

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION

WELL COMPLETION OR RECOMPLETION FORM
ACO-1 WELL HISTORY

DESCRIPTION OF WELL AND LEASE

Operator: License # 9697
Name Southwest Operating, Inc.
Address City Plaza West Suite 515
5310 E. 31st St.
City/State/Zip Tulsa, OK 74135

Purchaser Republic Natural Gas

Operator Contact Person G. Embury
Phone 918/665-2161

Contractor: License # 6394
Name Mohawk Drilling, Inc.

Wellsite Geologist Mel Hussey
Phone 316-267-8006

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp Abd
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply etc.)

If OWNO: old well info as follows:
Operator
Well Name
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable
3-20-85 3-30-85 6-15-85
Spud Date Date Reached TD Completion Date
4643 4490
Total Depth PBTD
Amount of Surface Pipe Set and Cemented at 870 feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set feet
If alternate 2 completion, cement circulated from feet depth to w/SX cmt

API NO. 15-007-22,023-0000

County Barber
100W
C E/2 SE SE Sec 4 Twp 31 Rge 14 East West

660 Ft North from Southeast Corner of Section
430 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

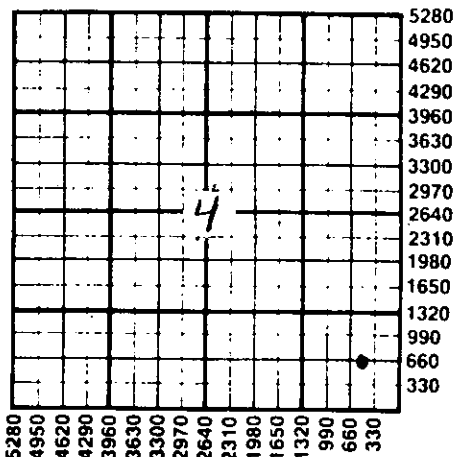
Lease Name Nittler Well # 14-1

Field Name Skinner

Producing Formation Viola

Elevation: Ground 1680 KB 1690

Section Plat



WATER SUPPLY INFORMATION

Disposition of Produced Water: Disposal Repressuring
Docket #

Questions on this portion of the ACO-1 call:
Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit # T 85-315
 Groundwater Ft North from Southeast Corner (Well) Ft West from Southeast Corner Sec Twp Rge East West
 Surface Water 660 Ft North from Southeast Corner (Stream, pond etc) 10 Ft West from Southeast Corner Sec 4 Twp 31 Rge 14 East West
 Other (explain) (purchased from city, R.W.D. #)

INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 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 drillers time log shall be attached with this form. 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 Exploration Manager Date 9-1-85

Subscribed and sworn to before me this 1st day of September 1985

Notary Public [Signature]

Date Commission Expires June 14, 1987

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other (Specify)
RECEIVED
STATE CORPORATION COMMISSION

SEP 16 1985 ACO-1 (7-84)
9-16-85
CONSERVATION DIVISION
Wichita, Kansas

Sec. 4 Twp 31 Rge 14 W

SIDE TWO

Operator Name Southwest Operating, Inc. Lease Name Nittler Well # 14-1

Sec. 4 Twp. 31 Rge. 14 East West County Barber

WELL LOG

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 Yes No
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No

Formation Description
 Log Sample

Name Top Bottom

SEE ATTACHED SHEET

SEE ATTACHED SHEET

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 (N)	1 1/2"	8 5/8"	24#	870'	Light Class A	300	3% CC
Production (N)	7 7/8"	5 1/2"	15.5	4614'	Light Common	100	2% Gel 3% CC
						100	2% GEL 3% CC
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			Amount and Kind of Material Used		Depth	
3	4380 - 4382			500 gal. 10% mud acid		4380-82	
TUBING RECORD							
Size	Set At	Packer at	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
2 3/8	4404	N/A					
Date of First Production	Producing Method						
6/15/85	<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	Gas	Water	Gas-Oil Ratio	Gravity		
	Ø Bbls	300 MCF	10 Bbls	N/A	CFPB		

METHOD OF COMPLETION

Production Interval

Disposition of gas: Vented Open Hole Perforation
 Sold Other (Specify) 4380-82
 Used on Lease Dually Completed
 Commingled

15-007-22023-0000

MARINER RESOURCES
330 S. Main
Wichita, Kansas 67202
April 19, 1985

Southwest Operating, Inc. / Mariner Resources
10880 Wilshire Blvd., Suite 1205
Los Angeles, California 90024

RE: Southwest Operating, Inc. / Mariner Resources
#4-1 NITTLER
C E/2. SE/4, SE/4 4-315-14W
Barber County, Kansas

Sirs:

Submitted herewith is the geological report concerning the above captioned test. Data pertinent to the operation are tabulated below:

Spud: 3-20-85	Rotary Complete: 3-30-85
Contractor: Mohawk Drilling	Elevation: Laughlin-Simmons
Surface Pipe: 8 5/8" at 858'	Production Pipe: 5 1/2" at 4614'
Drill Time: 2300' to T.D.	Samples: 2500' to T.D.
DST: Western Testing (3)	Cores: None
Mud: Maverick	Log: Schlumberger (CNL-LDT, DIL)

Geological formation tops as picked from samples and corrected to the open hole survey follow. All measurements are from the Kelly Bushing elevation.

Elevations: 1690' K.B.

1680' G.L.

Indian Cave Sand	2765	(-1075)
Stotler	2931	(-1241)
Emporia	3041	(-1351)
Heebner	3626	(-1936)
Lower Douglas Sand	3777	(-2087)
Lansing	3818	(-2128)
Stark	4112	(-2422)
Maquoketa (Viola)	4368	(-2678)
Simpson Shale	4512	(-2822)
Simpson Sand	4531	(-2841)
Arbuckle	4612	(-2922)
Total Depth	4642	

RECEIVED
STATE CORPORATION COMMISSION

SEP 16 1985
9-16-85
CONSERVATION DIVISION
Wichita, Kansas

15-007-22023-0000

Page 4
Southwest Operating, Inc. / Mariner Resources
#4-1 Nittler

DST #1 - 3030-3044 Emporia

30 - 30 - 30 - 30

Weak blow, dead two minutes into first flow. Flushed tool second flow - no blow.

Rec: 10' mud
SIP - 67 - 67#
IFP - -
FFP - 67 - 67#
HP - 1495 - 1473#
BHT - 102 degrees F.

DST #2 3776-3793 Lower Douglas Sand

30 - 60 - 45 - 60

Weak blow building to strong blow in 26 minutes.

Rec: 360' gas in pipe, 30' gassy, watery mud, 280' saltwater.

SIP - 1328 - 1305#
IFP - 90 - 135#
FFP - 191 - 236#
HP - 1926 - 1893#
BHT - 110 degrees F.

DST #3 4376-4402 Maquoketa (Viola)

30 - 60 - 65 - 90

Gas to surface 4 minutes into first flow period. Gauged 116,000 to 211,000 cubic feet of gas first flow and 216,000 to 242,000 cubic feet of gas second flow period. Stabilized at 242,000 cubic feet.

Rec: 60' gas cut mud, 60' gas cut watery mud, 60' gas cut saltwater, 620' of saltwater (CI 96,000).

SIP - 938 - 918#
IFP - 191 - 236#
FFP - 236 - 360#
HP - 2217 - 2183#
BHT - 124 degrees

RECEIVED
STATE CORPORATION COMMISSION

SEP 16 1985
7-16-85
CONSERVATION DIVISION
Wichita, Kansas