

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

API NO. 15- 023-20,316-000 **ORIGINAL**

County CHEYENNE

-APP- S<sup>1</sup>/<sub>2</sub> -NW Sec. 4 Twp. 3S Rge. 39 X <sup>E</sup> <sub>W</sub>

Operator: License # 03628

2070 Feet from S/N (circle one) Line of Section

Name: HARVEST ENERGY COMPANY

1330 Feet from E/W (circle one) Line of Section

Address P.O. BOX 620006

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

LITTLETON, CO 80162

Lease Name SHERLOCK Well # 3-4

City/State/Zip \_\_\_\_\_

Field Name ORLANDO, EAST

Purchaser: WILLIAMS GAS MARKETING COMPANY

Producing Formation NIOBRARA (BEECHER ISLAND)

Operator Contact Person: ALAN L. NACKERUD

Elevation: Ground 3389 KB 3395

Phone (303) 972-8750

Total Depth 1413 PBDT 1373

Contractor: Name: EXCELL DRILLING COMPANY

Amount of Surface Pipe Set and Cemented at 299 Feet

License: 08273

Multiple Stage Cementing Collar Used? Yes X No

Wellsite Geologist: ALAN L. NACKERUD

If yes, show depth set \_\_\_\_\_ Feet

Designate Type of Completion

If Alternate II completion, cement circulated from \_\_\_\_\_

New Well  Re-Entry  Workover

feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Oil  SWD  SLOW  Temp. Abd.

Gas  ENHR  SIGW

Dry  Other (Core, WSW, Expl., Cathodic, etc)

Drilling Fluid Management Plan 5-4-93  
(Data must be collected from the Reserve Pit)

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

Operator: \_\_\_\_\_

Well Name: 3-12-92

Comp. Date \_\_\_\_\_ Old Total Depth 12192

Deepening  Re-perf.  Conv. to  SWD

Plug Back  PBDT

Commingled Docket No. \_\_\_\_\_

Dual Completion Docket No. \_\_\_\_\_

Other (SWD or Inj?) Docket No. \_\_\_\_\_

11/1/91 11/2/91 12/20/91

Spud Date Date Reached TD Completion Date

RECEIVED  
STATE OF KANSAS  
OIL AND GAS CONSERVATION COMMISSION  
Wichita, Kan.

Chloride content N/A ppm Fluid volume 107 bbls

Deswating method used EVAPORATION

Location of fluid disposal if hauled offsite: \_\_\_\_\_

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 [Signature]

Title OWNER Date 3/9/92

Subscribed and sworn to before me this 9th day of March 19 92.

Notary Public [Signature]

Date Commission Expires My Commission expires July 27, 1992

8441 W. Bowles Ave.  
Littleton, CO 80123

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

Operator Name HARVEST ENERGY COMPANY

Lease Name SHERLOCK

Well # 3-4

Sec. 4 Twp. 3S Rge. 39

East  
 West

County CHEYENNE

**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	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	NIOBRARA	1280	KB
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

List All E.Logs Run:  
DUAL INDUCTION  
COMPENSATED NEUTRON/DENSITY

CASING RECORD <input checked="" 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	9 7/8	7	20	299	NEAT	145	-
PRODUCTION	6 1/4	4 1/2	9.5	1413	50/50 POZ	75	2% GEL

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)	Depth
2	1280-82, 1284-96, 1298-1300, 1309-11	9,000 GALS. 10%HCL 360 GALS, GLACIAL ACETIC 20 TONS CO2	SAME

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
N/A				

Date of First, Resumed Production, SWD or Inj.	Producing Method
12/21/91	<input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		15			

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: 1280-1311



P.O. Box 4442  
Houston, Texas 77210

# CEMENTING LOG

STAGE NO.

# ORIGINAL

Date 11-2-91 District OAKLEY Ticket No. 609969  
 Company Harvest Energy Rig Excel #2  
 Lease Sherlock 3-4 Well No. 3-4  
 County Cherokee State KS  
 Location Wheeler 4 1/2 W - 12 S N 2 E Field \_\_\_\_\_

CASING DATA: PTA  Squeeze   
 Surface  Intermediate  Production  Liner   
 Size 4 1/2 Type \_\_\_\_\_ Weight 9.5 Collar \_\_\_\_\_

Casing Depths: Top \_\_\_\_\_ Bottom 1422.64

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 6 1/4 T.D. 1426' ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. .0163 Lin. ft./Bbl. 61.54  
 Open Holes: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Drill Pipe: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Annulus: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt \_\_\_\_\_

CEMENT DATA:

Spacer Type: \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type 50/50  
pos 2 1/2 sec, 2 1/2 gal Excess \_\_\_\_\_

Amt. 75 Sks Yield 1.23 ft<sup>3</sup>/sk Density 14.4 PPG \_\_\_\_\_  
 TAIL: Pump Time \_\_\_\_\_ hrs. Type \_\_\_\_\_  
 Excess \_\_\_\_\_

Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

WATER: Lead 5.43 gals/sk Tail \_\_\_\_\_ gals/sk Total 9.6 Bbls.

Pump Trucks Used BSU 6463

Bulk Equip. BSU 2027

Float Equip: Manufacturer Baker

Shoe: Type Cem. nose Depth 1422.64

Float: Type Latchdown Assy. Depth 1378.4

Centralizers: Quantity 6 Plugs Top \_\_\_\_\_ Btm. set

Stage Collars \_\_\_\_\_

Special Equip. \_\_\_\_\_

Disp Fluid Type Water Amt. 22.5 Bbls. Weight 8.34 PPG \_\_\_\_\_

Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG \_\_\_\_\_

COMPANY REPRESENTATIVE \_\_\_\_\_

CEMENTER Ron M. Wolk

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min	
<u>7:00</u> <u>8:00</u>						<u>All times Central Time</u>
<u>10:30</u> <u>10:45</u>						
<u>12:15</u>				<u>4</u>		<u>arr loc with float camp</u> <u>Trucks arrive, hold prep work</u> <u>making setup camp</u> <u>start float camp</u> <u>finish float camp</u>
<u>12:25</u>				<u>3.5-4</u>		<u>pump 20 Bbls 20% tech (pre flush)</u> <u>mix + pump cement</u>
<u>12:30</u>						<u>wash out pump + lines</u> <u>drop plug.</u>
<u>12:35</u>				<u>4-5</u>		<u>displace plug to latchdown</u> <u>plug down - latchdown hold</u> <u>Job complete</u>
<u>12:45</u>						<u>Thank you</u> <u>Ron + crew</u>