ft	0.00 in 0.00 in	ches Volume: ches Volume: ches Volume: Total Volume:	51.45 bbl 0.00 bbl 0.00 bbl 51.45 bbl	Weight set on Pa Weight to Pull Lou Tool Chased String Weight: In	2000.00 lb acker: 25000.00 lb ose: 70000.00 lb 0.00 ft itial 55000.00 lb inal 58000.00 lb
Tool Length: 83.00 Number of Packers: 2 Tool Comments:	ft	6.75 in	ches			
	Length (ft)	Serial No.	Position		Accum. Lengths	
Shut In Tool	5.00	Serial No.	Position	3666.00	Accum. Lengths	
Shut In Tool Hydraulic tool	5.00 5.00	Serial No.	Position	3666.00 3671.00	Accum. Lengths	
Shut In Tool -lydraulic tool Jars	5.00 5.00 5.00	Serial No.	Position	3666.00 3671.00 3676.00	Accum. Lengths	
Shut in Tool Hydraulic tool Jars Safety Joint	5.00 5.00 5.00 2.00	Serial No.	Position	3666.00 3671.00 3676.00 3678.00	Accum. Lengths	Bottom Of Top Packer
Shut In Tool Hydraulic tool Iars Safety Joint Packer	5.00 5.00 5.00 2.00 5.00	Serial No.	Position	3666.00 3671.00 3676.00		Bottom Of Top Packer
Shut in Tool Hydraulic tool Jars Safety Joint Packer Packer	5.00 5.00 5.00 2.00 5.00 4.00	Serial No.	Position	3666.00 3671.00 3676.00 3678.00 3683.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb	5.00 5.00 5.00 2.00 5.00 4.00 1.00	Serial No.	Position	3666.00 3671.00 3676.00 3678.00 3683.00 3687.00		Bottom Of Top Packer
Shut In Tool tydraulic tool lars Safety Joint Packer Packer Stubb Perforations	5.00 5.00 2.00 5.00 4.00 1.00	Serial No.	Position	3666.00 3671.00 3676.00 3678.00 3683.00 3683.00 3688.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder	5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00			3666.00 3671.00 3676.00 3678.00 3683.00 3683.00 3687.00 3688.00 3689.00		Bottom Of Top Packer
Shut in Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder	5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 0.00	8678	Inside	3666.00 3671.00 3676.00 3678.00 3683.00 3683.00 3687.00 3688.00 3689.00 3689.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder Perforations	5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 0.00 19.00	8678	Inside	3666.00 3671.00 3676.00 3678.00 3683.00 3683.00 3688.00 3689.00 3689.00 3689.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder Recorder Perforations Change Over Sub	5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 0.00 19.00 1.00	8678	Inside	3666.00 3671.00 3676.00 3683.00 3683.00 3687.00 3688.00 3689.00 3689.00 3689.00 3689.00		Bottom Of Top Packer
Shut In Tool Tydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder Recorder Perforations Change Over Sub Drill Pipe	5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 0.00 19.00 1.00 31.00	8678	Inside	3666.00 3671.00 3676.00 3683.00 3683.00 3687.00 3689.00 3689.00 3689.00 3689.00 3689.00 3689.00 3708.00		
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder Perforations Change Over Sub	5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 0.00 19.00 1.00	8678	Inside	3666.00 3671.00 3676.00 3678.00 3683.00 3683.00 3689.00 3689.00 3689.00 3689.00 3689.00 3708.00 3709.00 3740.00		Bottom Of Top Packer

		L STEM TEST I	REPORT	- · · · ·		LUID SUMMARY
RILOBITE	Gra Ex Li				v Stafford,K	
TESTING, INC	PO Box 3	2 KS 67068		Violet #1 Job Ticket: 4	•	DST#:1
Mud and Cushion Information		· · · · · · · · · · · · · · · · · · ·		<u>.</u>		
Mud Type: Gel Chem Mud Weight: 9.00 lb/gai Viscosity: 48.00 sec/qt Water Loss: 8.74 in ³ Resistivity: ohmm Satinity: 2800.00 ppm Filter Cake: inches	•	Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressur	e:	ft bbl psig	Oil API: Water Salinity:	deg API 68000 ppṁ
Recovery Information		Recovery Table	. "			
Lengt ft	h	Description		Volume bbl		
		/CW 50%mu50%w ater skim	n of oil	3.479	7	
Total Length:	682.00 N 930.00	/C/V95%w ater5%mud	13.046 bbl	9.567	4	
Num Fluid Sampl Laboratory Nam Recovery Comm	е;	Num Gas Borrbs: Laboratory Locatio	0 on:	Serial #		
			·	-		

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DRILL STEM TEST REPORT

Prepared For: Gra Ex LLC

PO Box 32 Kingman, KS 67068

ATTN: Jeff Burk

Violet #1

31-24s-13w Stafford,KS

Start Date:	2011.12.02 @	01:40:26	
End Date:	2011.12.02 @	12:19:41	
Job Ticket #	42314	DST#:	2

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.12.14 @ 14:17:21

	DRILL STEM TES	ST REPORT
RILOBITE	Gra Ex LLC	31-24s-13w Stafford,KS
ESTING , INC	PO Box 32 Kingman, KS 6706B	Violet #1 Job Ticket: 42314 DST#:2
	ATTN: Jeff Burk	Test Start: 2011.12.02 @ 01:40:26
GENERAL INFORMATION:		
Formation:Lansing I, JDeviated:NoWnipstock:Time Tool Opened:06:27:41Time Test Ended:12:19:41	ft (KB)	Test Type: Conventional Bottom Hole (Initial) Tester: Mike Slemp Unit No: 53
Interval: 3787.00 ft (KB) To 3 Total Depth: 3834.00 ft (KB) (T Hole Diameter: 7.88 inchesHol		Reference Elevations: 1953.00 ft (KB) 1943.00 ft (CF) KB to GR/CF: 10.00 ft
Serial #:8677InsidePress@RunDepth:178.06 psigStart Date:2011.12.02Start Time:01:40:27	@ 3789.00 ft (KB) End Date: End Time:	Capacity: 8000.00 psig 2011.12.02 Last Calib.: 2011.12.02 12:19:41 Time On Btm 2011.12.02 @ 06:23:11 Time Off Btm 2011.12.02 @ 09:20:11
TEST COMMENT: IF- BOB in 1 min ISI-No blow bac FF- BOB ASAO FSI- No blow ba	GTS in 15 TSTM	
Pressian VS.]	LTTE ETT Temperature	
607 Presure 100 100 100 100 100 100 100 10	EX7 Terretars	Time Pressure Temp Annotation (Mn.) (psig) (deg F) Initial Hydro-static 0 1866.24 102.07 Initial Hydro-static 5 37.76 105.50 Open To Flow (1) 35 95.07 111.80 Shut-In(1) 80 1114.69 113.19 End Shut-In(1) 81 105.87 112.07 Open To Flow (2) 116 178.06 114.60 Shut-In(2) 174 1103.42 114.70 End Shut-In(2) 177 1813.96 114.28 Final Hydro-static
Doopper		. Gas Rates
Length (11) Description	Volume (bbi)	Choke (Inches) Pressure (psig) Gas Refe (Mcf/d)
62.00 OGCM10%gas20%oil10%	* ?	
376.00 GCO60%oil30gas5%wat	er5%mud 5,27	· · · ·
62.00 100%w ater	0.87	
	· · ·	
	1	

Trilobite Testing, Inc

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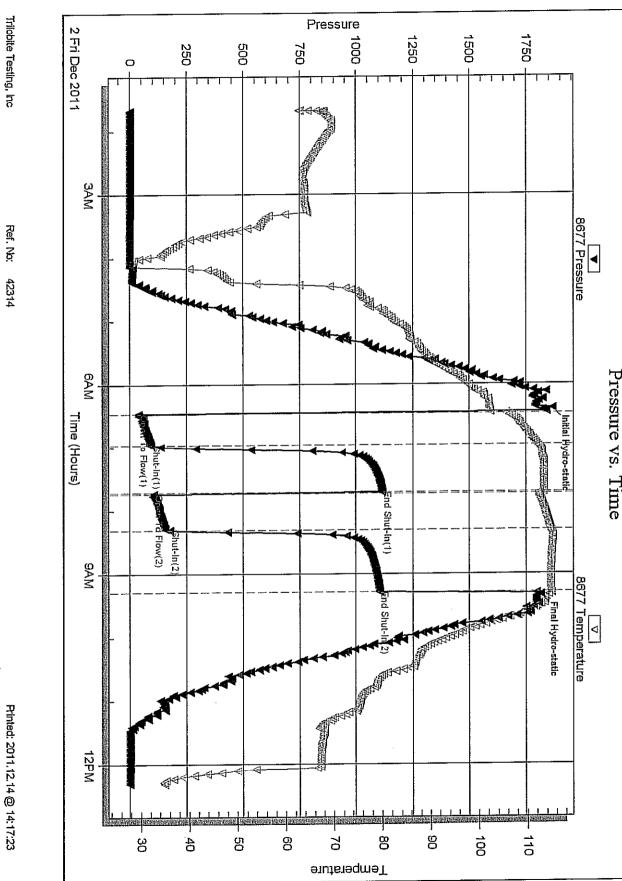
		DRII	L STE	MTEST	REPOR	रा	TOOL DIAGRA
HILUE	SILE	Gra Ex I	TC			31-24s-13w Staffor	d,KS
EST	BITE FING , INC	PO Box				Violet #1	
		Kingmar	1, KS 67068			Job Ticket: 42314	DST#:2
		ATTN	Jeff Burk			Test Start: 2011.12.02	@ 01:40:26
Tool Information		<u> </u>					
Drill Pipe: Length:	3790.00 ft	Diameter:		ches Volume:	53,16 bbl		2000.00 lb
Heavy Wt. Pipe: Length:	0.00 ft	Diameter:		ches Volume:	0.00 bbl	-	
Drill Collar: Length:	0.00 ft	Diameter:		ches Volume:	0.00 bbl		0.00 ft
Drill Pipe Above KB:	29.00 ft			Total Volume:	53.16 bbl	String Weight: Initial	
Depth to Top Packer:	3787.00 ft					Final	56000.00 lb
Depth to Bottom Packer:	ft						
Interval between Packers:							
Tool Length:	73.00 ft		•		•		
Number of Packers:	2	Diameter:	6.75 in	ches			
Tool Description	Le	ngth (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
	Le	ngth (ft) 5.00	Serial No.	Position	Depth (ft) 3766.00	Accum. Lengths	
Shut In Tool	Le	<u> </u>	Serial No.	Position		Accum. Lengths	
Tool Description Shut In Tool Hydraulic tool Jars	Le	5.00	Serial No.	Position	3766.00	Accum. Lengths	
Shut in Tool Hydraulic tool Jars	Le	5.00 5.00	Serial No.	Position	3766.00 3771.00	Accum. Lengths	
Shut In Tool Hydraulic tool Jars Safety Joint	Le	5.00 5.00 5.00	Serial No.	Position	3766.00 3771.00 3776.00	Accum. Lengths	Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint	Le	5.00 5.00 5.00 2.00	Serial No.	Position	3766.00 3771.00 3776.00 3778.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer	Le	5.00 5.00 5.00 2.00 5.00	Serial No.	Position	3766.00 3771.00 3776.00 3778.00 3783.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb	Le	5.00 5.00 5.00 2.00 5.00 4.00	Serial No.	Position	3766.00 3771.00 3776.00 3778.00 3783.00 3783.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations	Le	5.00 5.00 5.00 2.00 5.00 4.00 1.00	Serial No.	Position	3766.00 3771.00 3776.00 3778.00 3783.00 3787.00 3788.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations	Le	5.00 5.00 5.00 2.00 5.00 4.00 1.00			3766.00 3771.00 3776.00 3778.00 3783.00 3783.00 3787.00 3788.00 3789.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder	Le	5.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00	8677	Inside	3766.00 3771.00 3776.00 3778.00 3783.00 3783.00 3787.00 3788.00 3789.00 3789.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder Perforations	Le	5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 0.00	8677	Inside	3766.00 3771.00 3776.00 3778.00 3783.00 3783.00 3787.00 3789.00 3789.00 3789.00 3789.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder	Le	5.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 1.00 0.00 0.00 9.00	8677	Inside	3766.00 3771.00 3776.00 3778.00 3783.00 3783.00 3789.00 3789.00 3789.00 3789.00 3789.00 3799.00 3830.00		Bottom Of Top Packer
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder Perforations Change Over Sub	Le	5.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 9.00 1.00	8677	Inside	3766.00 3771.00 3776.00 3778.00 3783.00 3783.00 3789.00 3789.00 3789.00 3789.00 3789.00 3789.00 3799.00 3830.00 3831.00	26.00	
Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations Recorder Recorder Recorder Perforations Change Over Sub Drill Rpe	Le	5.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00 9.00 1.00 31.00	8677	Inside	3766.00 3771.00 3776.00 3778.00 3783.00 3783.00 3789.00 3789.00 3789.00 3789.00 3789.00 3799.00 3830.00	26.00	Bottom Of Top Packer

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(ONT	RILOBITE		ILL STEM TEST I	KEPOR		· · · · · · · · · · · · · · · · · · ·	LUID SUMMAR	
		Gra B	< LLC		31-24s-13w Stafford,KS			
	ESTING , IN	1 1000		•	Violet #1			
		Kingm	an, KS 67068		Job Ticket: 4	42314	DST#:2	
		ATTN	Jeff Burk		Test Start: 2	2011.12.02 @ 01:	40:26	
Mud and Cu	shion Information	· <u> </u>	<u></u>					
Mud Type: Ge	el Chem		Cushlon Type:			Oil API:	deg API	
Mud Weight:	9.00 lb/gal		Cushion Length:		ft	Water Salinity:	58000 ppm	
Viscosity:	48.00 sec/qt		Cushion Volume:		bbi			
Water Loss: Resistivity:	8.76 in³ ohmm		Gas Cushion Type: Gas Cushion Pressure	. .	psig			
Salinity: Filter Cake:	5500.00 ppm inches	' <u>.</u>						
Recovery In	formation							
			Recovery Table		Maharan	Т		
	. Ler f	igth t	Description		Volume bbl			
		62,00	OGCI/10%gas20%oil10%wa		0.870			
		376.00	GCO60%oil30gas5%w ater5%	6mud	5,274	7		
		62.00	100%w ater	· .	0.870	4		
	Total Length:	500	1.00 ft Total Volume:	7.014 bb!				
	Num Fluid San		Num Gas Borrbs:	0	Serial #	:	·· .	
	Laboratory Na		Laboratory Locatio	n:				
	Recovery Cor	ments:						
			· .					
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					4			
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Serial #: 8677 Inside

Gra Ex LLC

Violet #1

DST Test Number: 2



DRILL STEM TEST REPORT

Prepared For. Gra Ex LLC

PO Box 32 Kingman, KS 67068

ATTN: Jeff Burk

Violet #1

31-24s-13w Stafford,KS

Start Date:	2011.12.02 @	22:00:34	
End Date:	2011.12.03 @	08:00:34	
Job Ticket #:	42315	DST#:	3

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.12.14 @ 14:18:50

RILOBITE	Gra Ex LLC	31-24s-13w Stafford,KS
ESTING, INC	PO Box 32	Violet #1
	Kingman, KS 67068	Job Ticket: 42315 DST#: 3
	ATTN: Jeff Burk	Test Start: 2011.12.02 @ 22:00:34
uh-dit.		
GENERAL INFORMATION:		
Formation: Lansing L		Test Tester Operational Betters Units
Deviated: No Whipstock: Time Tool Opened: 01:47:49	ft (KB)	Test Type: Conventional Bottom Hole (I
Time Test Ended: 08:00:34		Unit No: 53
Interval: 3869.00 ft (KB) To 390	03.00 ft (KB) (TVD)	Reference Elevations: 1953.00 ft (
Total Depth: 3903.00 ft (KB) (TV	'D)	1943.00 ft (
Hole Diameter: 7.88 inchesHole	Condition: Good	KB to GR/CF: 10.00 ft
Serial #: 8677 Inside		
Press@RunDepth: 173.63 psig @	@ 3871.00 ft (KB)	Capacity: 8000.00 psi
Start Date: 2011.12.02	End Date:	2011.12.03 Last Calib.: 2011.12.03
Start Time: 22:00:35	End Time:	08:00:34 Time On Btm 2011.12.03 @ 01:46:19 Time Off Btm 2011.12.03 @ 04:41:34
· ·		Time Off Βtπ 2011.12.03 @ 04:41:34
	EU/) arrowing and a second se	Time Pressure Temp Annotation (Min.) (psig) (deg F)
Pressure vn. Tir		PRESSURE SUMMARY
RET7 Prenare	EST Temperative	Time Pressure Temp Annotation
	110	(Mn.) (psig) (deg F) 0 1883.96 103.74 Initial Hydro-static
		2 57.91 104.79 Open To Flow (1)
		33 129.15 111.52 Shut-In(1)
		77 1211.19 115.06 End Shut-In(1)
		80 120.19 112.06 Open To Flow (2) 107 173.63 115.22 Shut-In(2)
	n n	174 1211.15 117.16 End Shut-In(2)
		176 1831.37 117.17 Final Hydro-static
	BAN	
Dae 2011 (fezz)		
Recovery	<i>.</i>	Gas Rates
Length (fi) Description	Voluma (bbl)	Choke (Inches) Pressure (psig) Gas Rate
	4.42	
315.00 MCO 95%oil5%mud		
315.00 INCO 95%oli5%mud 215.00 MM/OGO40%gas50%oli5%	water5%mud 3.02	
	water5%mud 3.02	
	water5%mud 3.02	
	water5%mud 3.02	

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RILOB TEST	TING , INC	Gra Ex I PO Box Kingman	32			31-24s-13w Stafford Violet #1	,KS
I EST	T ING , INC					Violet #1	
		i Kingmer		20			DOT" O
	,	-	I, NO 0700	10		Job Ticket: 42315	DST#:3
		ATTN:	Jeff Burk			Test Start: 2011.12.02 @	22:00:34
Tool Information							
Drill Ape: Length:	3852.00 ft	Diameter:		inches Volume:	54.03 bbl		2000.00 lb
-leavy Wt. Ape: Length:		Diameter:		inches Volume:	0.00 bbl		
Drill Collar: Length:	0.00 ft	Diameter:	0.00	inches Volume:	0.00 bbl	•	0.00 ft
Drill Pipe Above KB:	9.00 ft			Total Volume:	54.03 bbl	String Weight: Initial	55000.00 lb
Depth to Top Packer:	3869.00 ft					Final	59000.00 lb
Depth to Bottom Packer:	ft						
nterval between Packers:	34.00 ft						
Fool Length:	60.00 ft						
Number of Packers:	2	Diameter:	6.75	inches			
Tool Contrients:							
Shut in Tool Hydraulic tool		5.00 5.00			3848.00 3853.00		
Hydraulic tool		5.00			3858.00		
Jars Sefety Joint		2.00			3860.00		
Safety Joint Packer		5.00			3865.00	26.00	Bottom Of Top Packe
Packer		4.00	_,,		3869.00		-
Stubb		1.00			3870.00		
Perforations		1.00			3871.00		
Recorder		0.00	8677	7 Inside	3871.00		
Recorder		0.00	8522	2 Inside	3871.00		
Perforations		29.00			3900.00		
Bullnose		3.00			3903.00	34.00 Bo	ottom Packers & Ancho
	ol Length:	60.00					
1041110							
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()AT	RILOE		DR	ILL	STEM TEST	REPOR	Т		LUID	SUMMARY
	The second s	and the second	Gra B	LLC	· · · ·	•	31-24 s -13	w Stafford,KS	;	
	[ESI	TING , INC			. •		Violet #1			
			Kingm	an, KS	67068		Job Ticket:	42315	DST#:3	
		• • •	ATTN	Jeff E	Burk		Test Start: 2	2011.12.02 @ 22	00:34	
Mud and Cus	hion Inf	ormation			<u></u>			. <u> </u>		
Mud Type: Gel Mud Weight: Viscosity:	Chem 9.00 i 49.00 s		·	,	Cushion Type: Cushion Length: Cushion Volume:		ft bbl	Oil API: Water Salinity:	•	deg API ppm
Water Loss: Resistivity:	8.86 i		·		Gas Cushion Type:					
Salinity;	5500.00 p	ohmm opm	5 J.	,	Gas Cushion Pressu	re:	psig			
Filter Cake:	ħ	nches	•					•		
Recovery Info	ormation	3			Recovery Table		• .	:		
		Lengti ft	'n		Description		Volume bbl			
			315,00		15%oil5%mud		4.419	†		
	Tet		215.00		040%gas50%oil5%w		3.016	1		1. A.
		al Length:	530.0		Total Volume:	7.435 bbl	- · · · ·			
	Lab	n Fluid Sample boratory Name covery Comm) :		Num Gas Bombs: Laboratory Locatio	O on:	Serial#.			· ·
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Trilobite Testing, Inc

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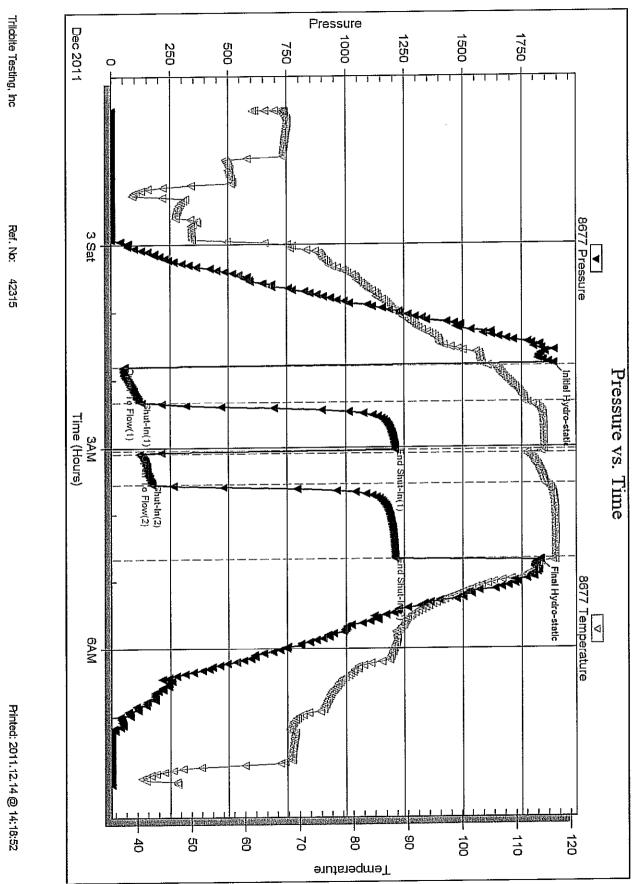
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DST Test Number: 3

Inside

Serial #: 8677

Gra Ex LLC

Violet #1



DRILL STEM TEST REPORT

Prepared For. Gra Ex LLC

PO Box 32 Kingman, KS 67068

ATTN: Jeff Burk

Violet #1

31-24s-13w Stafford,KS

Start Date:	2011.12.03 @	21:13:31	
End Date:	2011.12.04 @	05:58:16	
Job Ticket #:	44047	DST#:	4

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.12.14 @ 14:19:06

	DRILL STEM TES	T REPORT	
RILOBITE	Gra Ex LLC	31-24s-13w Sta	ifford,KS
ESTING , INC	PO Box 32 Kingman, KS 67068	Violet #1 Job Ticket: 44047	DST#:4
	ATTN: Jeff Burk	Test Start: 2011.1	2.03 @ 21:13:31
GENERAL INFORMATION:		· · · · · · · · · · · · · · · · · · ·	
Formation: Mississippi Devlated: No Whipstock: Time Tool Opened: 23:30:31 Time Test Ended: 05:58:16	ft (KB)		entional Bottom Hole (Reset) Cason
Interval:3969.00 ft (KB) To40Total Depth:4020.00 ft (KB) (TvHole Diameter:7.88 inchesHole		Reference Bevation	1943.00 ft (CF)
Serial #: 6798 Inside Press@RunDepth: 31.99 psig Start Date: 2011.12.03 Start Time: 21:13:32 TEST COMMENT: IF: Fair Blow, 7 in ISt: No Blow back FF: Weak Blow, 8 FSt: No Blow back FSt: No Blow back	End Date; End Time: ches 30B in 54 minutes		8000.00 psig 2011.12.04 12.03 @ 23:29:31 12.04 @ 02:48:31
Pressure vs. Ti	·	PRESSURE S	
standard Standa	Tropenses	Time Pressure (psig) Temp (deg F) Ar (deg F) 0 1948.30 99.80 Initia 1 25.23 99.40 Ope 33 28.81 102.90 Shu 77 192.07 106.06 End 79 23.21 106.03 Ope 138 31.99 109.14 Shu 199 95.19 111.16 End	Inotation Il Hydro-static In To Flow (1) t-In(1) Shut-In(1) In To Flow (2) t-In(2) Shut-In(2) Il Hydro-static
Recovery		Gas Ra	
Length (1t) Description 30.00 SGCM 2%G 98%M	Voluma (bbl) 0.42	Choke (inches)	Pressure (psig) Gas Rele (Mct/d)
* Recovery from multiple tests			

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Trilobite Testing, Inc Ref. No: 44047

Printed: 2011.12.14 @ 14:19:06

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Land Land		DRIL	LSTE	VIESI	REPOR		TOOL DIAGRAI		
ESTING , M		Gra Ex L	LC			31-24s-13w Stafford,KS			
		PO Box 3	32			Violet #1			
			, KS 67068			Job Ticket: 44047	DST#:4		
		ATTN: Jeff Burk				Test Start: 2011.12.03 @) 21:13:31		
Tool Information						·			
	3972.00 ft	Diameter:	3.80 inc	hes Volume:	55.72 bbl	Tool Weight:	2000.00 lb		
Heavy Wt. Pipe: Length:		Diameter:	0.00 inc	hes Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb		
Drill Collar: Length:	0.00 ft	Diameter:	0.00 inc	hes Volume:	0.00 bbl	Weight to Pull Loose:	65000.00 lb ft		
	00 00 St			Total Volume:	55.72 bbl	Tool Chased	58000.00 lb		
Drill Pipe Above KB:	30.00 ft 3969.00 ft					String Weight: Initial Final	58000.00 lb		
	3969.00 ft					1 11 161			
Depth to Bottom Packer: Interval between Packers:	51.00 ft								
Tool Length:	78.00 ft								
Number of Packers:		Diameter:	6.75 ind	ches					
Tool Comments: Bottom Pac	ker is a shale	e packer							
Shut in Tool Hydraulic tool Iars		5.00 5.00			3952.00 3957.00				
Jars		5.00 2.00			3959.00				
-						27.00	Bottom Of Top Packe		
Packer		5.00			3964.00	27.00	Bottom Of Top Packe		
Packer Packer		5.00 5.00			3964.00 3969.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb		5.00 5.00 1.00	6709	Inside	3964.00 3969.00 3970.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb Recorder		5.00 5.00 1.00 0.00	6798	Inside	3964.00 3969.00 3970.00 3970.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb Recorder Recorder		5.00 5.00 1.00 0.00 0.00	6798 8367	Inside Outside	3964.00 3969.00 3970.00 3970.00 3970.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb Recorder Recorder Perforations		5.00 5.00 1.00 0.00 0.00 10.00			3964.00 3969.00 3970.00 3970.00 3970.00 3980.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb Recorder Recorder Perforations Change Over Sub		5.00 5.00 1.00 0.00 0.00 10.00 1.00			3964.00 3969.00 3970.00 3970.00 3970.00 3980.00 3981.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb Recorder Recorder Perforations Change Over Sub Drill Ppe		5.00 5.00 1.00 0.00 0.00 10.00 1.00 32.00			3964.00 3969.00 3970.00 3970.00 3970.00 3980.00 3981.00 4013.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb Recorder Recorder Perforations Change Over Sub Drill Pipe Change Over Sub		5.00 5.00 1.00 0.00 10.00 1.00 32.00 1.00			3964.00 3969.00 3970.00 3970.00 3970.00 3980.00 3981.00 4013.00 4014.00	27.00	Bottom Of Top Packe		
Packer Packer Stubb Recorder Recorder Perforations Change Over Sub Drill Pipe Change Over Sub Perforations		5.00 5.00 1.00 0.00 10.00 1.00 32.00 1.00 3.00			3964.00 3969.00 3970.00 3970.00 3980.00 3981.00 4013.00 4014.00 4017.00				
Recorder Perforations Change Over Sub Drill Pipe Change Over Sub		5.00 5.00 1.00 0.00 10.00 1.00 32.00 1.00			3964.00 3969.00 3970.00 3970.00 3970.00 3980.00 3981.00 4013.00 4014.00		Bottom Of Top Packe		

ACEN TOUC			DRILL STEM TEST REPORT FLUID SUMMARY									
	RILOB	1.0	Gra Ex	Gra Ex LLC 31-24s-13w Stafford,KS								
	I ESTI	ING , INC	. PO Box	37		:	Violet #1		·			
			Kingma		37068		Job Ticket: 4	44047	DST#:4			
	· ż							ų.				
	•		ATTN	Jett B	urk		Test Start: 4	2011.12.03 @ 2	21:15:51			
Mud and Cus	hion Info	mation										
Mud Type: Gel (Chem				Oushion Type:	1 .		Oil API:		deg API		
Mud Weight:	9.00 lł	-			Cushion Length:	1. T	ft	Water Salinity	•	ppm		
/iscosity:	49.00 s				Cushion Volume:		bbl					
Vater Loss:	13.17 ir				Gas Cushion Type:			;				
Resistivity:		hmm			Gas Cushion Pressur	·e:	psig					
Salinity: Filter Cake:	9000.00 p 0.20 ir				•.							
Recovery Info	rmation	-						• •				
•			 ,		Recovery Table	·		т				
		Lengt ft	h		Description		Volume bbl					
	·		30.00	SGOM	2%G 98%M		0.421	1				
	Tota	al Length:	30,0	00 ft	Total Volurre:	0.421 bbl						
		n Fluid Sampl loratory Nam		·	Num Gas Bombs: Laboratory Locati	0 on:	Serial #	:				
		overy Corm			-							
		-										
	•				·							
					- 01 -		100 A					
	5. 1				1 a.							
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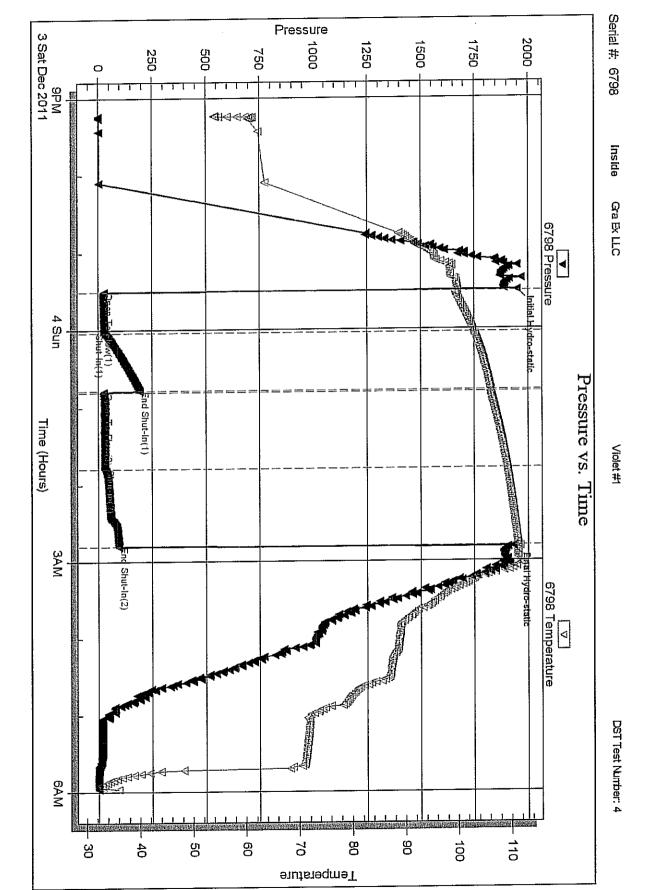




Trilobite Testing, Inc









DRILL STEM TEST REPORT

Prepared For. Gra Ex LLC

PO Box 32 Kingman, KS 67068

ATTN: Jeff Burk

Violet #1

31-24s-13w Stafford,KS

Start Date:	2011.12.05 @	06:50:33	
End Date:	2011.12.05 @	16:44:03	
Job Ticket #:	44048	DST#:	5

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.12.14 @ 14:19:22

	DRILL STEM TE	ST REPORT
RILOBITE	Gra Ex LLC	31-24s-13w Stafford,KS
ESTING , INC	PO Box 32 Kingman, KS 67068	Violet #1 Job Ticket: 44048 DST#:5
	ATTN: Jeff Burk	Test Start: 2011.12.05 @ 06:50:33
GENERAL INFORMATION:		
Formation:ArbuckleDeviated:NoWhipstock:Time Tool Opened:10:24:48Time Test Ended:16:44:03	ft (KB)	, Test Type: Conventional Bottom Hole (Reset) Tester: Leal Cason Unit No: 45
Interval:4193.00 ft (KB) To42Total Depth:4265.00 ft (KB) (TVHole Diameter:7.88 inchesHole		Reference Elevations: 1953.00 ft (KB) 1943.00 ft (CF) KB to GR/CF: 10.00 ft
Serial #: 6798InsidePress@RunDepth:682.80 psigStart Date:2011.12.05Start Time:06:50:34	 4194.00 ft (KB) End Date: End Time: 	Capacity: 8000.00 psig 2011.12.05 Last Calib.: 2011.12.05 16:44:03 Time On Btm 2011.12.05 @ 10:23:03 Time Off Btm 2011.12.05 @ 13:44:18
TEST COMMENT: IF: Strong Blow, I ISI: No Blow back FF: Strong Blow, FSI: No Blow bac	BOB in 8 minutes k	PRESSURE SUMMARY
Pressure vs. Ti	CT-1	Time Pressure Temp Annotation
	530 530	(Mn.) (psig) (deg F)
773	117	0 2123.43 107.03 Initial Hydro-static 2 41.65 106.40 Open To Flow (1)
100		32 297.04 127.61 Shut-In(1)
		78 1429.79 123.10 End Shut-In(1) 79 291.29 122.95 Open To Flow (2)
		138 682.80 127.49 Shut-In(2)
		200 1433.46 125.77 End Shut-In(2) 202 2065.57 125.61 Final Hydro-static
La Corpsi DALA Corpsi L'Anté Des 2011 The (Herr)	denter and have been a set of the	
Recovery		Gas Rates
Length (II) Description	Volume (bbl)	Choke (Inches) Pressure (psig) Gas Role (Mc/d)
1364.00 Water	19.13	
372.00 GWOM 5%G 35%W 60%M		
30.00 SOSGOM 1%O 2%G 97%	M 0.42	

Trilobite Testing, Inc

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Printed: 2011.12.14 @ 14:19:23

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Packer 5.00 410.00 Packer 5.00 4193.00 Stubb 1.00 4194.00 Recorder 0.00 6798 Inside 4194.00 Recorder 0.00 8367 Outside 4194.00 Perforations 5.00 4199.00 4199.00 Change Over Sub 1.00 4200.00 4200.00 Drill Fipe 61.00 4261.00 4262.00	L DIAGRAN		
Kingman, KS 67068 Job Ticket: 44048 DST# ATTN: Jeff Burk Test Start: 2011.12.05 @ 06:50.33 Tool Information 3.80 inches Volume: 58.77 bbl Pril Ppe: Length: 4190.00 ft Dameter: 3.80 inches Volume: 0.00 bbl Dill Colar: Length: 0.00 ft Dameter: 0.00 inches Volume: 0.00 bbl Dill Ppe: Length: 0.00 ft Dameter: 0.00 inches Volume: 0.00 bbl Weight is et on Packer: 25000.00 Dill Ppe Above KB: 24.00 ft Total Volume: 58.77 bbl Total Chased String Weight: Initial 63000.00 Depth to Top Packer: ft Total Volume: 58.77 bbl Total Chased String Weight: Initial 63000.00 Depth to Bottom Packer: ft Final 67000.00 Final 67000.00 Number of Packers: 2 Dameter: 6.75 inches Final 67000.00 Shut h Tool 5.00 4171.00 4171.00 4176.00 4176.00 4176.00 4188.00 27.00 Bottom Safety Joh	31-24s-13w Stafford,KS		
Drill Pipe: Length: 4190.00 ft Diameter: 3.60 inches Volume: 58.77 bbl Tool Weight: 2100.00 Heavy Wt. Pipe: Length: 0.00 ft Diameter: 0.00 inches Volume: 0.00 bbl Weight set on Packer: 2500.00 Drill Collar: Length: 0.00 ft Diameter: 0.00 inches Volume: 0.00 bbl Weight to Packer: 2500.00 Drill Pipe Above KB: 24.00 ft Tool Volume: 58.77 bbl Tool Chased String Weight: 6300.00 Depth to Too Packer: ft Interval between Packers: 72.00 ft Final 67000.00 Number of Packers: 2 Diameter: 6.75 inches Final 67000.00 Shut In Tool 5.00 4171.00 4183.00 String Weight: 500 4183.00 Packer 5.00 4188.00 27.00 Bottom String Weight: Final 6700.00 Packer 5.00 4171.00 4183.00 500 4183.00 500 500 4183.00 500 500 500			
Tool Description Lengin (t) Contract Contract <td>0 10 10 15 11 10 10</td>	0 10 10 15 11 10 10		
Shut In Tool 5.00 4171.00 Hydraulic tool 5.00 4176.00 Jars 5.00 4181.00 Safety Joint 2.00 4183.00 Packer 5.00 4183.00 Packer 5.00 4193.00 Stubb 1.00 4194.00 Recorder 0.00 6798 Inside 4194.00 Recorder 0.00 8367 Outside 4194.00 Perforations 5.00 4199.00 4199.00 Change Over Sub 1.00 4200.00 4199.00 Drill Fipe 61.00 4261.00 4261.00 Change Over Sub 1.00 4265.00 72.00 Bottom Pac			
Hydraulic tool 5.00 4176.00 Jars 5.00 4181.00 Safety Joint 2.00 4183.00 Packer 5.00 4183.00 Packer 5.00 4193.00 Packer 5.00 4194.00 Stubb 1.00 6798 Inside 4194.00 Recorder 0.00 6798 Inside 4194.00 Recorder 0.00 8367 Outside 4194.00 Perforations 5.00 4199.00 4199.00 Change Over Sub 1.00 4200.00 4200.00 Drill Fipe 61.00 4261.00 4265.00 Change Over Sub 1.00 4265.00 72.00			
Jars 5.00 4181.00 Safety Joint 2.00 4183.00 Packer 5.00 4188.00 27.00 Bottom Packer 5.00 4193.00 Stubb 1.00 4194.00 Stubb 1.00 6798 Inside 4194.00 4194.00 Fecorder 0.00 6798 Inside 4194.00 4194.00 Fecorder 5.00 4199.00 Fecorder 5.00 4199.00 Fecorder 5.00 4199.00 Fecorder 5.00 4199.00 Fecorder 5.00 4200.00 Fecorder 5.00 4200.00 Fecorder 5.00 4200.00 Fecorder 5.00 5.00 72.00 Bottom Pace Partitions 5.00 1.00 4265.00 72.00 Bottom Pace Change Over Sub 1.00 4265.00 72.00 Bottom Pace			
Safety Joint 2.00 4188.00 27.00 Bottom Packer 5.00 4193.00 4194.00 500 4194.00 500 500 4194.00 500 500 4194.00 500			
Packer 5.00 4188.00 27.00 Dutom Packer 5.00 4193.00 4194.00 500 4194.00 500 500 4194.00 500 500 6798 Inside 4194.00 4194.00 500 500 6798 1010 4194.00 500 500 700 500 700 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 700 500 500 500 500 500 700 5	Of Top Packer		
Packer 5.00 Stubb 1.00 4194.00 Recorder 0.00 6798 Inside 4194.00 Recorder 0.00 8367 Outside 4194.00 Perforations 5.00 4199.00 4199.00 Change Over Sub 1.00 4200.00 4261.00 Drill Fipe 61.00 4262.00 4265.00 72.00 Bottom Pac			
Stubb 1.00 6798 Inside 4194.00 Recorder 0.00 8367 Outside 4194.00 Recorder 0.00 8367 Outside 4194.00 Perforations 5.00 4199.00 4200.00 Change Over Sub 1.00 4261.00 4262.00 Change Over Sub 1.00 4265.00 72.00 Bottom Pac			
Recorder 0.00 8367 Outside 4194.00 Recorder 0.00 8367 Outside 4199.00 Perforations 5.00 4200.00 4200.00 Change Over Sub 1.00 4261.00 4262.00 Change Over Sub 1.00 4262.00 4265.00 72.00 Bottom Pac			
Recorder 0.00			
Perforations 3.00 Change Over Sub 1.00 4200.00 Drill Fipe 61.00 4261.00 Change Over Sub 1.00 4262.00 Change Over Sub 1.00 4265.00 72.00 Bottom Pac			
Change Over Sub 1.00 4261.00 Drill Fipe 61.00 4262.00 Change Over Sub 1.00 4265.00 72.00 Bottom Pac			
Drill Hpe 01.00 4262.00 Change Over Sub 1.00 4265.00 72.00 Bottom Pac			
Change Over Sub 1.00 Bottom Pac			
	kers & Anchor		
Total Tool Length: 99.00			

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() N	RILOE		DRILL STEM TEST REPORT FLUID SUMMARY							
		Gra Ex	LLC	· · · · · · · · · · · · · · · · · · ·		31-24s-13w Stafford,KS				
ESTING , INC		TNG , INC		x 32 an, KS	67068	.*	Violet #1 Job Ticket: 44048 DST#:5			
			ATTN	Jeff E				011.12.05@06		
Mud and (Cushion Inf	ormation	-		,*1	· · · ·				
	Gel Chem	onnacon			Cushion Type:			Oil API:	deg A	API
Mud Weight:		lb/gal			Cushion Length:			Water Salinity:	45000 ppm	· · .
Viscosity:	56.00		•		Cushion Volume:		bbl	•		
Water Loss:	12.77				Gas Cushion Type:					
Resistivity: Salinity:	ہ ر 10000.00 ا	ohmm			Gas Cushion Pressure	:	psig		• 4. •	ŀ
Filter Cake:		inches							· .	
Recovery	Information	n					<u>, 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>			
	•				Recovery Table		Values	· · ·		
		Lengt ft			Description		Volume bbl			
			364.00	Water			19,133			
			372.00 30.00		M 5%G 35%W 60%M CM 1%O 2%G 97%M		5.218 0.421			
					1.1			•		
		tal Length:	1766.	.00 ft	Total Volume:	24.772 bbl				
		m Fluid Sampl			Num Gas Borrbs:	0	Serial #:			
		boratory Nam		Vwas	Laboratory Location 38 @ 30 degrees	1:	÷			
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Trilobite Testing, Inc.

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Ref. No; 44048

Trilobite Testing, Inc

