

Superior Testers, Inc.

Derby, Kansas (316) 788-2631

Great Bend, Kansas (316) 792-6902

Hays, Kansas (913) 628-3209

DRILL STEM TEST RECOVERY ANALYSIS

Company Energy Three Sec. 35 Twp. 17 Rge. 13

Lease Morganstein County Barton State Kansas D.S.T.# 1

Visual D.S.T. 2025' GAS IN PIPE 20' OIL CNT MUD 75' GAS CNT
 Recovery Muddy Oil 80' Gassy Fracture Oil

CENTRIFUGE PERCENTAGE ANALYSIS

Sample #	Feet of FLUID	Percent of GAS	Percent of OIL	Percent of WATER	Percent of MUD
1	20	43	34	11	12
2	80	2	56	12	30
3	60	30	50	12	8
4	15	18	64	9	9

CALCULATED FLUID RECOVERY FROM PERCENTAGES

(Formula for Calculation)

Percent of Individual Fluid x Total Footage Represented in Sample

SAMPLE #	TOTAL FOOT-AGE	GAS				Feet	OIL				Feet	WATER				Feet	MUD				Feet
		%	x	Total	=		%	x	Total	=		%	x	Total	=		%	x	Total	=	
1	20	43	x	20	=	8.6	34	x	20	=	6.8	11	x	20	=	2.2	12	x	20	=	2.4
2	80	2	x	80	=	1.6	56	x	80	=	44.8	12	x	80	=	9.6	30	x	80	=	24
3	60	30	x	60	=	18	50	x	60	=	30	12	x	60	=	7.2	8	x	60	=	4.8
4	15	18	x	15	=	2.7	64	x	15	=	9.6	9	x	15	=	1.35	9	x	15	=	1.35
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
			x		=			x		=			x		=			x		=	
TOTALS		30.9					91.2					20.35					32.55				

Calculated D.S.T. Recovery =

Chlorides Mud System 56000 PPM
 Chlorides D.S.T. Water 55000 PPM
 Gravity of Oil _____

Gas 30.9 Feet
 Oil 91.2 Feet
 Wtr. 20.35 Feet
 Mud 32.55 Feet
 Total Fluid 175 Feet

SUPERIOR TESTERS
368 West Second, Hoisington, Kansas

Date 5-2-83 Location 35-17-13 1/2 SW NW Elevation 1892 KB County BARTON
Company ENERGY THREE INC Number of Copies _____
Address P.O. BOX 1505 GREAT BEND, KANSAS 67530
Charts Mailed to P.O. BOX 1505 GREAT BEND, KANSAS 67530
Invoice Mailed to P.O. BOX 1505 GREAT BEND, KANSAS 67530
Lease MORGENSTERN Well No. 4 Formation Tested KANSAS CITY Test No. 1
Depth 3300 Tested from 3277 To 3300 Packer Size 6 3/4 Anchor Length 23'
Top Packer Depth 3272 ft. Bottom Packer Depth 3277 ft. Dual Packers yes
Tool Joint Size 4 1/2" FH Tool Size 5 1/2" 00 Hole Size 7 7/8 Did Packer Hold yes
Drilling Contractor BIG THREE RIG #1
Length Drill Pipe 3256 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" FH
Length Weight Pipe — I.D. Weight Pipe — Tool Joint Size —
Length Drill Collars — I.D. Drill Collars — Tool Joint Size —
Tool Open I.F.P. from 12:15 A m to 12:45 A m 30 min from [B] 29 P.S.I. to [C] 49 P.S.I.
Tool Closed I.C.I.P. from 12:45 A m to 1:30 A m 45 min [D] 1052 P.S.I.
Tool Open F.F.P. from 1:30 A m to 2:00 A m 30 min from [E] 59 P.S.I. to [F] 69 P.S.I.
Tool Closed F.C.I.P. from 2:00 A m to 2:45 A m 45 min [G] 994 P.S.I.
Initial Hydrostatic Pressure [A] 1687 P.S.I. Final Hydrostatic Pressure [H] 1667 P.S.I. Maximum Temp 107° F
Blow BUILDING BLOW ON FIRST OPENING TO BOTTOM OF BUCKET IN 7 MIN
BUILDING BLOW ON SECOND OPENING 6 MIN TO BOTTOM OF BUCKET
Gas to Surface — Min. Oil to Surface — Min. Mud Weight 9.8 Viscosity 44
Gas Gauged _____
Recovery 2025' GAS IN PIPE 20' OIL OUT MUD 75' GAS OUT
Muddy OIL 80' Gassy Frothy OIL
Remarks _____
Extra Equipment-Jars _____ Safety Joint _____ Straddle _____ Hook Wall _____
Top Recorder No. 13208 Clock No. 23913
Bottom Recorder No. 906 Clock No. 8968
Price of Job 550.00
Tool Operator Bob Johnson
Approved By [Signature]

SUPERIOR TESTERS, 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.

Ticket N° 6912

13208

DST#1

6912

Energy Three Inc.
Morgenstern # 4
3277-3300 Kansas City
5/7/83

