

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15- 129-20843 00 01

County Morton **ORIGINAL**
SW SW NE NW Sec. 11 Twp. 32S Rge. 42 XX W

Operator: License # 30915
Name: Richfield Gas Storage System
Address 4200 E. Skelly Dr.
Suite 1000
City/State/Zip Tulsa, OK 74135

4060 Feet from (S)N (circle one) Line of Section
3860 Feet from (E)W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, (SE) NW or SW (circle one)

Purchaser: _____
Operator Contact Person: Robert L. Hull

Lease Name Jackson Well # 2-11
Field Name Richfield West

Phone (918) 747-7000
Contractor: Name: Well Tech
License: Unknown

Producing Formation Morrow
Elevation: Ground 3472 KB 3483
Total Depth 5400 PBDT 5200

Wellsite Geologist: Harold Frauli

Amount of Surface Pipe Set and Cemented at 1665 Feet
Multiple Stage Cementing Collar Used? _____ Yes X No

Designate Type of Completion
_____ New Well _____ Re-Entry X Workover
_____ Oil _____ SWD _____ S10W _____ Temp. Abd.
_____ Gas _____ ENHR _____ S16W
_____ Dry X Other (Core, WSV, Expl., Cathodic, etc)
Gas Storage

If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ sx cat.

If Workover/Re-Entry: old well info as follows:

Drilling Fluid Management Plan 8-26-93
(Data must be collected from the Reserve Pit)

Operator: Hawkins Oil & Gas
Well Name: Jackson #2-11
Comp. Date 4/7/87 Old Total Depth 5400
_____ Deepening X Re-perf. _____ Conv. to Inj/SWD
_____ Plug Back _____ PBDT
_____ Commingled _____ Docket No. _____
_____ Dual Completion _____ Docket No. _____
X Other (SWD or Inj?) Docket No. _____

Chloride content _____ ppm Fluid volume _____ bbls
Dewatering method used _____
Location of fluid disposal if hauled offsite: _____

1/28/87 Observation Well 2/4/87 4/7/87
Spud Date Date Reached TD Completion Date

Operator Name _____
Lease Name _____ License No. _____
Quarter Sec. Twp. S Rng. E/W
County _____ Docket No. _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 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 geologist well report 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.

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.

Signature Robert L. Hull
Title Vice President, Operations Date 8/11/93
Subscribed and sworn to before me this 13th day of August
19 93.
Notary Public Kim M. Miller
Date Commission Expires 9-11-96

K.C.C. OFFICE USE ONLY		
F	_____	Letter of Confidentiality Attached
C	_____	Wireline Log Received
C	_____	Geologist Report Received
Distribution <u>AUG 16 1993</u>		
<input checked="" type="checkbox"/>	KCC	_____ SWD/Rep
_____	KGS	_____ Plug
_____		_____ NGPA
_____		_____ Other
(Specify)		

Operator Name Richfield Gas Storage Lease Name Jackson Well # 2-11

Sec. 11 Twp. 32S Rge. 42 East West
 County Morton

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum Name Marmaton 4204' Datum -721' Morrow 4642' -1159' Chester 4997' -1514 St. Louis 5158' -1675'	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
List All E.Logs Run:			

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, 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
Surface	12-1/4	9-5/8"	36	1665	Lite + "C"	350+150	2% & 3% CaCl ₂
Production	7-7/8"	4-1/2"	10.5&11.6	5395	"H"	535	5% CaCl ₂

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> 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)	
		Amount	Depth
2	Morrow Keyes, 5083'-88'	500 gal 7 1/2% FE acid	
2	Morrow Keyes, 5060'-72'	1000 gal 7 1/2% FE acid	
8	Morrow G-2, 4994'-5006'	2000 gal 15% FE acid	

TUBING RECORD	Size 2 3/8"	Set At 5030'	Packer At 5030'	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Date of First, Resumed Production, SWD or Inj. Producing Method Flowing Pumping Gas Lift Other (Explain)
 Observation well

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: 5060'-88'
4994'-5006'