ORIGINAL

CONFIDENTIAL

STATE CORPORATION COMMISSION OF KANSAS API NO. 15- 165-21,553-0000 OIL & GAS CONSERVATION DIVISION MAY 2 0 1992 unty -Rush WELL COMPLETION FORM East ACO-1 WELL HISTORY SW SW SE sec. 18 Twp. 17S Rge. 17 X West DESCRIPTION OF WELL AND LEASE FROM CONFIDENTIAL Ft. North from Southeast Corner of Section 30658 Operator: License # Name: ANR Production Company 2260 Ft. West from Southeast Corner of Section (NOTE: Locate well in section plat below.) Address 211 N. Robinson, Suite 1700 Hertel Lease Name One Leadership Square Wildcat Field Name City/State/Zip Oklahoma City, Okla. 73102 Producing Formation Dry Purchaser: N/A Elevation: Ground <u>2061</u> KB Operator Contact Person: John D. Perry 3710' PBTD Total Depth Phone (405) 239-7031 5280 4950 Contractor: Name: Allen Drilling Company 4620 4290 License: ___ 5418 whenen 3960 STATE CO. 3300 Wellsite Geologist:__ 2970 APR 0 4 1991 2640 Designate Type of Completion X New Well Re-Entry Workover 2310 1980 1650 1320 Delayed Comp. Walking Randas _ Ini 990 Gas 660 Other (Core, Water Supply, etc.) ALTI DYA If OWNO: old well info as follows: Operator: Amount of Surface Pipe Set and Cemented at _____1180_____ Feet Well Name: ____ Multiple Stage Cementing Collar Used? _____ Yes X No Comp. Date _____ Old Total Depth ____ If yes, show depth set ______ Drilling Method:
_____ Mud Rotary _____ Air Rotary _____ Cable If Alternate II completion, cement circulated from ____ feet depth to ___ _ W/ _ Soud Date INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work. 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. K.C.C. OFFICE USE ONLY XSignature ____ Letter of Confidentiality Attached
Wireline Log Received Superintendent pate 4/1/91 Drillers Timelog Received Subscribed and sworn to before me this 2nd day of April 19 1. Distribution ____ SWD/Rep NOPA Other Plug Notary Public __ (Specify) Date Commission Expires

Jamelan

SIDE TWO

perator Name <u>ANR</u>	Production	Company	Lease Name	Herte	<u> </u>	Well # .	1
	[East	County	Rush			
ec. <u>18</u> twp. <u>175</u>	. Rge. <u>17</u> [X West					
terval tested, time	e tool open ar , bottom hole t	and base of formation nd closed, flowing ar temperature, fluid rec upy of log.	nd shut-in pres	sures, whet	her shut-in pres	ssure reac	hed static leve
rill Stem Tests Take (Attach Additional		X Yes No			Formation Descr	ription	
amples Sent to Geolo	ogical Survey	X Yes No			以 Log	Sample	
ores Taken		Yes X No	Name Winfield		тор 1996	Bott	om
ectric Log Run (Submit Copy.)		X Yes No	Brownvil	le	2691 2799		
ubmited with	Plugaina Re	ecord CP-4	Tarkio Topeka		2799 3042		
COMPOCA WICH			Toronto		3302		
			Lansing	. .	3337		
			PC-Grani	ıe	3623		
Purpose of String	Size Hole	Il strings set-conduc Size Casing Set (In O.D.)	Weight	Setting Depth	Type of Cement	# Sacks Used	Type and Perce
Surface	. 12 1/4	8 5/8	24	1180	60/40Pozmix	790	6% gel
Shots Per Foot	PERFORATION Specify Footage	N RECORD ge of Each Interval P	erforated	Acid, (Amount ar	Fracture, Shot, nd Kind of Mater	Cement Sq ial Used)	weeze Record Depth
	N/A			N/A		_	
TUBING RECORD	Size	Set At	Packer At	Liner Run	☐ _{Yes} ☐	No	
Date of First Produ	ation Broduci	ng Method					
N/A	CCTOIL PRODUCT	Flowing	$\square_{Pumping} \square_{G}$	as Lift 🗌	Other (Explain)		
Estimated Productio Per 24 Hours	n _{N/A} oil	Bbls. Gas	Mcf Wate	r Bbls.	. Gas-Oil	Ratio	Gravity
isposition of Gas:	·	HE	THOO OF COMPLET	ON	1/200		Production Inter
J _{Vented} □ _{Sold}	Used on	Lease Open	Hole Perfo	ration 🗌	Dually Complete	d 🗆 Comm	ningled
(If vented, su		r	(Specify)	Drv			
		Gener	(202)			_	

ORIGINAL

CONFIDENTIAL

RELEASED

MAY 2 0 1992

DRILLSTEM TEST REPORT

FROM	CONFIDENT	<i>ا</i> +،
7,10,1	02/20/01	

Prospect Name:	Date: 03/20/91
Well Name: Hertel #1-18	
DST No. 1 Test Interval: 3509-3528'	
Formation Tested: Lansing "J"	
Initial Flow: 15 min slight blow 1/4" in t	water.
Initial Shut-in: 60 min.	
Final Flow: 30 min. Very light blow to no	o blow.
Final Shut-in: 90 min.	
Recovery: 5 Ft &	
Flowing DST Data	
Chlorides: Recoveries 400 pH 3150 Recovery: 2900 cc DM	0 ppm Rw 1.8 @ 55 OF ppm cc volume Pressure 40 psi
Top	Pressures Middle Bottom
Depth of Bomb 3520 Initial Flow 41 to 41 Initial Shut-in 41 to 83 Final Flow 41 to 41 Final Shut-in 41 to 125 Initial Hydrostatic 1734 to 1734 Final Hydrostatic 1734 to 1734	to 42 to 42 to 42 to 64 to 42 to 42 to 42 to 96 to 1729 to 1729 to
Temperature 104 OF Surface Choke	
REMARKS: TOP PKR 3504' - BOT PKR 3509'	
	TO WED
	TOTALE (%)

4-4-91 APR () 4 1991

CONSTITUTION DISCLON

15.165-21553-0000 ORIGINAL

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DRILLSTEM TEST REPORT

MAY 2 0 1992

Prospect Name:		۲	Date: 03/21/9	
Well Name: Hertel	#1-18			
DST No. 2 Test	Interval: 3580-3630) •		
Formation Tested:	Base Penn Sand			
Initial Flow: 15 N	fin Blow F/6" below	v surface of wate	er.	
Initial Shut-in: 4	5 min.			
Final Flow: 30 mir	n. Blow F/8" below	surface of water	c .	
Final Shut-in: 90	min.			
Ft & Ft &	Bbls Gas Cut DM Bbls Bbls Bbls			
Flowing DST Data				
	Recoveries	ppm		<u>60</u> °F
Recovery: 2/50 CC	DM, gas 1.// Cu it			
Depth of Bomb	Top 3622	<u>Pressures</u> Middle	B	ottom 3625
Initial Flow Initial Shut-in Final Flow Final Shut-in Initial Hydrostatic Final Hydrostatic	41 to 41 41 to 93 41 to 41 41 to 114	to to	52 52 52 52 1778	to 52 to 95 to 52 to 116 to 116
Temperature <u>108</u>		e3/4 Bo		
REMARKS:				
	STATE	CALLERY SECTION MISSION		
		4-4-91		

APR 0 4 1991

CONTINUATION SWISION Valutada, Ramaas

BJ	P.O. Box 4442 Houston, Texas
SERVICES	(

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	<u> </u>	P.O. Box 444 Houston, Ter	cas 77210	15.165-2	2177751		
े १ श्रम	RVICES		(P)	$\mathcal{J}(\mathbb{D})_{i}$	VCEN	MENTING L	STAGE NO.
4			((_ ((\mathbb{N}		•
			\bigcirc	<u>)</u> []		MENT DATA:	00117107879181
3 - 15-	- 9/ District	HATS	Tic	ket No 52 76	\$ Sp.	acer Type:	PPG
ompany)	C. PKulus	4. 1/		Allen DRS	An	ntSks Yield	110000000000000000000000000000000000000
eose Hyd	ie/			II No.			
County X U	<u>in</u>			ite <u>/ / / / / / / / / / / / / / / / / / /</u>		AD: Pump Time	hrs. Type
ocation	78 = 7 /	4	Fie	ld		100 2% W 3	% (C t) Cello Excess
	25 F/4 C	•		 -		nt 13 Sks Yie	. 3.
ASING DATA:	PTA Intermediate		eze 🖸	Lin		II Pumo Time	hrs. Type
Surface S	Type 2 1		24	Collar		7 % x	Excess
Size <u>-7</u>	_ iyi e ge				Ar	nt. 100 Sks Yiel	Id 1.15 has Density 15.67 PPG
			,		: w	ATER: Lead 5.6 1	gals/sk Tail\$ 15 gals/sk Total 104.6 Bbls
						111.0	74 - Denn
Casing Depths: T	ор	(Bottom	·		ump Trucks Used 46 0	0 - (akl
					Ві	ulk Equipالله Equip	
							5-ROWKT
	uf.						
Drill Pipe: Size_	23	Weight	<u> </u>	Collars		oat Equip: Manufacturer	RAKER
Open Hole: Size	· •	1.D. <u></u> 1	<u> </u>	P.B. 10	 Si	hoe: Type	Depth
CAPACITY FACTO	ORS Bbls/Lin.ft	0/37	Lin. ft./£	Bbi 15.70)F1	oat Type A E a	Depth
Casing: Open Holes:	Bbls/Lin. ft	1457	Lin_ft./E		۶ <u> </u>	entralizers: Quantity	Plugs TopBtm
Open Holes. Drill Pipe.	Bbls/Lin ft	0/42	Lin ft./E	ы. <u>70,32</u>	s	tage Collars	
Annulus:	Bbls/Lin ft	.0735	Lin_ft./E	361 13.60	7 7	pecial Equip	Amt 5. 3 Bbls. Weight 5. 311 PPG
	Bbls/Lin. ft		Lin. ft /E	ЗЫ	0	isp Fluid Type (addis)	Amt.3 Bbis. Weight 9 2 PPO
Perforations: F	rom	ft to_		ft. Amt	N	flud Type	**************************************
							0 80
COMPANY REP	RESENTATIVE_	hulle	1 / 40	181		CEMENTER BULL	K. J. Gam
					DATA	1	
TIME	PRESSU	RES PSI	TOTAL	JID PUMPED I Pumped Per	RATE	-	REMARKS
AM/PM	DRILL PIPE CASING	ANNULUS	FLUID	Time Period	Bbls Min	7 .	1 5" 3" 4 600
				RELEASE	<u> </u>	Runde De	85" 24 ° CC9
						Itundias	41121
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		نا ا	-4-9	OMMISSION -		1	7 2 46000
						1/1/45	Club 1. 48 FM

FINAL DISP. PRESS:_ Form No. SR 0502 (Rev. 3/90) Note: Must accompany job ticket. Validation (1) .PSI BUMP PLUG TO.

BBLS PSI BLEEDBACK_

THANK YOU



FINAL DISP. PRESS:

Form No. SR 0502 (Rev. 3/90)

PSI BUMP PLUG TO.

CEMENTING LOG

STAGE NO.

THANK YOU

	_		14 S	1		EMENT DATA:		LUMINENI	AL
Date 3 2	2-91 Distric	(<u> </u>	CLEY Tio	MO 609	V/c V	pacer Type:Sks \	/ield	ft³/sk Density	PPG
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County R	ush		St	no <u>1< 5 </u>		·		- 101110	
Location <u>Liei</u>	anthal	4 1/2 6 6	<u>, 5 - ⁷/2 I</u> LFIe	ıld	u	EAD: Pump Time		hrs. Type_60/40	•
		<u> </u>						ft³/sk Density	
CASING DATA		_	seze 🗆	•				hrs. Type	
Surface D	Intermediate Type			Collar				Excess	
3176	. 1400				A	mtSk	Yield	ft ¹ /sk Density	PPG
					v	VATER: Lead	gals/sk Tail_	gals/sk Total	Bbls.
						ump Trucks Used	26. 2361	6 4 C Y	
Casing Depths: "	Тор		Bottom				30 x /5 (-	6 (3 (
					в	lulk Equip	2752-6	457	
				·				1	
Drill Pine Size		Weight_		Collars					
Open Hole: Size		T.D	tt.	P.B. to		loat Equip: Manufactu			
CAPACITY FACT	ORS:		*	•	_, s			Depth	
Casing:								Depth	
Open Holes:	Bbls/Lin. ft	0.4.5	Lin. ft./E	ы				Btm	
Drill Pipe.				ы <u> 70</u> 1		Stage Collars Special Equip			
Annulus:				lbl		iso Fluid Type 😉	Nek An	ntBbls. Weight	PPG
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enorations.	10				-				
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AM)PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min		1,5141		
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PSI BLEEDBACK_