

UNICHEM INTERNATIONAL

601 NORTH LEECH

P.O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : ARCO OIL AND GAS
DATE : 1-7-81
FIELD/LEASE/WELL : STATE 19 #1-D.S. T #1 MIDDLE
SAMPLING POINT:
DATE SAMPLED : 12-31-81

SPECIFIC GRAVITY = 1.019
TOTAL DISSOLVED SOLIDS = 28683
PH = 10.43

		MG/L	MG/L
CATIONS			
CALCIUM	(CA)+2	18	18.0
MAGNESIUM	(MG)+2	2.7	32.8
SODIUM	(NA).CALC.	490.	11275.
ANIONS			
BICARBONATE	(HCO3)-1	0	0
CARBONATE	(CO3)-2	70.0	2112
HYDROXIDE	(OH)-1	8.8	149.
SULFATE	(SO4)-2	31.2	1500
CHLORIDES	(CL)-1	383.	13596.
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON(TOTAL)	(FE)	NOT RUN	
BARIUM	(BA)+2	NOT RUN	
STRONTIUM	(SR)+2	NOT RUN	

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	2.80
CALCIUM CARBONATE SCALING	LIKELY
SULFATE INDEX	-64.
CALCIUM SULFATE SCALING	UNLIKELY

State 19 #1

LOCATION Sec. 19, T16S, R34E, Lea County

(New Mexico give U.S.T&R: Texas give S, BLK, SURV. and TWP)

OPERATOR ARCO Oil & Gas Company

DRILLING CONTRACTOR MORANCO

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

Degrees and Depth

Degrees and Depth

Degrees and Depth

Degrees and Depth.

1/2 : 1.95

1/2 5418

3/4 10461

1/2 . . . 482

174 5784

1-1/4 10961

1/4 975

1/2 6251

2 11490

$\frac{1}{2}$.1509

1 - 6682

2 . 1.1663

1871

6955

2-1/2 12041

1/4 2470

1/2 7239

2 . 12254

1/2 2875:

1/2 7747

2 12480

1/4 3104

1/4 8315

2 12971

1/4 3618

1 8528

2-3/4 13200

• 1/4 • 4043

12 9025

1 4500

1-174 • 9583

3/4 4897

1-1/4 . 9937

Drilling Contractor MORANCO

By

Subscribed and sworn to before me this _____ day of _____ 19____

My Commission expires:

Notary Public
Lea County, New Mexico

RECEIVED

APR 28 1982

O.C.D.
HOBBS OFFICE

Contractor Moranco
Rig No. 2
Spot 800' FSL & 1980' FEL
Sec. 19
Twp. 16 S
Rng. 34 E
Field South Kemnitz
County Lea
State New Mexico
Elevation 4153' "K.B."
Formation Canyon

Top Choke 1/4"
Bottom Choke 3/4"
Size Hole 7 7/8"
Size Rat Hole --
Size & Wt. D. P. 4 1/2" 16.60
Size Wt. Pipe --
I. D. of D. C. 2 1/4"
Length of D. C. 640'
Total Depth 11,490'
Interval Tested 11,433-11,490'
Type of Test Bottom Hole
Conventional

Flow No. 1 20 Min.
Shut-in No. 1 60 Min.
Flow No. 2 60 Min.
Shut-in No. 2 120 Min.
Flow No. 3 -- Min.
Shut-in No. 3 -- Min.

Bottom
Hole Temp. 196° F
Mud Weight 9.6
Gravity --
Viscosity 34

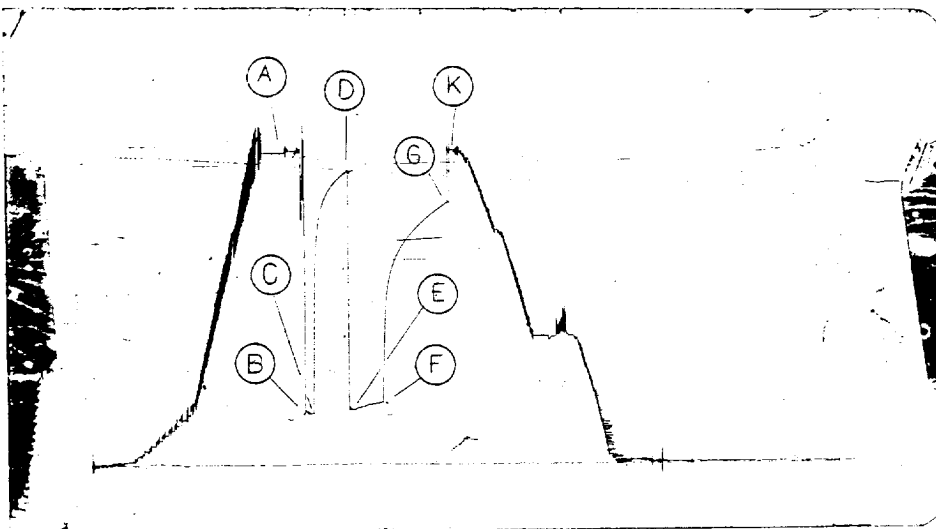
Tool opened @ 4:55 AM

Outside Recorder

PRD Make Kuster K-3
No. 21714 Cap. 8550 @ 11,490'

Press	Corrected
Initial Hydrostatic A	5746
Final Hydrostatic K	5739
Initial Flow B	1000
Final Initial Flow C	939
Initial Shut-in D	5357
Second Initial Flow E	1000
Second Final Flow F	1136
Second Shut-in G	4775
Third Initial Flow H	--
Third Final Flow I	--
Third Shut-in J	--

Lynes Dist. Hobbs, New Mexico
Our Tester: Ricky Ragsdale
Witnessed By: David Mitchell



Did Well Flow - Gas Yes Oil No Water No (Test was reverse circulated)

RECOVERY IN PIPE: 2530' Total fluid (ran 1500 water cushion)

1,500 Gas & Oil cut water cushion = 21.30 bbl.
731' Formation fluid = 7.60 bbl.
155' Oil = .76 bbl.
144' Gas cut mud = .71 bbl.

Top Sample: 38,000 ppm. Cl.
Middle Sample: 36,000 ppm. Cl.
Bottom Sample: 92,000 ppm. Cl.

Blow description:

1st flow: Tool opened with a weak blow; increasing to 10 ozs. at end of flow period.

2nd flow: Tool opened with gas to surface; see gas volume report.

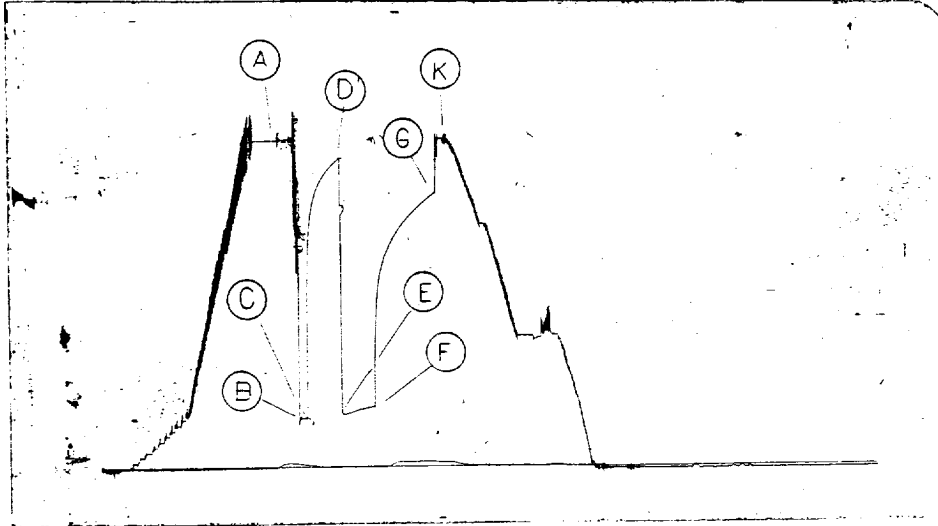
Operator ALCO Oil & Gas Co.
P.O. Box 1710
Hobbs, New Mexico 88240
Ticket No. 36252
Date 12-29-81
No. Final Copies 5

LYNES, INC.

Arco Oil & Gas Co.
Operator

State 19 #1
Well Name and No.

1
DST No.



Inside Recorder

Kuster K-3

PRD Make _____
No. 21810 Cap. 8000 @ 11,419

Press Corrected

Initial Hydrostatic	A	5685
Final Hydrostatic	K	5683
Initial Flow	B	952
Final Initial Flow	C	908
Initial Shut-in	D	5340
Second Initial Flow	E	969
Second Final Flow	F	1093
Second Shut-in	G	4756
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Pressure Below Bottom
Packer Bled To

PRD Make _____

No. _____ Cap. _____ @ _____

Press Corrected

Initial Hydrostatic	A	
Final Hydrostatic	K	
Initial Flow	B	
Final Initial Flow	C	
Initial Shut-in	D	
Second Initial Flow	E	
Second Final Flow	F	
Second Shut-in	G	
Third Initial Flow	H	
Third Final Flow	I	
Third Shut-in	J	

Pressure Below Bottom
Packer Bled To