Kansas Corporation Commission Oil & Gas Conservation Division

ORICIAL

Form ACO-1 September 1999 Form Must Be Typed

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33075	API No. 15 - 111 - 20432 - 0000
Name: CMS Pan Gas Storage Co. LLC dba Southwest Gas Storage	County: Lyon
Address: PO Box 4967	NESENW_Sec7Twp20SR13
City/State/Zip: Houston, TX 77210-4967	1460 feet from S /(N)(circle one) Line of Section
Purchaser:	2685 feet from W (circle one) Line of Section
Operator Contact Person: David M. McQuilling	Footages Calculated from Nearest Outside Section Corner:
713 \ 989-7493	(Vinternal ALE) CE NIVI CIVI
Contractor: Name: CP Drilling JAN 1 0 2005	Lease Name: Whitaker Well #: No. 1
License: 32525 KCC WICH	
Wellsite Geologist:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: 1080 Kelly Bushing:
New Well Re-Entry Workover	Total Depth: 300 Plug Back Total Depth:
Oil SWD Temp. Abd.	Amount of Surface Pipe Set and Cemented at 70 Feet
Gas ENHR SIGW	Multiple Stage Cementing Collar Used? ☐Yes ✔No
Dry Other (^ore, WSW, Expl. Cathodic) etc)	If yes, show depth setFeet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from
Operator: N/A	feet depth tow/sx cmt.
Well Name: Olpe 10.0 Grounbed No. 1	
Original Comp. Date: Original Total Depth:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pity) 3 4 205
Deepening Re-perf Conv. to Enhr./SWD	Chloride content ppm Fluid volume bbls
Plug Back Plug Back Total Depth	Dewatering method used
Commingled Docket No	
Dual Completion Docket No	Location of fluid disposal if hauled offsite:
Other (SWD or Enhr.?) Docket No	Operator Name:
6/4/04 6/5/04 6/5/04	Lease Name: License No.:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West
Recompletion Date Recompletion Date	County: Docket No.:
Kansas 67202, within 120 days of the spud date, recompletion, workow information of side two of this form will be held confidential for a period of	the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, er or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. It is months if requested in writing and submitted with the form (see rule 82-3-and geologist well report shall be attached with this form. ALL CEMENTING. Submit CP-111 form with all temporarily abandoned wells.
All requirements of the statutes, rules and regulations promulgated to regulation are complete and correct to the best of my knowledge.	ate the oil and gas industry have been fully complied with and the statements
Signature: X	KCC Office Use ONLY
Title OWNER Date: 12-16-04	Letter of Confidentiality Received
Subscribed and sworn to before me this 16 day of December	If Denied, Yes Date:
	Wireline Log Received
200947	Geologist Report Received
Notary Public Les Luc Chronten #040003	UIC Distribution
Date Commission Expires: Annual 14 2008	

Side Two

Operator Name: CMS P	an Gas Storage Co. L	TC dba 20	utnwest Gas Ston	Lease	Name:_	vvnitaker		Well #: NO	. I			
Sec. 7 Twp. 20	S. R. <u>13</u>	✓ Eas	st West	County	Lyon	 						
INSTRUCTIONS: Sho tested, time tool open a temperature, fluid reco Electric Wireline Logs	and closed, flowing very, and flow rate	g and shu s if gas to	t-in pressures, surface test, a	whether shalong with fi	iut-in pro	essure reached	static level, hyd	rostatic pressu	res, bottor	m hole		
Drill Stem Tests Taken (Attach Additional Sheets)			☐ Yes ☐ No			.og Format	ion (Top), Depth	(Top), Depth and Datum		Sample		
Samples Sent to Geolo	ogical Survey	. 🗆 ነ	∕es ∏No		Nam	ie '		Тор		Datum		
Cores Taken			res No									
Electric Log Run (Submit Copy)		✓ Yes No			JAN 10 2005 KCC WICHITA							
List All E. Logs Run:					-	110	- WICHIT	A				
						, '				٠		
111		Repo		RECORD	rface, inte	ew Used ermediate, produc	ction, etc.			,		
Purpose of String.	Size Hole Drilled	Si	ze Casing et (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used		and Percent dditives		
	17.5"	10,75"		7.532		70'	Neat	. 70	water / 5 gallons per sacl			
					•							
	,		ADDITIONAL	CEMENTIN	NG / SQL	JEEZE RECORI	· ·					
Purpose: Perforate	Depth Top Bottom	Тур	e 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						Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth						
·		,										
			•			:						
TUBING RECORD	Size	Set At		Packer A	t	Liner Run	Yes N)				
Date of First, Resumerd F	Production, SWD or E	nhr.	Producing Met	hod	Flowing	g Pumpi	ing Gas L	ift \ \ \ Oth	er (Explain)	·		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf ·	Wate			Gas-Oil Ratio		Gravity		
Disposition of Gas	METHOD OF C	OMPLETI) NO	:		Production Inte	rval	·····				
✓ Vented Sold (If vented, Subn	Used on Lease		Open Hole	Perf.		Dually Comp.	Commingled					
,		•	Other (Speci	ry)								



165

170

175

180

185

190

195

Shale

Shale

Shale

Shale

Shale

Shale

Shale

JAN 1 0 2005 KCC WICHITA

JOB NO.	311100	PAGE	E 1 OF 2		INSTALLATION DATE 6/4/04					
IOD TITLE	DISTALLATION OF CAMPAONIC			<u>.</u>				. 0/ 1/04		
JOB IIILE	INSTALLATION OF CATHODIC	PROTEC	TION D	EEP AN	ODE B	ED .				
	•							· · · · · · · · · · · · · · · · · · ·		
JOB SITE	Olpe 10.0 No.1 Bed (North) LYON (COUNTY	, KANSA	S						
•							'			
COMPANY	PANHANDLE ENERGY						· ·			
Rotary:			Casing:	70'	of 10" PV	? Pine				
Groundbed										
Depth		The second secon								
Ft.	DRILLERS LOG	1 · TC	STRUCTU	IDE .	No	With		oth Top		
		E	T	T	Coke	Coke	of Anode			
0-4	Sand	 	CASING	R	R	R	No.	Ft.		
4-24	Yellow Clay	 	CASING			 	 	 		
24-70	Gray Shale		CASING		ļ	<u> </u>	 			
70-112	Gray Shale		CASING				 	<u>I </u>		
112-143	Limestone							 		
143-201	Shale	· ·			<u> </u>			 		
201-210	lime	 				 		 		
210-300	Shale		<u> </u>		-	 	 			
				<u> </u>	· · · · ·		 	 		
		1 .			i			 		
	Exploring Anode Log					<u> </u>				
70	Gray Shale	13.89	1.10				<u> </u>	<u> </u>		
75	Gray Shale	13.89	1.20				·	·		
80	Gray Shale	13.89	1.10					 		
85	Gray Shale	13.89	1.20							
90	Gray Shale	13.89	1.10							
95	Gray Shale	.13.89	1.00							
100	Gray Shale	13.89	1.10							
105	Gray Shale	13.89	1.10			·				
110	Gray Shale	13,89	1.00							
115	Limestone	13.89	0.70							
120	Limestone	13.89	0.70							
125	Limestone	13.89	0.90							
130	Limestone	13.89	0.70							
135 140	Limestone	13.89	0.60							
140	Limestone	13.89	0.80							
150	Shale	13.89	0.90	·						
155	Shale	13.89	1.00							
160	Shale Shale	13.89	1.00				<u> </u>			
4 100	. Snale	13.80	1 120	,						

13.89

13.89

13.89

13.89

13.89

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13.89

0.80

1.00

1.00

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1.00

1.00

1.00



JAN 10 2005 KCC WICHITA

			•			, 400	AAICH	IIA		
JOB NO.		311100		PAGI	E 2 OF 2	INSTALLATION DATE 6/4				
JOB TITLE	INSTA	LLATIC	ON OF CATHODIC	PROTEC	CTION D	EEP AI	NODE B			
JOB SITE	Olpe 1	0.0 No.1	Bed (North) LYON (COUNTY	, KANSA	AS				
COMPANY	PANH	ANDLE	ENERGY							
Rotary:	300	Ca	ble Tool:0	•	Casing	. 70'	of 10" PV	C Bina		
Groundbed	Depth:	300,	Diameter:	 10"	Cokebre					
Depth	Diameter.	T	OUKEDIE	<u> </u>	Anodes: 6 EA 1.25"X4' MMO MP TUBULAR No With Depth Top					
Ft.	Exploring Anode Log				STRUCT	LIDE	1			
ļ				E	I		Coke			Anode
200			Shale	13.89	1.00	R	R	R	No.	Ft.
205			Limestone	13.89		 -	 	 		
210			Limestone	13.89	1.20	ļ	 	· 	 	
215			Shale	13.89	1.20		 	 	 	
220			Shale	13.89	1.20	 	-		 	<u> </u>
225			Shale	13.89	1.30	 	 		 	
230			Shale	13.89	1.30		 	<u> </u>	 	
235			Shale	13.89	1.60		1.59	9.00	 	
240		_	Shale	13.89	1.00		1.39	8.90	6	241
245			Shale	13.89	1.20	 	+		 	
250		,	Shale	13.89	1.40		1.59	8.70	 	 -
255			Shale	13.89	1.50	 	1.39	8.70	5	.251
260			Shale	13.89	1.30	<u> </u>	1,54	. 0.00	 	
265			Shale	13.89	, 0.70		1,34	9.00	4	261
270			Shale	13.89	1.30	 	1.88	7.50	 	
275			Shale	13.89	1.40		1.00	7.50	3	271
280			Shale	13.89	1.30		1.76	8.00	 	
285			Shale	13.89	1.10		1.70	8.00	2	281
290			Shale	13.89	1.10		 		 	
295			Shale	13.89	1.30		3.36	4.20	1	1 201
300			Shale		· · · · · · · · · · · · · · · · · · ·		3.50	4.20	 	291
										
										
									 	
									 	
		<u> </u>			:					
		<u> </u>								
										
										
										
										
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