

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other ☐

2. NAME OF OPERATOR ARCO Oil and Gas Company
Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1520' FSL & 1520' FEL
AT TOP PROD. INTERVAL: Approx same
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

5. LEASE
SF 078863

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Krause WN Federal

9. WELL NO.
6E

10. FIELD OR WILDCAT NAME
Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
29-28N-11W

12. COUNTY OR PARISH
San Juan

13. STATE
New Mexico

14. API NO.
30-045-24125

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5772' GL

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

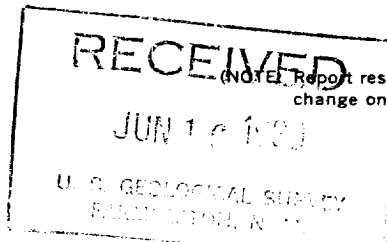
PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

CHANGE ZONES ☐

ABANDON* ☐

(other) NO setting prod Csg.



(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drld to 6340' & logged. Ran 148 jts 4-1/2", 10.5#, K-55, ST&C, Rge 3 (6344.89'), GS, diff fill up FC, DV tool (5.46') & landed @ 6331'. Cmt'd 1st stage w/500 gals mud flush, 10 BW, 500 sxs Howcolite w/10# gilsonite/sx, 3/4% CFR-2. Tailed w/ 300 sxs 50/50 pozmix w/ 3/4% CFR-2, 2% gel. Displ w/101 bbls wtr. Bumped plug w/1800# - float, held OK. Started losing returns in first 50 bbls of displacement. Lost complete returns on last 51 bbls of displacement. CIP @ 7:30 P.M. 5/23/80. Opened DV tool @ 1857'. Circl 3 hrs. Cmt'd 2nd stage w/500 gals mud flush, 10 BW, 350 sxs HOWCO lite w/2% CaCl. Tailed w/200 sxs 50/50 pozmix w/2% CaCl. Displ w/31 BW. Circl cmt to surface. CIP @ 11:15 A.M. 5/23/80. Released rig @ 2:30 A.M. 5/24/80. Waiting on Completion.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____

18. I hereby certify that the foregoing is true and correct

SIGNED W.A. Walther, Jr. TITLE Operations Manager DATE June 12, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD

187700

*See Instructions on Reverse Side

JUN 18 1980

FARMINGTON DISTRICT
BY [Signature]

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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P. O. Box 5540, Denver, Colorado 80217
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1520' FSL & 1520' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: Approx the same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF ☐ ☐
FRACTURE TREAT ☐ ☐
SHOOT OR ACIDIZE ☐ ☐
REPAIR WELL ☐ ☐
PULL OR ALTER CASING ☐ ☐
MULTIPLE COMPLETE ☐ ☐
CHANGE ZONES ☐ ☐
ABANDON* ☐ ☐
(other) N.O. spud and set surface casing

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

MI & RU. Spud 12-1/4" hole @ 7:30 pm 5-12-80. Ran 20 jts 8-5/8", 24#, K-55, Rge 3, ST&C casing (747.67') and landed @ 742'. Cemented w/550 sxs Class "B", 2% CaCl, 1/4# flocele/sx. Circ'l 40 sx cement. P.D. @ 2:20 pm 5-13-80. Tested blind and pipe rams to 1000# - held OK.

Drilling ahead @ 1190'.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED W. A. Walther, Jr. TITLE Operations Manager DATE 5-21-80

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD

MAY 29 '80

FARMINGTON DISTRICT

*See Instructions on Reverse Side

BY



NEW FIELD TEST OF DEVIATION CORRECTION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form 112
Revised 5-1-66

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 07-15-80			
Company ARCO Oil & Gas Co.; Div. of Atlantic Richfield Co.					Connection None			
Pool Basin Dakota					Formation Dakota		Unit	
Completion Date 07-03-80			Total Depth 6340		Plug Back TD 6300		Elevation 5772 GL	
Turn or Lease Name Krause WN Fed.								
Csg. Size 4 1/2"	Wt. 10.5#	d 4.052	Set At 6331	Perforations: From 6132 To 6247		Well No. 6E		
Fig. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 6126	Perforations: From To		Unit 29 Soc. 29 Twp. 28N Range 11W		
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single - Gas					Packer Set At None		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a 12.0		State New Mexico
L 6126	H 6126	G _g .800(EST)	% CO ₂	% N ₂	% H ₂ S	Prover 2"	Meter Run	Taps

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	2"X0.750"			110		76°	1198		1197		12-Days
2.							221		425		3-Hours
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super. Comp. Factor, F _{pv}	Rate of Flow Q, Mscf
1.	9.453		122	0.9350	1.118	1.018	1293
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.18	536	1.26	0.965	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas 0.800 (EST)	X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure 665	P.S.I.A. 1980
5.					Critical Temperature 424	P.S.I.A. R

P _c 1210	P _c ² 1464100		
NO.	P _r ²	P _w	P _w ²
1	54289	314	98625
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0722$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0537$	
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1362$			

Absolute Open Flow 1362	Mcf @ 15.025	Angle of Slope θ	Slope, n 0.750
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Remarks: Well Tested thru 48/64" Choke

Approved By Commission	Conducted By C. R. Thompson, Jr.	Calculated By C. R. Thompson, Jr.	Checked By
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<u>DEPTH</u>	<u>DEGREES</u>	<u>DEPTH</u>	<u>DEGREES</u>
300'	1/4	3912'	1-1/4
747'	1/2	4470'	1
1300'	1/2	5586'	1/2
2311'	1/4		

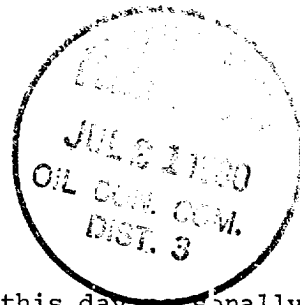
AFFIDAVIT

This is to certify that to the best of my knowledge the above tabulation details the deviation tests taken on ARCO Oil and Gas Company, Division of Atlantic Richfield Company's Krause WN Federal Well Number 6E, Basin Dakota Field, 1520' FSL & 1520' FEL of Section 29-28N-11W, San Juan County, New Mexico.

July 17, 1980
Date

K. L. Flinn
K. L. Flinn
Operations Information Assistant

State of Colorado)
) ss.
County of Denver)



Before me, the undersigned authority, on this day personally appeared, K. L. Flinn, known to me to be the Operations Information Assistant for ARCO Oil and Gas Company, Division of Atlantic Richfield Company, and to be the person whose name is subscribed to the above statement, who, being duly sworn on oath, states that she has knowledge of the facts stated herein, and that said statement is true and correct.

Subscribed and sworn to before me, a Notary Public in and for
said County and State this 17th day of July, 1980.

Phyllis Ann Halloway
Notary Public

My commission expires:

May 12, 1982

7/5-7/80	6340	TD - Well SI.
7/8/80	6340	TD - Well SI.
7/9/80	6340	TD - Well SI.
7/10/80	6340	TD - Well SI.
7/11/80	6340	TD - Well SI.
7/16/80	6340	TD - <u>COMPLETED SI GAS WELL</u> , 7/15/80, Dakota fm. Tst date 7/15/80. 12 day SICP 1197#, SITP 1198#. Flwd 3 hrs thru 48/64" chk. Flwd 1293 MCFD, liquid rate 96 BPD, 24 BWPD (frac) f/Dakota perfs 6132-6247' (DA). Oil gvty 48.1° API @ 60°F. FCF 425#, FTP 221#. LPP 6247'.