

ORIGINAL

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

Operator: License # 31632

Name: Bison Production Company

Address 9320 East Central

City/State/Zip Wichita, Kansas 67206

Purchaser: N/A

Operator Contact Person: C.J. Lett

Phone (316) 636-1801

Contractor: Name: Duke Drilling Co., Inc.

License: 5929

Wellbore Geologist: Dean Patterson

Designate Type of Completion

New Well Re-Entry Workover
 Oil SWD SIOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

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

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBD
 Casinghead Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Inj?) Docket No. _____

05-29-97 06-04-97 06-05-97
Spud Date Date Reached TD Completion Date

API NO. 15- 095-21729 0000

County Kingman County, Kansas

NW - SE - NE Sec. 15 Twp. 29S Rge. 7

1650 Feet from (circle one) Line of Section

990 Feet from (circle one) Line of Section

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

Lease Name Harrison Well # 1-15

Field Name Basil N/A

Producing Formation _____

Elevation: Ground 1585' KB 1592'

Total Depth 4210' PBD 4550'

Amount of Surface Pipe Set and Cemented at 211' Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

foot depth to _____ v/ _____ xx cmt.

Drilling Fluid Management Plan D-4-A-4-1-98 UC
(Data must be collected from the Reserve)

Chloride content _____ ppm FLUID VOLUME _____ bbls

Dewatering method used Remove fluids

Location of fluid disposal if hauled offsite: _____

Operator Name Jody Oil & Gas

Lease Name Sanders License No. 3288

SW Quarter Sec. 20 Twp. 31S Rng. 8

County Harper Docket No. D23313

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.

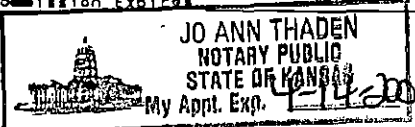
Signature _____

Title C. J. Lett, III, V. Pres. Date 8-8-97

Subscribed and sworn to before me this 8th day of Aug. 19 97.

Notary Public Jo Ann Thaden

Date Commission Expires 4-14-2001



K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

Operator **Bison Production Company**

Lease Name **Harrison** Well # **1-15**

Sec. **15** Twp. **29S** Rge. **7**
 East
 West

County **Kingman County, Kansas**

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
 (Attach Additional Sheets.)
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No
 (Submit Copy.)

Log Name	Formation (Top), Depth and Datum		Sample Datum
	Top	Datum	
Cherokee Gp.	3992'	-2399'	
Miss. Cht.	4128'	-2535'	
Miss. Porosity	4153'	-2560'	

List All E.Logs Run:

Dual Ind., Comp. Density Neut.

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	12-1/4"	8-5/8"	20#	211'	60/40 Poz	155	3%cc 2%gel
Plugged					60/40 Poz	195	4% 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	Acid, Fracture, Shot, Cement Squeeze Record
	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used) Depth

TUBING RECORD		Size	Set At	Packer At	Liner Run	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of First, Resumed Production, SWD or Inj.		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 Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: _____

ALLIED CEMENTING CO., INC.

6231

will file

REMIT TO "P.O. BOX 31
RUSSELL, KANSAS 67665

ORIGINAL

SERVICE POINT: Medicine Lodge

DATE <u>5-29-97</u>	SEC. <u>15</u>	TWP. <u>29S</u>	RANGE <u>7W</u>	CALLED OUT <u>1:00 pm</u>	ON LOCATION <u>2:45 pm</u>	JOB START <u>4:15</u>	JOB FINISH <u>4:35</u>
LEASE <u>Harrison</u>	WELL# <u>1-15</u>	LOCATION <u>Rago Jct 4N, 1E, 2N, 1S</u>			COUNTY <u>Kingman</u>	STATE <u>Kansas</u>	

OLD OR NEW (Circle one)

CONTRACTOR Duke Rig 2

TYPE OF JOB Surface

HOLE SIZE 12 7/8 T.D. 212

CASING SIZE 8 3/8 DEPTH 211.73

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX 150 MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15

PERFS.

OWNER Bison Production Co

CEMENT

AMOUNT ORDERED 155 x 60:40 266el 38cc

COMMON A	<u>93</u>	@	<u>6.10</u>	<u>567.30</u>
POZMIX	<u>62</u>	@	<u>3.15</u>	<u>195.30</u>
GEL	<u>3</u>	@	<u>7.50</u>	<u>22.50</u>
CHLORIDE	<u>5</u>	@	<u>28.00</u>	<u>140.00</u>
HANDLING	<u>155</u>	@	<u>7.05</u>	<u>1092.75</u>
MILEAGE	<u>155 x 45</u>	@	<u>0.04</u>	<u>279.00</u>

EQUIPMENT

PUMP TRUCK CEMENTER Carl Balding

237 HELPER Steve Winsor

BULK TRUCK

242 DRIVER John Kelly

BULK TRUCK

DRIVER

TOTAL \$1372.85

REMARKS:

Pipe on Bottom, Circulate with
big pump, pump 5 Bbls Freshwater,
pump 155x60:40=2+38cc, stop pumps
release plug, Displace with 12.78
Bbls Freshwater, Cement did Circulate

SERVICE

DEPTH OF JOB 211'

PUMP TRUCK CHARGE 0-300' 445.00

EXTRA FOOTAGE @

MILEAGE 45 @ 2.85 128.25

PLUG TWP 8 1/8" @ 45.00 45.00

TOTAL \$618.25

CHARGE TO: Bison Production Co

STREET 9320 EAST CENTRAL

CITY WICHITA STATE KANSAS ZIP 67206

FLOAT EQUIPMENT

@

@

@

@

@

TOTAL

TAX _____

TOTAL CHARGE \$1991.10

DISCOUNT \$298.66 IF PAID IN 30 DAYS

NET \$1692.34

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE John J. Ambrosio

ALLIED CEMENTING CO., INC. 6506

REMIT TO 'P.O. BOX 31
RUSSELL, KANSAS 67665

ORIGINAL

SERVICE POINT: MEDICINE LODGE

6-4-97

DATE <u>6-5-97</u>	SEC. <u>15</u>	TWP. <u>29S</u>	RANGE <u>7W</u>	CALLED OUT <u>9:45 PM</u>	ON LOCATION <u>1:15 AM</u>	JOB START <u>2:15 AM</u>	JOB FINISH <u>3:30 AM</u>
LEASE <u>HARRISON</u>	WELL # <u>1-15</u>	LOCATION <u>RAGO</u>	<u>4 N, 1E, 1/2 N, W/5</u>	COUNTY <u>KINGMAN</u>	STATE <u>KANSAS</u>		

OLD OR NEW (Circle one)

CONTRACTOR LUKE JALG #2

TYPE OF JOB ROTARY PLUG

HOLE SIZE 7 7/8" T.D. 4210'

CASING SIZE 8 1/8" 20# DEPTH 212'

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2" 16.6# DEPTH 1100'

TOOL _____ DEPTH _____

PRES. MAX 250# MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

OWNER BISON PRODUCTION Co.
CEMENT

AMOUNT ORDERED 205x 60:40:4

COMMON A	<u>123</u>	@	<u>6.10</u>	<u>750.30</u>
POZMIX	<u>82</u>	@	<u>3.15</u>	<u>258.30</u>
GEL	<u>7</u>	@	<u>9.50</u>	<u>66.50</u>
CHLORIDE		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>205</u>	@	<u>1.05</u>	<u>215.25</u>
MILEAGE	<u>205 X 45</u>	@	<u>.04</u>	<u>369.00</u>

EQUIPMENT

PUMP TRUCK CEMENTER KEVIN BRUNSBADT

237 HELPER SHANE WENSOR

BULK TRUCK _____

301 DRIVER RANDIE CANOWEAR

BULK TRUCK _____

_____ DRIVER _____

TOTAL \$1659.35

REMARKS:

35x @ 1100'

35x @ 700'

100x @ 260'

15x - RATHOLE

10x - MOUSEHOLE

10x - WATERWELL

SERVICE

DEPTH OF JOB	<u>1100'</u>		
PUMP TRUCK CHARGE			<u>445.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>45</u>	@	<u>2.85</u>
PLUG		@	
		@	

TOTAL \$573.25

CHARGE TO: BISON PRODUCTION Co.

STREET 9320 EAST CENTRAL

CITY WICHITA STATE KANSAS ZIP 67206

FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
	@		

TOTAL _____

TAX _____

TOTAL CHARGE \$ 2232.60

DISCOUNT \$ 334.89 IF PAID IN 30 DAYS

NET \$ 1897.71

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE X John Ambruster

ORIGINAL

GEOLOGIC REPORT

for:

Bison Production Company
#1-15 Harrison

15-095-21729

Supervised by:
Xploration Services, Inc.

RECEIVED
KANSAS CORP COMM
1997 AUG 11 A 1:25

ORIGINAL

XPLORATION SERVICES, INC.

OIL & GAS PROSPECTS - EVALUATION - DRILLING & COMPLETION SUPERVISION



June 11, 1997

Bison Production Company
9320 E. Central
Wichita, Kansas 67278

RE: Geologic Report
#1-15 Harrison
NW SE NE
Sec.15-T29s-R7w
Kingman County, Kansas

RECEIVED
KANSAS CORP COMM
1997 AUG 11 A 1:25

Gentlemen;

The following report is a summary of the drilling operations regarding the above captioned well.

RECOMMENDATION:

Due to negative structural position compared to offset producers and the poor results of the drill stem tests and log calculations, it was recommended to the operator that the well be plugged and abandoned according to the rules and regulations of the KCC.

GENERAL WELL DATA:

Spud date: May 29, 1997
Drilling completed: June 4, 1997

Contractor: Duke Drilling Co., Rig #2, John Armbruster; Toolpusher

Elevations: 1593' KB, 1591.5' DF, 1588' GL. All drilling operations measured from KB.

Rotary Total Depth: 4210'
Logged Total Depth: 4209'

Casing: Surface; New 85/8" 20# set at 212' with 160 sxs 60/40 Pozmix, 3%CC, 2% gel by Allied Cementing.

Production: None

Mud Program: MudCo Inc. Chemical Gel System. Gary Talbot; Engineer.

Geologic Program: 1' drilling time from 2600', 10' Wet and dry samples from 2700' - 2800' & 3300' to RTD.

Open Hole Logs: ELI; Compensated Density - Neutron - PE, Dual Induction. 5" from 4209' to 3000'.

Hole Deviation(s): 1/4 @ 212', 1 1/2 @ 4120'.

Formation Test(s): Two by Superior Testers, Great Bend, Gene Budig tester.

DST#1

(All Pressures are electronic recorder)

Test Interval: 4135 - 4150'
Formation: Mississippi
Tool Interval: 15"-30"-60"-90"

IHP 2024#
IFP 50 - 42#
ISIP 1330#
FFP 42 - 90#
FSIP 1373#
FHP 1993#

Preflow: Strong blow, off bottom in 10 sec. Strong throughout, No GTS

Final flow: Strong blow, GTS in 5". Ga: 21.9 decreasing to 8.7 MCFD at end of flow period.

Rec: 150' SGCMW. Chlorides: 96K

BHT: 130 deg. F.

DST#2

Test Interval: 3772 - 3790'
Formation: Hertha LS.
Tool Interval: 15"-30"-60"-90"

IHP 1911#
FFP 28 - 46#
ISIP 1029#
FFP 47 - 91#
FSIP 1029#
FHP 1837#

Preflow: Weak, building to 2 1/2" in bucket. No GTS.

Final flow: Weak, built to 6 1/2" in bucket. No GTS.

Recovery: 6" Clean Oil, 150' SMW. Chlorides: 83K

BHT: 130 deg. F.

GEOLOGIC DATA:

Log KB Tops: Formation	Top	Datum	Position*
TOPEKA LS.	2737	-1144	-11'
HEEBNER SH.	3096	-1503	-3'
TORONTO LS.	3113	-1520	-3'
DOUGLAS GP.	3135	-1542	-2'
IRELAND SD.	3230	-1637	-3'
HASKELL LS.	3339	-1746	-2'
LANSING GP.	3343	-1750	-1'

KANSAS RECEIVED
1997 AUG 11 A 1:25
KANSAS CORP COMM

RECEIVED
KANSAS CORP COMM

1997 AUG 11 A 1:25

STARK SH.	3742	-2149	-5'
SWOPE POROSITY	3748	-2155	-4'
HUSHPUCKNEY SH.	3777	-2184	-8'
HERTHA POROSITY	3784	-2191	-2'
BASE KC GP.	3830	-2237	-7'
MARMATON LS.	3864	-2271	-9'
PAWNEE LS	3946	-2353	-9'
LABETTE SH.	3974	-2381	-7'
CHEROKEE GP.	3992	-2399	-4'
EROSIONAL MISS. CHT	4128	-2535	-20'
BASE MISS. POROSITY	4153	-2560	-5'

** Structural position compared to Sunray #2 Bates, SW SE NE 15-29-7w

ANALYSIS OF SHOWS:

Minor Show Zone(s):

Swope Limestone; 3748 - 3754' E-Log. Circulated, Not tested.

Limestone; Light gray, singular, very fine oolitic grainstone. Good oolcastic porosity at top, becoming less developed with depth. Some good intercrystalline porosity between oolcasts. Permeability is inconsistent. Fair to good odor. Rare dull yellow spotted fluorescence. Scattered fine gas bubbles when broken. Very rare show light brown oil. (note, the log indicates this zone to be dolomitic, however sample examination did not support this)

Due to its relatively low position this zone was not tested and the corresponding log calculations show it to be very wet.

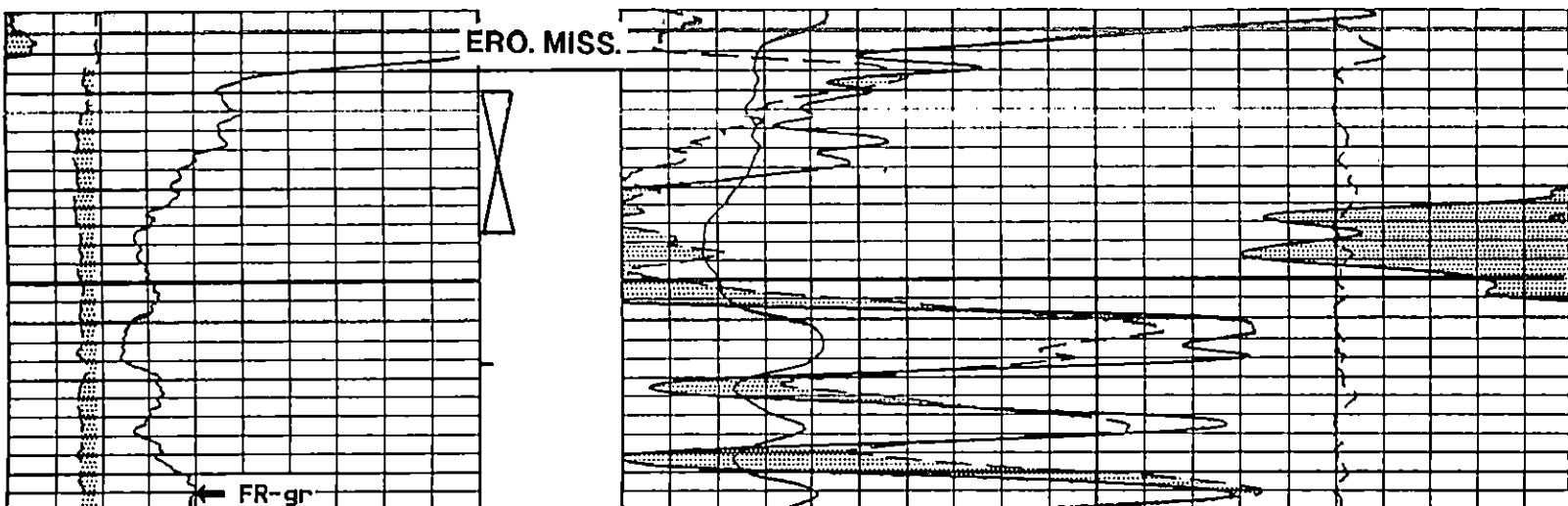
Hertha Limestone; 3784 - 3807' E-Log. Circulated and covered by Straddle DST #2.

Limestone; Light gray, mottled in part, very fine oolitic grainstone with good to very good oolcastic porosity throughout. Moderate visible permeability. Good petroleum odor. Uniform to spotted golden fluorescence. Some light scattered stain. Fair to good cut and cut fluorescence. Scattered fine gas bubbles when broken with rare scattered shows of light brown oil.

Initially this zone was judged to be low and wet, however, the Open Hole Log calculated the top 5 - 6 feet to be possibly productive. A straddle DST across the top of the zone was run to confirm the calculations. The results showed the zone to be of low permeability and wet.

Major Show Zone(s):

Mississippi Osage Chert , 4128 - 4209' (LTD) E-Log depths. Circulated and covered by DST #1.



(Drilling depths)

Erosional Mississippi

4133 - 4141' Drill Time

Chert; white and tan intermixed with pale green. Hard, dense appearing, spicular. Very fine intercrystalline porosity. Faint petroleum odor, speckled golden fluorescence. Slight show of gas. No shows of oil.

Chert; dark gray and black mixed with white. Spicular with fine pinpoint porosity. Show of gas bubbles with time.

Note, many of the chert samples examined were quite rounded and were possibly intermixed with shale. The pale green chert looks to be silica replaced limestone.

4141 - 4156' Drill Time

Chert; Tan to light brown, singular. Weathered to spicular. Good pin point type porosity. Good odor, bright yellow speckled fluorescence. Show of gas with time and fair show gassy oil. Fair to good cut.

Chert; Tan to brown and white, mottled. Weathered with fine pin point porosity.

Chert; Gray and dark gray, mottled in part. Tripolitic. Small percentage overall found as rind.

Chert; Black and dark gray, mottled. Spicular, dense appearing.

The three chert types described above were observed together, probably as thin beds. They had fair, scattered shows of gas and oil but were not believed to be significant as reservoir rocks.

4156 - 4210' (RTD) Drill Time

Chert; white to light gray, grading to predominantly white with depth, devitrified, chalky appearing at times. Barren of shows.

Limestone; white and light gray as above, singular, dense wackestone, chalky in part. Becoming dolomitic in places. Barren of shows.

The Chert and Dolomitic Limestone described above were found intermixed throughout the referenced interval.

Conclusions:

For reasons not known at this time the #1-15 Harrison ran low on all datums to those predicted by the Telluric survey. The structural interpretation of these datums indicates the well to have found the northern flank of the Basil Field with the sediments draped over the basement core. This is the situation conventional subsurface mapping would have accurately predicted. The failure of the Tellurics to this degree has not been observed before. A subsequent follow-up survey will hopefully shed some light as to the source of the failure.

Respectfully submitted,

Xploration Services, Inc.


Dean Pattissen
Consulting Geologist

RECEIVED
KANSAS CORP COMM
1997 AUG 11 A 1:25

ORIGINAL

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

15856.L

Date 6-3-1997 Location N 1/4 Sec 15-29-7W Elevation 1593 KB. County Kingman

Company Bison Production Company Number of Copies 5

Charts Mailed to 9320 East Central Wichita, Kansas 67206

Drilling Contractor Duke Drilling Co #2

Length Drill Pipe 4116 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X 1 1/2"

Length Weight Pipe None I.D. Weight Pipe None Tool Joint Size None

Length Drill Collars None I.D. Drill Collars None Tool Joint Size None

Top Packer Depth 4130 Bottom Packer Depth 4135 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4135 TO 4150 ANCHOR LENGTH 15 TOTAL DEPTH 4150 Hole Size 7 7/8"

LEASE & WELL NO. Harrison #1-15 FORMATION TESTED Mississippi TEST NO. 1

Mud Weight 9.2 Viscosity 40 Water Loss 10.4 Chlorides - Pits 5000 D.S.T. 96000

Maximum Temp. 130 °F Initial Hydrostatic Pressure (A) 2024 P.S.I. Final Hydrostatic Pressure (H) 1993 P.S.I.

Tool Open I.F.P. from 8:30 p.m. to 8:45 p.m. 15 min

Tool Closed I.C.I.P. from 8:45 p.m. to 9:15 p.m. 30 min

Tool Open F.F.P. from 9:15 p.m. to 10:15 p.m. 60 min

Tool Closed F.C.I.P. from 10:15 p.m. to 11:45 p.m. 90 min

from [B] 50 P.S.I. to [C] 42 P.S.I.
[D] 1330 P.S.I.
from [E] 42 P.S.I. to [F] 90 P.S.I.
[G] 1373 P.S.I.

Initial Blow Strong blow-off the bottom of a 5 Gallon bucket in 10 seconds

Final Blow Strong blow-gas to surface in 5 minutes - see Gas Flow Report

Total Feet Recovered 150 Gravity of Oil Corrected

150 Feet of Slightly Gas cut muddy water	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water
Feet of	% Gas	% Oil	% Mud	% Water

Remarks

Extra Equipment - Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 78225 Clock No. Electronic Depth 4143 Cir. Sub None Sampler None

Bottom Recorder No. 11088 Clock No. 47441 Depth 4147 Insurance None

Price of Job

Tool Operator None Budig

Approved By

No 11642

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

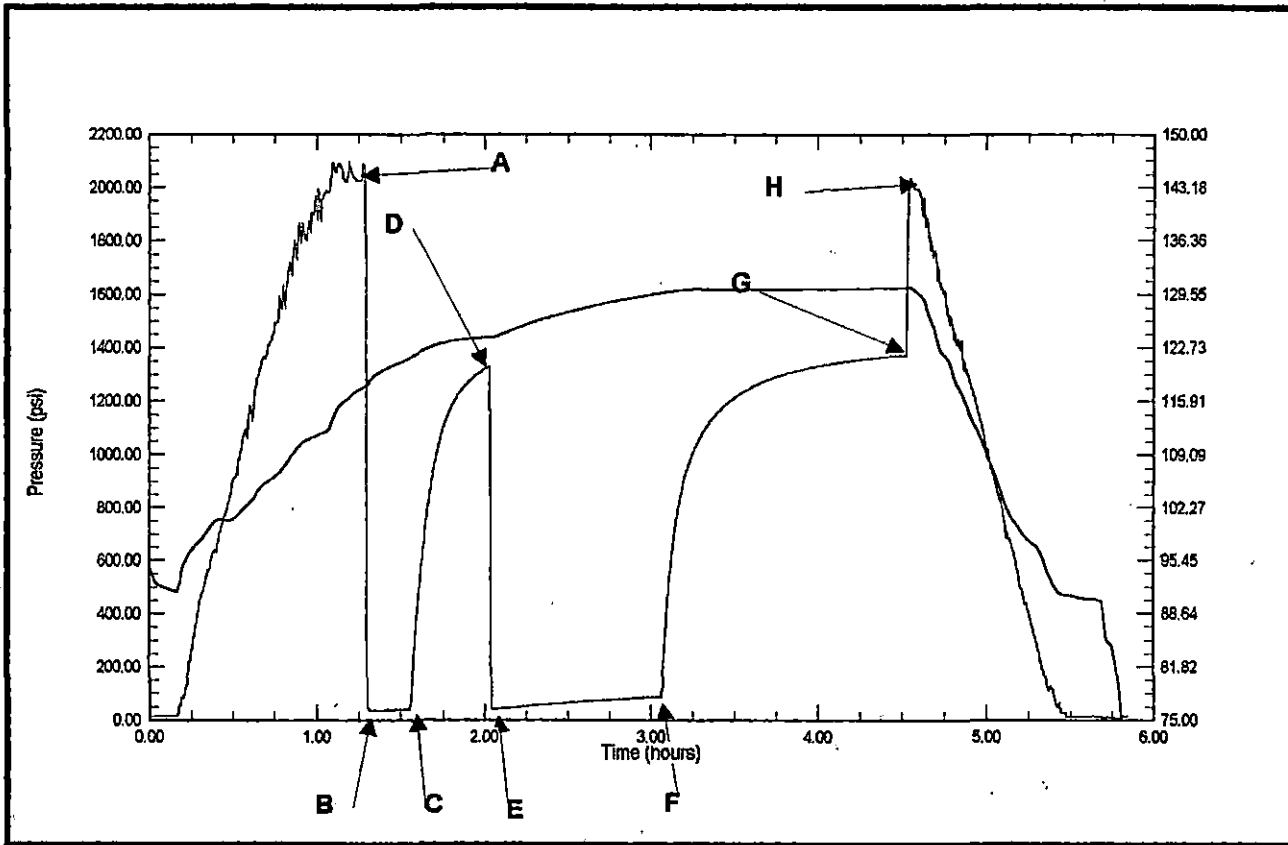
(316) 792-6902

HARRISSON #1-15 MISSISSIPPI

State KANSAS
 County
 Field

Test Date June 3, 1997
 Sec Town Range NW S/E N/E 15-29S-7
 Report Number 11642

Company: BISON PRODUCTION COMPANY Lease & Well No. HARRISSON #1-15 Test # 1 Date: 6-3-1997
 Sec. 15 TWP. 29S RGE. 7W



Field Reading

Office Reading

(A) Initial Hydrostatic Pressure	2024	psi
(B) Initial Flow Pressure	50	psi
(C) Final Initial Flow Pressure	42	psi
(D) Initial Shut-In Pressure	1330	psi
(E) Initial Final Flow Pressure	42	psi
(F) Final Flow Pressure	90	psi
(G) Final Shut-In Pressure	1373	psi
(H) Initial Hydrostatic Pressure	19933	psi

Mechanical Recorder Depth 4147 ft, Recorder Number 11087

15-075-21167

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

General Information

Test Company Name SUPERIOR TESTERS ENTERPRISES INC.
Company Name BISON PRODUCTION COMPANY
Lease and Well Number HARRISSON #1-15
Formation Tested MISSISSIPPI
Test Number 1
State KANSAS
County KINGMAN
Field
Test Date 3-Jun-97
Section Town Range NW S/E N/E 15-29S-7W
Report Number 11642
Elevation Ground Level 1585
Elevation Kelly Bushings 1593
Company Representative DEAN PATTISON
Testing Engineer GENE BUDIG

Extra Equipment

Jars No
Safety Joint No
Extra Packes No
Straddle No
Hook Wall No
Sampler No
Circulating Sub No
Electronic Recorder YES

Well Information

Drilling Contractor DUKE DRILLING RIG #2

Drill Pipe Length 4116
Drill Pipe I.D. 3.8
Tool Joint Size 4 1/2 XH

Weight Pipe Length
Weight Pipe I.D. 2.76
Tool Joint Size 4 1/2 X.H.

Drill Collar Length
Drill Collar I.D. 2.25
Tool Joint Size 4 1/2 X.H.

Mud Weight #/gal 9.20
Viscosity 40.00
Water Loss 10.4
Chlorides - Pits 5,000
Chlorides - DST **96 000**

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316)792-6902

Tool Setting Information

Top Packer Depth 4130
Bottom packer Depth 4135
Number of Packers 2
Packer Size 6 3/4

Test Interval (from) 4135
Test Interval (to) 4150.00
Anchor Length 15
Total Depth (ft) 4150
Hole Size (in) 7 7/8

Pressure Readings

	<i>Field Reading</i>	<i>Office Reading</i>
Maximum Temp	130	
Initial Hydrostatic Pressure	2024	
Initial Flow Pressure	50	
Final Initial Flow Pressure	42	
Initial Shut-In Pressure	1330	
Initial Final Flow Pressure	42	
Final Flow Pressure	90	
Final Shut-In Pressure	1373	
Final Hydrostatic Pressure	19933	
Mechanical Recorder Depth (ft)	4147	
Recorder Number	11087	
Electronic Recorder Depth	4143	
Recorder Number	78225	

Comments

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

GREAT BEND, KANSAS (316) 792-6902

Flow Times

Initial Open

Tool Open (from) 8:30
 Tool Open (to) 8:45
 Duration (min) 15

Initial Shut-In

Tool Closed (from) 8:45
 Tool Closed (to) 9:15
 Duration (min) 30

Final Open

Tool Open (from) 9:15
 Tool Open (to) 10:15
 Duration (min) 60

Final Shut-in

Tool Closed (from) 10:15
 Tool Closed (to) 11:45
 Duration (min) 90

Recovery Description

Initial Blow STRONG BLOW-BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 10 SECONDS

Final Blow STRONG BLOW-GAS TO SURFACE IN 5 MINUTES-SEE GAS FLOW REPORT

Description	Feet of Recovery	% Gas	% Oil	% Mud	% Water
1) SLIGHTLY GAS CUT MUDDY WATER	150				
2) CHLORIDES 96000					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
Total	150				

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

GAS FLOW RATE

(316) 792-6902

HARRISSON #1-15 MISSISSIPPI

State KANSAS

Test Date June 3, 1997

County KINGMAN

Sec Town Range N/W S/E N/E 15-29S-7W

Field

Report Number 11642

Initial Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)

Final Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
GAS TO	9:20	5	12			0.50	21.900
SURFACE 5	9:25	10	6			0.50	15.400
MINUTES INTO	9:35	20	14			0.38	13.400
THE 2ND	9:45	30	12			0.38	12.400
OPENING	9:55	40	10			0.38	11.300
AT 9:20	10:05	50	8			0.38	10.100
	10:15	60	6			0.38	8.740

SUPERIOR TESTERS ENTERPRISES II

GREAT BEND, KANSAS

SEMI-LOG ANALYSIS

(316) 792-6902

2ND SHUT-IN

State KANSAS

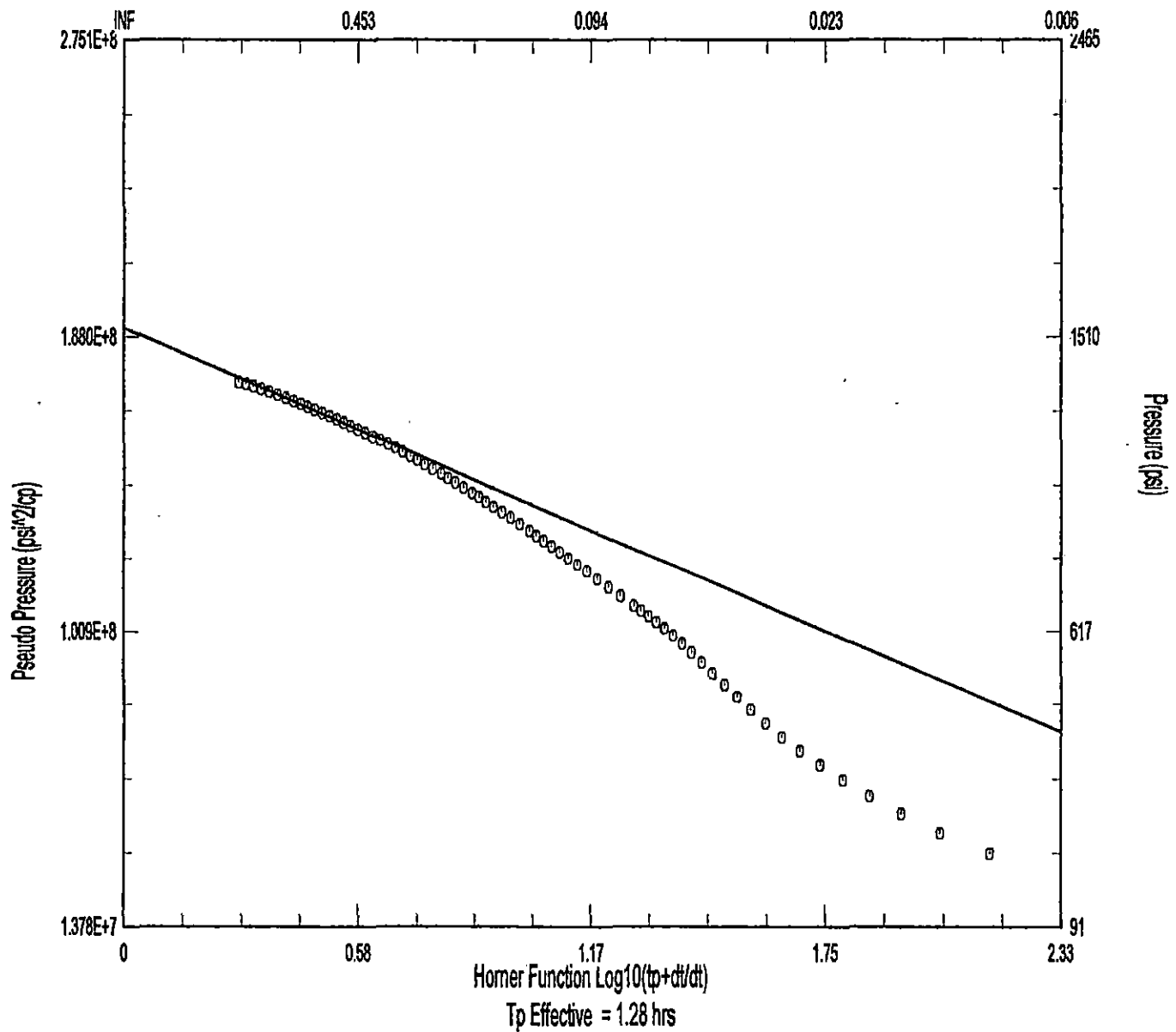
Test Date June 3, 1997

County KINGMAN

Sec Town Range N/W S/E N/E 15-29S-7W

Field

Report Number 11642



Field :
County or Parish :
State :

Date : 04-Jun-97 01:51:37
Analysis Period : END FLOW - 2ND SHUT-IN
Identifier : Line #

Superposition Slope -> m' N/A
Horner Slope -> m -5.126785E+7
Intercept 1.906E+8
P(dt=1 hr) 1.722E+8
Pwf 1.378E+7
R Sqr 0.9943

Intercept (psi) 1537.600
k (md) 0.01647
kh (md-ft) 0.16465
k/u (md/cp) 0.78781
kh/uB (md-ft/cp) 7.87809
Skin 2.6046
DP Skin 815.6729
Total DP 1446.9730
Percent DP 56.37%

Radius Invest (ft) 3
Radius Time (hrs) 1.46

Delta Q = 9
h (ft)= 10
mu (cp) = 0.0209
B (stb/scf) = 0.0016

First Point # 113
Second Point # 298
Start Real Time 0.342
End Real Time 1.374
Start SF Time 0.676