

SIDE ONE

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

Operator: License # 5565

Name: National Cooperative Refinery Assoc.

Address 6000 W. 10th

City/State/Zip Great Bend, KS 67530

Purchaser: N/A

Operator Contact Person: Morris Bell

Phone (303) 861-4883

Contractor: Name: Allen Drilling Company

License: 5418

Wellsite Geologist: Jack Searle

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD Temp. Abd.

Gas Inj Delayed Comp.

Dry Other (Core, Water Supply, etc.)

If OAWO: old well info as follows:

Operator: N/A

Well Name: _____

Comp. Date _____ Old Total Depth _____

Drilling Method:

Mud Rotary Air Rotary Cable

1/18/90 1/26/90 1/27/90

Spud Date Date Reached TD Completion Date

API NO. 15- 135-23,423-0000

County Ness

S/2 SW NW Sec. 10 Twp. 19S Rge. 26 X East West

2970 Ft. North from Southeast Corner of Section

4620 Ft. West from Southeast Corner of Section

(NOTE: Locate well in section plat below.)

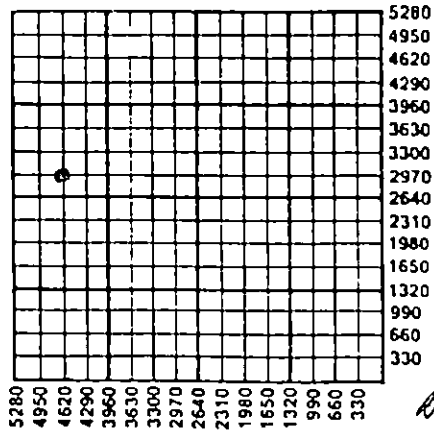
Lease Name GANTZ Well # 1

Field Name Wildcat

Producing Formation D. & A

Elevation: Ground 2602 KB 2607'

Total Depth 4610 PBDT _____



4-5-90

APR 05 1990

CONSERVATION DIVISION
Wichita, Kansas

Amount of Surface Pipe Set and Cemented at 357 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

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.

Signature Steve Bracken

Title District Foreman Date 3/8/90

Subscribed and sworn to before me this 8th day of March 19 90.

Notary Public Patricia Schultz

Date Commission Expires 1-29-93
NOTARY PUBLIC - State of Kansas
PATRICIA SCHULTZ
My Appt. Exp. 1-29-93

K.C.C. OFFICE USE ONLY

Letter of Confidentiality Attached
 Wireline Log Received
 Drillers Timelog Received

Distribution

KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

ORIGINAL

Form ACO-1 (7-89)

KCC/KG
4-19-90
P
X

SIDE TWO

Operator Name National Cooperative Refinery ASSOC. Lease Name GANTZ Well # 1
 Sec. 10 Twp. 19B Rge. 26 East County Ness West

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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input 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	Formation Description <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample Name _____ Top _____ Bottom _____
SEE ATTACHMENTS	

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"	8-5/8" NEW	24#	357'	60/40 Poz	235	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
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No			
Size	Set At	Packer At					
Date of First Production	Producing Method <input 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		

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perforation Dually Completed Commingled Other (Specify) _____

Production Interval _____

ORIGINAL

15.135.23423.0000

NCRA
Gantz No. 1
Section 10-T19S-R26W
Ness County, Kansas

WELL DATA SHEET - CONTINUED

ELECTRIC LOGS:

Western Atlas - Great Bend, Kansas
Engineer: Wayne Jenkinson

Compensated Neutron &
Z Densilog with Gamma Ray 3,000'-4,608'

Dual Induction Focused
Log with Gamma Ray 300'-4,608'

DST'S:

DST No. 1 - 4480'-4554' - Cherokee-Mississippi
Western Testing - Great Bend, Kansas
Technician: Ray Schwager

DST No. 2 - 4530'-4559' - Mississippian -
Western Testing - Great Bend, Kansas -
Technician: Ray Schwager

CORES:

None

FORMATION TOPS: LOG

<u>NAME</u>	<u>DEPTH</u>	<u>DATUM</u>
Anhydrite	1874'	(+ 733')
Heebner	3878'	(-1271')
Lansing	3922'	(-1315')
Base of Kansas City	4270'	(-1663')
Marmaton	4295'	(-1688')
Pawnee	4382'	(-1775')
Fort Scott	4438'	(-1831')
Cherokee Shale	4460'	(-1853')
Mississippian	4542'	(-1935')
Total Depth	4610'	

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STATE CORPORATION COMMISSION

APR 05 1990

CONSERVATION DIVISION
Wichita, Kansas

15.135.23423.0000

NCRA
 Gantz No. 1
 Section 10-T19S-R26W
 Ness County, Kansas

DST NO. 1 - CHEROKEE SAND-MISSISSIPPI CHERT

Interval: 4480'-4554'

TESTING COMPANY: Western Testing
 TESTERS NAME: Ray Schwager
 TYPE OF TEST: Conventional

IO: 5 minutes - opened with 1" blow -
 building to 4".

ISI: 30 minutes - blow continued throughout
 shut in period.

FO: 30 minutes - opened with 3" blow,
 building to bottom of bucket in 20
 minutes.

FSI: 60 minutes - blow continued throughout
 shut in period.

PRESSURES:

IHP: 2243
 IF: 72-72 in 5 minutes
 ISIP: 1257 in 30 minutes
 FF: 104-125 in 30 minutes
 FSIP: 1101 in 60 minutes
 FHP: 2222

BOTTOM HOLE TEMPERATURE: 124° F.

RECOVERY:

Pipe: 100' gas in pipe, 40' oil cut mud,
 (13% oil, 87% mud). 120' heavy oil
 and gas cut mud (30% oil, 10% gas,
 60% mud). 60' heavy oil and gas cut
 mud (35% oil, 6% gas, 6% water, 53%
 mud). Rw = Not enough water.

Sample Chamber: 1400 cc's fluid at 100 PSI.
 880 cc's oil, 140 cc's water,
 450 cc's mud. Rw = .35 at ?
 Temp, 13,000 ppm Cl.

Rw pit mud: 2.2 at 60° F, 3,000 ppm Cl.

Rw make up water: N/A

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 WICHITA, KANSAS

NCRA
 Gantz No. 1
 Section 10-T19S-R26W
 Ness County, Kansas

DST NO. 2 - MISSISSIPPIAN - 4530'-4559'

TESTING COMPANY: Western Testing
 TESTERS NAME: Ray Schwager
 TYPE OF TEST: Conventional

IO: 5 minutes - opened with 1" blow, building to bottom of bucket in 5 minutes.

ISI: 30 minutes - blow continued through shut-in period.

FO: 45 minutes - opened with good blow, built to bottom of bucket in 2 minutes.

FSI: 90 minutes.

PRESSURES:

IHP: 2233
 IF: 83-135 in 5 minutes
 ISIP: 1309 in 30 minutes
 FF: 135-416 in 45 minutes
 FSIP: 1298 in 90 minutes
 FHP: 2202

BOTTOM HOLE TEMPERATURE: 131° F.

RECOVERY:

Pipe: 60' gas in pipe, 120' oil cut watery mud (4% oil, 25% water, 71% mud)
 780' oil cut water (2% oil, 98% water).
 Rw = .36 at 75° F, 13,000 ppm Cl.

Sample Chamber: 2100 cc's fluid at 140 PSI.
 20 cc's oil, 2080 cc's water.
 Rw = .36 at 75° F, 13,000 ppm Cl

Rw pit mud: 2.7 at 60° F, 2,500 ppm Cl.

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 STATE OF KANSAS
 APR 05 1990
 STATE OF KANSAS
 DEPARTMENT OF REVENUE

15-135.23423.0000

CREDIT COP

BJ-TITAN SERVICES COMPANY

INVOICE DATE
01/26/90

DIRECT BILLING INQUIRIES TO	TERMS	REMIT TO
713-895-5821	NET AMOUNT DUE 30 DAYS FROM DATE OF INVOICE	BJ-TITAN SERVICES P.O. BOX 100806 HOUSTON, TX 77212

PAGE	INVOICE NO.
1	PB098

N C R A
1775 SHERMAN ST., SUITE 300
DENVER CO 80203

AUTHORIZED BY
545142

PURCH ORDER REF NO

WELL NUMBER : 1

CUSTOMER NUMBER : 02582020

LEASE NAME AND NUMBER	STATE	COUNTY/PARISH	CITY	DISTRICT NAME	DISTR NO
GANTZ	14			GREAT BEND	3310
JOB LOCATION/FIELD	MTA DISTRICT	DATE OF JOB	TYPE OF SERVICE		
		01/26/90	LAND-PLUG AND ABANDON		

PRODUCT NUMBER	QUANTITY	DESCRIPTION	UNIT PRICE	U/M	EXTENDED PRICE
10100303	1.00	CEMENTING CASING 0 TO 300 FT.	375.00		375.00
10109005	38.00	MILEAGE CHRG. FROM NEAREST BASE OF	1.10		41.80
10430538	1.00	8-5/8 DRY HOLE PLUG	12.00	EA	12.00
10410504	117.00	CLASS "A" CEMENT	5.25	CF	614.25
10415018	78.00	DIAMIX F	2.46	CF	191.88
10420145	10.00	BJ-TITAN GEL, BENTONITE, BULK SALES	6.75	CF	67.50
10880085	195.00	MIXING CUSTOMERS MATERIALS, PER CUB	0.95		185.25
10940101	169.10	DRAYAGE, PER TON MILE	0.70		118.37
SUBTOTAL					1,606.05
DISCOUNT					353.34

ACCOUNT	4.25000% STATE TAX	690.79	29.36
	1.00000% COUNTY TAX	690.79	6.91
STATE CORP			
APR 05 1990			
CONSERVATION DISTRICT Wichita, Kansas			

TAX EXEMPTION STATUS:	PAY THIS AMOUNT →	1,288.98
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BJ-TITAN SERVICES COMPANY

INVOICE DATE
01/18/90

15.135.23423.0000

DIRECT BILLING INQUIRIES TO: 713-895-5821	TERMS: NET AMOUNT DUE 30 DAYS FROM DATE OF INVOICE	REMIT TO: BJ-TITAN SERVICES P.O. BOX 100806 HOUSTON, TX 77212
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PAGE: 1	INVOICE NO. NO: NZ089
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N C R A
1775 SHERMAN ST., SUITE 300
DENVER CO 80203

AUTHORIZED BY: 510017

PURCH. ORDER REF. NO.

WELL NUMBER : 1

CUSTOMER NUMBER : 02582020

LEASE NAME AND NUMBER GANTZ	STATE 14	COUNTY/PARISH	CITY	DISTRICT NAME GREAT BEND	DISTR. NO. 3310
JOB LOCATION/FIELD	MTA DISTRICT	DATE OF JOB 01/18/90	TYPE OF SERVICE LAND-CONDUCTOR/SURFACE		

PRODUCT NUMBER	QUANTITY	DESCRIPTION	UNIT PRICE	U/M	EXTENDED PRICE
10100305	1.00	CEMENTING CASING 300 TO 1500 FT.	375.00		375.00
10100310	59.00	PLUS PER FOOT BELOW 300 FT.	0.42		24.78
10109005	38.00	MILEAGE CHRG. FROM NEAREST BASE OF	1.10		41.80
10410504	141.00	CLASS "A" CEMENT	5.25	CF	740.25
10415018	94.00	DIAMIX F	2.46	CF	231.24
10420145	4.04	BJ-TITAN GEL, BENTONITE, BULK SALES	6.75	CW	27.27
10415049	606.00	A-7-P CALCIUM CHLORIDE PELLETS	0.33	LB	199.98
10431036	1.00	8-5/8" TOP WOOD PLUG	50.00	EA	50.00
10940101	197.60	DRAYAGE, PER TON MILE	0.70		138.32
10880085	235.00	MIXING CUSTOMERS MATERIALS, PER CUB	0.95		223.25
10409600	1.00	8 5/8 INSERT	246.00	GL	246.00
10409600	3.00	CENT	57.75	GL	173.25
SUBTOTAL					2,471.14
DISCOUNT					557.91

ACCOUNT	4.25000% STATE TAX 1.00000% COUNTY TAX	1291.40 1291.40	54.89 12.91
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RECEIVED
STATE COMMISSION
APR 05 1990
CONSERVATION DIVISION
Wichita, Kansas

TAX EXEMPTION STATUS:	PAY THIS AMOUNT	1,981.03
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