Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

FEB 2 1982
DIST. 3

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 Co., Div. of Atlantic Richfield Company

3. ADDRESS OF OPERATOR: 717-17th St., P.O. Box 5540, Denver, Co. 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) Unit "A" (NE NE)
AT SURFACE: 50' FNL & 50' FEL, Sec. 31
AT TOP PROD. INTERVAL: Appx. same
AT TOTAL DEPTH: Appx. same

5. LEASE: 14-20-603-734

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo

7. UNIT AGREEMENT NAME: Horseshoe Gallup Unit

8. FARM OR LEASE NAME: Horseshoe Gallup Unit

9. WELL NO.: 295

10. FIELD OR WILDCAT NAME: Horseshoe Gallup

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 31-31N-16W

12. COUNTY OR PARISH: San Juan

13. STATE: New Mexico

14. API NO.: 30-045-22100

15. ELEVATIONS (SHOW DF, KDB, AND WD): 5430' GL; 5441' KB

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) Add'l. Compl. of Upper Gallup and Stimilation of Present Lower Gallup Perfs.			

RECEIVED
JAN 25 1982
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

(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.)*

Well #295 was completed in August, 1976 as an infill development well and initially tested 109 BOPD and 109 BWPD from the Lower Gallup form. Production declined dramatically to 3 BOPD and 30 BWPD in late 1978 and has remained at that level since. We believe that there is perforation damage of the Lower Gallup zone. Reperforating and acid treatment of this zone should correct this damage and restore the Lower Gallup to a reasonable production rate and decline.

The Upper Gallup sand has never been completed in this well. Well logs indicate 38' of potentially productive sand.

We propose to perforate and frac the Upper Gallup sand and stimulate the present Lower Gallup perforations in this well. Attached is the proposed workover procedure for this work.

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

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

SIGNED Stephen Rose S. E. Rose TITLE Dist.Prod.Supt. DATE January 20, 1982

(This space for Federal or State office use)

APPROVED
FEB 01 1982
For JAMES F. SIMS
DISTRICT ENGINEER

RECEIVED
USGS-O&G
JAN 25 1982
ALB, NM

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NMOCC

*See Instructions on Reverse Side

WORKOVER PROCEDURE - HSGU #295

1) MIRU. Pull rods, pump, and tbg. Clean out hole to PBTD w/casing scraper.

2) Run Gamma Ray-CCL correlation log. Perf csg opposite Lower Gallup f/1272-82' ELM w/2 JET SPF. Pump 500 gal 7-1/2% HCL into perfs.

3) Set drillable bridge plug @ 1260'± w/wireline. Perf csg opposite Upper Gallup f/1160-98' ELM w/2 JET SPF.

4) Run temperature survey. Test casing to 2000 psi.

5) Run tubing and circulate hole w/10% KCL water and spot 250 gallons 7-1/2% HCL acid across Upper Gallup perforated zone. Pull tubing and rig up to frac down 5-1/2" casing.

6) Frac down 5-1/2" casing at 15 BPM at approximately 1000 psi using 14,000 gallons pre-gelled Mini-Max II fluid and 42,000 pounds 20/40 sand. Frac water to contain: 1% KCL, 1 gal/1000 Aquaflow, 1 gal/2000 Claymaster III clay stabilizer, and appropriate gel breakers.

Gals	Bbls	Prop	Prop Conc	Fluid
2000	48			Pad-Mini-Max II
1000	24	20/40	1 ppg	Mini-Max II
2000	48	20/40	2 ppg	Mini-Max II
2000	48	20/40	3 ppg	Mini-Max II
4000	96	20/40	4 ppg	Mini-Max II
3000	72	20/40	5 ppg	Mini-Max II
5000	119		Flush	1% KCL water

7) Run temperature survey immediately after frac job, and then 2 hours later.

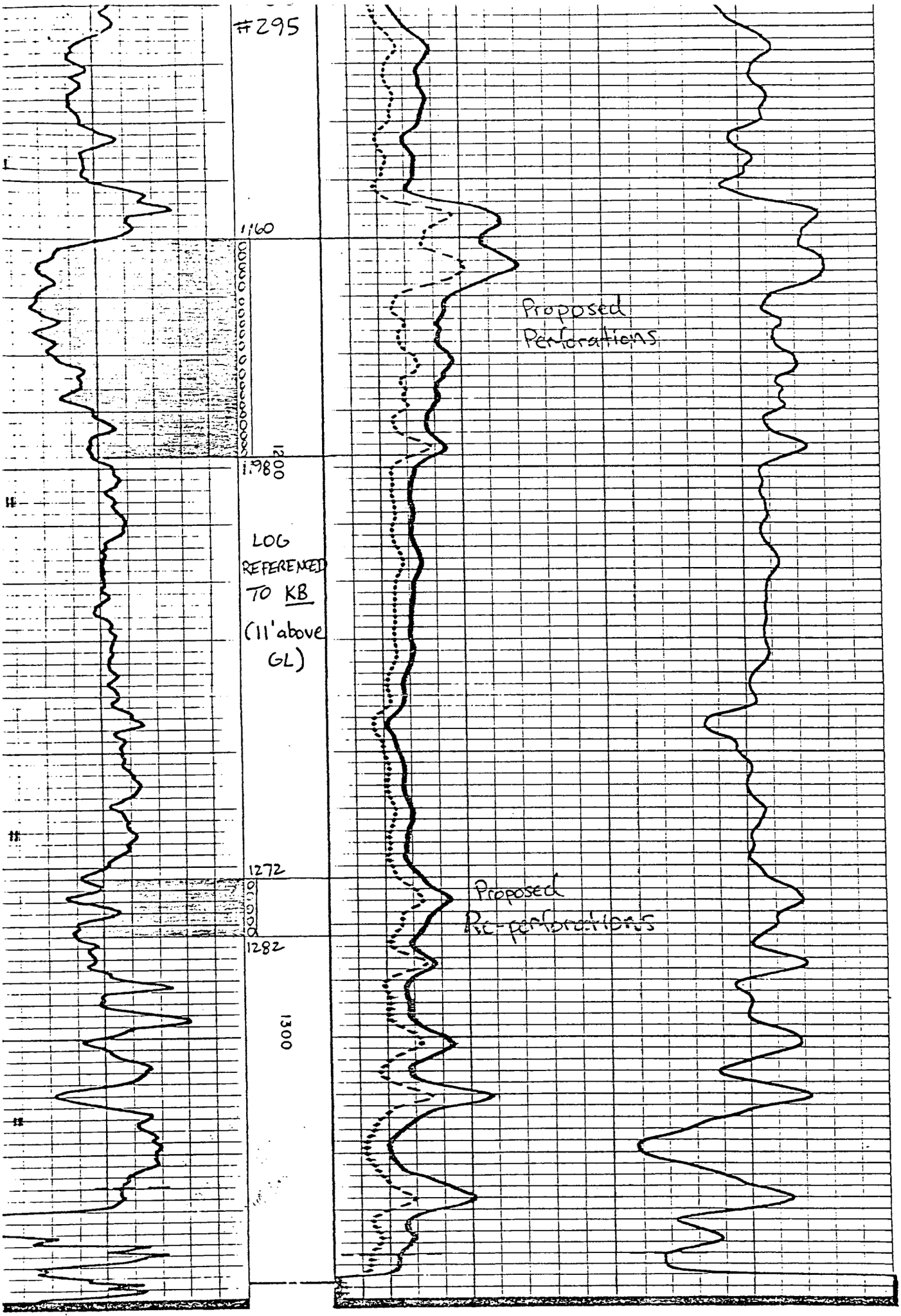
8) Allow sufficient time for gel to break. Swab test Upper Gallup.

9) Drill out bridge plug, run pumping equipment, put well on test. (Upper and Lower Gallup commingled production.)

WELL DATA - HSGU #295

Location:	50' FNL and 50' FEL, Sec. 31-31N-R16W San Juan County, New Mexico	
Elevation:	GL - 5430' KB - 5441' Log measured from KB	
Casing:	5-1/2" 14# K-55 set @ 1340' KB, cemented w/150 sx Howco light and 75 sx neat.	
Perfs:	1274-82' ELM (Lower Gallup)	
Tubing:	1 Jt. 2-7/8" EUE, 8R, J-55, 6.5#	30.66
	1 SN 2-7/8" EUE, 8R	1.10
	40 Jts. 2-7/8" EUE, 8R, J-55, 6.5#	1254.20
	RKB to top of tbg. head	8.50
	Bottom of tbg. @	1294.46
TD:	1340'	
PBTD:	1316'	

Orginally Completed 8/20/76



CALIBRATION