

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

CLSF

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP EN ☐ PLUG BACK ☐ DIFF. REVR. ☐ Other ☐

2. NAME OF OPERATOR

Harvey E. Yates Company

3. ADDRESS AND TELEPHONE NO.

P.O. Box 1933 Roswell, New Mexico 88202 505-623-6601

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface Unit N., 660' FSL & 1980' FWL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

5. LEASE DESIGNATION AND SERIAL NO.

LC-029393-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

Arco 8 Federal # 4

9. API WELL NO.

30-015-27185

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 8, T-18s, R-31e

12. COUNTY OR PARISH

Eddy

13. STATE

New Mexico

15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.)

11-10-92

11-30-92

3-20-93

18. ELEVATIONS (DF, RKB, RT, OR, ETC.)

3653' GL

19. ELEV. CASINGHEAD

Same

20. TOTAL DEPTH, MD & TVD

8610'

21. PLUG, BACK T.D., MD & TVD

7649'

22. IF MULTIPLE COMPL., HOW MANY

23. INTERVALS DRILLED BY

ROTARY TOOLS

0-TD

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)

3745-3818' (OA) Grayburg

25. WAS DIRECTIONAL SURVEY MADE

no

26. TYPE ELECTRIC AND OTHER LOGS R/N

Comp Density/Comp Neutron GR/CCL, DLL/MLL/GR; CBL/CCL/GR

27. WAS WELL CORED

no

29. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13 3/8"J	54.5	378'	17 1/2"	375 SXS Circ. to surf.	
8 5/8"J	32	2100'	12 1/4"	1000 sxs Circ to surf.	
5 1/2"J	17	8610'	7 7/8"	1500 SXS TOC @ 2460 CBL	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	ANCHOR (MD)
2 3/8'	3508'	3178' Anchor

31. PERFORATION RECORD (Interval, size and number)

3745-3818' (OA) 9 holes .41"

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3745-3818	4000 gals acid & 5500 gal frac 11Ksc
3745-3818	18K gals frac & 47.9K# sd.

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
2-22-93		Pump: 2' x 1 1/2" x 20' (Cumbie)				Producing	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3-25-93	24	--	→	20	TSTM	120	---
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
---	----	→	20	TSTM	120	35.2	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented(no vol. just fumes)

TEST WITNESSED BY

Cliff Mann Jr.

35. LIST OF ATTACHMENTS

Logs, Inclination Survey, C-104, C-102

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Ray F. Nokes

TITLE

Prod. Mgr/Eng.

DATE 4-5-93

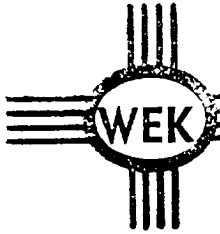
*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Rustler	501	1943	Anhy
Yates	1943	2346	Anhy, Dolo, sand
Seven Riv.	2346	3076	Anhy, Dolo, sand
Queen	3076	3620	Sand, Dolo
Grayburg	3620	4096	Dolo, Sand
San Andres	4096	4772	Dolo
Delaware	4772	5368	Sand
Bone Spring	5368	8610	LS, Dolo, Sand
TD	8610		

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
KB		
Rustler	501	
Cowden Anhydrite	1578	
Yates	1943	
Seven Rivers	2346	
Bowers	2814	
Queen	3076	
Penrose	3309	
Grayburg	3620	
Metex	3886	
BF San Andres	4096	
Delaware Sand	4772	
Bone Spring	5368	
TD	8610	



KEN REYNOLDS—PRESIDENT
ARNIE NEWKIRK—VICE-PRESIDENT

DRILLING CO., INC. — OIL WELL DRILLING CONTRACTORS

P. O. BOX 1498 ROSWELL, NEW MEXICO 88202-1498
505/623-5070 505/746-2719
ROSWELL, NM ARTESIA, NM

December 02, 1992

Heyco, Inc.
P.O. Box 1933
Roswell, N.M. 88202

RE: Arco "8" Federal #4

Gentlemen:

The following is a Deviation Survey on the above referenced well located in Eddy County, New Mexico.

378' - 1/4°	5690' - 1 1/2°	7092' - 4°
878' - 1 1/4°	5761' - 2°	7154' - 4 1/2°
1364' - 1°	6252' - 2°	7184' - 3°
1835' - 1 1/4°	6378' - 3°	7313' - 3 1/4°
2100' - 1 1/4°	6439' - 3°	7433' - 3°
2600' - 1/2°	6531' - 3°	7557' - 3 1/4°
3077' - 3/4°	6624' - 3 1/4°	7682' - 2 3/4°
3577' - 1°	6717' - 3 1/2°	7805' - 3°
4014' - 3/4°	6748' - 3 3/4°	7932' - 2 3/4°
4514' - 3/4°	6811' - 3 1/4°	8432' - 2 3/4°
4989' - 3/4°	6930' - 3 3/4°	8610' - 2° TD
5460' - 3/4°	7030' - 4°	

Sincerely,

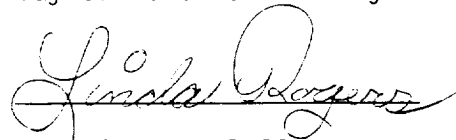

Gary W. Chappell
Contracts manager

STATE OF NEW MEXICO }
COUNTY OF CHAVES }

The foregoing was acknowledged before me this 02nd day of December 1992 by Gary W. Chappell.

MY COMMISSION EXPIRES

October 07, 1996


NOTARY PUBLIC