CONFIDENTI AMSAS CORPORATION COMMISSION & GAS CONSERVATION DIVISION

WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

HIGINA

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

10/5/12

OPERATOR: License # 4767	API No. 15
Name: Ritchie Exploration, Inc.	Spot Description: 50'S & 279' E of C SE NE SE
Address 1: P.O. Box 783188	SE_NE_SE_Sec. 20 Twp. 13 S. R. 31 ☐ East ✓ West
Address 2:	
City: Wichita State: KS Zip: 67278 + 3118	
Contact Person: John Niernberger	Footages Calculated from Nearest Outside Section Corner:
Phone: (316) 691-9500	
	_ County: Gove
CONTRACTOR: License #	Lease Name: Hess Unit Well #: 1
Wellsite Geologist:	_ Field Name:
Purchaser: NCRA	_ Producing Formation: LKC
Designate Type of Completion:	Elevation: Ground: 2877' Kelly Bushing: 2886'
New Well	Total Depth: 4577' Plug Back Total Depth: 4540'
☑ oil □ wsw □ swd □ slow	Amount of Surface Pipe Set and Cemented at: 232 Feet
Gas D&A ENHR SIGW	Multiple Stage Cementing Collar Used? ✓ Yes No
OG SW Temp. Abd.	If yes, show depth set:Feet
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from: surface
Cathodic Other (Core, Expl., etc.):	feet depth to: 2356' sx cmt.
ff Workover/Re-entry: Old Well Info as follows:	
Operator: Ritchie Exploration	- Difficulty and Plan
Well Name: Hess Unit 1	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: 62609 Original Total Depth: 4577	Third and the state of the stat
☐ Deepening Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWI	Chloride content:ppm Fluid volume:bbls
Conv. to GSW	Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	
SWD Permit #:	
ENHR Permit #:	
GSW Permit #:	County: Permit #:
6/25/10 6/28/10 6/28/10	_
Spud Date or Date Reached TD Completion Date or Recompletion Date	
Kansas 67202, within 120 days of the spud date, recompletion, workover of side two of this form will be held confidential for a period of 12 months if	with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information if requested in writing and submitted with the form (see rule 82-3-107 for confidents well report shall be attached with this form. ALL CEMENTING TICKETS MUST 1 form with all temporarily abandoned wells.
AFFIDAVIT	1/00 O(f) - 1/- O(1/)
I am the affiant and thereby certify that all requirements of the statutes, rules a	and reque
lations promulgated to regulate the oil and gas industry have been fully company to be stronger to be so applied and so required to the bast of my know	plied with Date: 10510 - 10512 CC MICILITY
and the statements herein are complete and correct to the best of my know	vledge. Date: 10 5 10 - 10 7 12 KCC WICHIT
	Wireline Log Received
Signature	Geologist Report Received
Title: Production Manager Date: 10/5/10	UIC Distribution
	ALT I II III Approved by: // Date: // Date:
	WD

Side Two

Operator Name: Rit	chie Exploration,	Inc.	Lease Nam	ne: Hess Unit		_ Well #:1			
Sec. 20 Twp.13	s. R. <u>31</u>	☐ East <a> West	County: _G	Sove					
time tool open and cle recovery, and flow rat	osed, flowing and shi	nd base of formations pe ut-in pressures, whether est, along with final chart I well site report.	shut-in pressure	reached static leve	l, hydrostatic pres	sures, bottom	hole temp	erature, fluid	
Drill Stem Tests Taken ✓ Yes No (Attach Additional Sheets)		(Log Formati	on (Top), Depth a	nd Datum	Sample			
Samples Sent to Geo	ological Survey	✓ Yes No		Name		Тор	[Datum	
Cores Taken			KCC OUT 0 5 20	KCC SEE ATTACHED ONFIDENTIAL					
List All E. Logs Run:		CASING		CONFIDEN	TIAL				
			-	e, intermediate, produc	ction, etc.				
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used		and Percent dditives	
Surface	12-1/4	8 5/8	23	232	common	175	3%cc,2% gel		
Production	7-7/8	5-1/2	15.5	4565	ASC	200	10% salt,29	6 gel & 3/4% CD-31	
		ADDITIONA	L CEMENTING /	SQUEEZE RECOR	 D]		
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone				# Sacks Used Type and Percent Additives					
			,						
Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated				Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth				
4	4080.5' - 4084' (7/8/09)			500 gals 15	500 gals 15% NE				
4	3944' - 3946.5' (7	7/8/09)		500 gals 1	500 gals 15% NE				
	**Pulled packer from 4030'								
	**Set bull-plugge	d packer at 4041'					RE	CEIVED	
TUBING RECORD:	Size: 2 7/8"	Set At: 4040'	Packer At:	Liner Run:	Yes V	0		1 9 6 201	
Date of First, Resumed	d Production, SWD or El	NHR. Producing Me	thod: Pumping	Gas Lift	Other (Explain)		へして	WICHI	
Estimated Production Per 24 Hours	Oil 1.16	Bbls. Gas	Mcf	Water 324	Bbls.	Gas-Oil Ratio		Gravity 40.5	
			METHOD OF COMPLETION: ✓ Perf. □ Dually Comp. □ Commingled			PRODUCTION INTERVAL:			
Vented Sol	d Used on Lease ubmit ACO-18.)	Other (Specify)			abmit ACO-4)				



#1 Hess Unit

1600' FSL & 51' FEL 50' S & 279' E of C SE NE SE Section 20-13S-31W Gove County, Kansas API# 15-063-21781-0000

Elevation: 2877' GL: 2886' KB

Ref. Sample Tops Well Anhydrite 2365' +521 -10 2388' +498 B/Anhydrite -10 Heebner -7 3866' -980 Lansing 3908' -1022 -8 Lansing "C" 3941' -1055 -8 Lansing "D" 3969' -1083 -8 Lansing "E" 3989' -1103 -8 Lansing "H" 4077' -1191 -6 Lansing "I" 4106' -1220 -4 Lansing "J" 4124' -1238 -4 Lansing "K" 4157' -1271 -8 Lansing "L" 4193' -1307 -6 **BKC** 4220' -1334 -7 Altamont 4275' -1389 -12 4350' -1464 -5 Pawnee 4384' -1498 -4 Myric Fort Scott 4403' -1517 -4 Cherokee Shale 4430' -1544 -4 Johnson 4474' -1588 -5 Morrow Sand 4501' -1615 -3 Mississippian 4516' -1630 -7 **RTD** 4577' -1691

KCC 0CT 0 5 2010 CONFIDENTIAL

RECEIVED

OCT 0 6 2010

KCC WICHITA