

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 ☒ gas ☐ other ☐
well well
2. NAME OF OPERATOR ARCO Oil and Gas Co., Div.
of Atlantic Richfield Company
3. ADDRESS OF OPERATOR 707 - 17th Street,
P.O. Box 5540, Denver, Colo. 80217
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17
below.) Unit "E",
AT SURFACE: (SW NW) 1335' FNL & 1250' FWL,
AT TOP PROD. INTERVAL: Appx. same Sec. 32
AT TOTAL DEPTH: Appx. same
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE.
REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF
FRACTURE TREAT
SHOOT OR ACIDIZE
REPAIR WELL
PULL OR ALTER CASING
MULTIPLE COMPLETE
CHANGE ZONES
ABANDON*

SUBSEQUENT REPORT OF:

RECEIVED

DEC 10 1982

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

(other) Stimulate present Lower Gallup perfs and additionally complete
Upper Gallup Sand

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.)*
- ARCO Oil and Gas Co. desires to re-perforate and acidize the Lower Gallup perforations in the subject well; and attempt additional completion by perforating and fracing the Upper Gallup Sand.

Attached is the planned Workover Procedure and a GR-Compensated Formation Density Log, showing the proposed re-perforations in the Lower Gallup and the proposed perforations in the Upper Gallup Sand.

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

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

SIGNED S. C. Rose TITLE Dist. Prod. Supt. DATE November 19, 1982

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY

TITLE _____ DATE _____

DEC 10 1982
M. F. SIMS
DISTRICT ENGINEER

*See Instructions on Reverse Side

Workover Procedure:

1. MIRU. Pull rods, pump, and tbg. Note if any scale is present. Clean out hole to PBDT w/casing scraper.
2. RIH w/csg perforating gun and perf opposite Lower Gallup f/1241-52 w/2 JET SPF (22 shots). Use premium quality deep penetrating charges.
3. Mix 1 drum S-271 scale inhibitor with 40 bbls of water and displace into perfs 1241-64 w/125 bbls of water.
4. Set retrievable bridge plug @ \pm 1170' w/wireline. Pressure test plug and csg to 2000 psi.
5. RIH w/csg perforating gun and perf opposite Upper Gallup f/1100-22 and 1126-46 w/2 0.5" JET SPF (84 shots).
6. RIH w/tbg and spot 500 gal 15% HCl. Acid to contain surfactant. Pull tbg and rig up to frac down 5-1/2" csg.
7. Breakdown Upper Gallup formation with 1000-2000 gal pre-pad of slickwater establishing a rate of 20 BPM. Shut-down for 2 minutes to obtain ISIP.
8. Frac down 5-1/2" csg at 20 BPM at approximately 1000 psi using 11000 gallons low-residue cross-linked 20#/1000 gal gel and 30,300 pounds 10/20 sand. Frac fluid to contain 2% KCl, 2 gal/1000 gal non-emulsifier, and appropriate breakers.

Remarks:

- a. Internal yield for 5-1/2" 14# J-55 csg is 4270 psig and capacity is 1.025 gal/ft.
- b. Bacteriacide to be added to tank water at .25/100 gal prior to treatment.
- c. $HHP = .0245 \times 1000 \times 20 = 490$.
- d. Service company to test fluid gelling and gel breaker agents prior to treatment.
- e. Do not overflush

Schedule

<u>Gals</u>	<u>Bbls</u>	<u>Prop</u>	<u>Prop Conc</u>	<u>Prop Wt.</u>	<u>Fluid</u>
2,800	67	Pad	---	---	Low-Residue Cross Linked Gel
800	19	10/20	1 ppg	800#	"
900	21	10/20	2 ppg	1800#	"
1000	24	10/20	3 ppg	3000#	"
2800	67	10/20	4 ppg	11200#	"
2700	64	10/20	5 ppg	13500#	"
1125	27	Flush	---	---	2% KCl Water
<u>12125</u>	<u>289</u>			<u>30,300#</u>	

9. Allow sufficient time for gel to break. Clean out sand to bridge plug.
10. Retrieve bridge plug.
11. Run pumping equipment, put well on test. (Upper and Lower Gallup commingled production).

Well Data:

Location: 1335' FNL, 1250' FWL, Section 32-31N-16W
San Juan County, New Mexico

Elevation: GL-5390' KB-5400.5'
Log Measured from KB

Casing: 5-1/2" 14# K-55 set @ 1339' KB, cemented
w/150 sxBJ-lite and 75sx Cl 'B'.

Perfs: 1252-64' ELM (Lower Gallup)

Tubing: 1 Jt. 2-7/8" EUE 8rd J-55 6.5# 31.20
SN 2-7/8 EUE 8rd 1.10
39 Jts. 2-7/8" EUE 8rd 6.5 # J-55 1220.27
1 Jt. sub 2-7/8" EUE 8rd 6.5 J-55 4.07
1256.64
RKB to tbg head collar 9.00
1265.64

TD: 1340'

PBTD: 1304'

HSGU #289
GR-Compensated Formation
Density Log

