

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

RECEIVED

5. LEASE	14-20-603-734	ALB, NM
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.	53	
10. FIELD OR WILDCAT NAME	Horseshoe Gallup	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	30-31N-16W	
12. COUNTY OR PARISH	13. STATE	
San Juan	New Mexico	
14. API NO.	Not Assigned	
15. ELEVATIONS (SHOW DF, KDB, AND WD)	5472.2' GL; 5479' KB	

**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 80217  
717-17th St., P.O. Box 5540, Denver, CO

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: C SW SE 660' FSL & 1980' FEL  
AT TOP PROD. INTERVAL: Appx. same Sec. 30  
AT TOTAL DEPTH: Appx. 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 <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>

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

(other)  Reperforate, acidize, and treat Upper & Lower Gallup Sands

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 #53 was completed in May, 1959 as a producer and initially tested 132 BOPD from the Upper and Lower Gallup sands. The last test on this well indicated production of approximately 1 BOPD and 10 BWPD from the two sands. The well is presently shut-in. This well has a significant history of scale problems since water injection started in 1963. This is probably the reason for the suppressed production of this well relative to performance of offset wells with similar net pay thicknesses. It is evident that the present perforations (1183-1211' and 1284-1318') are practically plugged off and that any small treatment will not open them.

Therefore, we recommend that both Gallup zones be re-perforated, acidized, and treated with scale inhibitor (as per the workover procedure attached) in order to regain lost production.

\*See modifications to workover procedure.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED W. A. Walther TITLE Mgr. of Prod. DATE March 5, 1982

APPROVED BY James F. Sims TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL \_\_\_\_\_

APPROVED

AS AMENDED

For JAMES F. SIMS  
DISTRICT ENGINEER

\*See Instructions on Reverse Side

NMOCC

HORSESHOE GALLUP UNIT WELL #53  
SAN JUAN COUNTY, NEW MEXICO

Well Data:

Location: 660' FSL, 1980' FEL, Sec. 30-30N-16W  
San Juan County, New Mexico

Elevation: GL 5472', KB 5479'  
Log measured from KB

Casing: 4-1/2" 9.5# set @ 1371' RKB, cemented w/150 sx  
Diamix

Perfs: 1183-1211', 1284-1318' ELM

Tubing: 1 jt tbg 2-7/8" 10R NU J-55 6.4# 14.25'  
1 SN 2-7/8" 10R 1.10'  
44 jts tbg 2-7/8" 10R NU J-55 6.4# 1267.02'  
1282.37'  
RKB to tbg collar 6.00'  
1288.37'

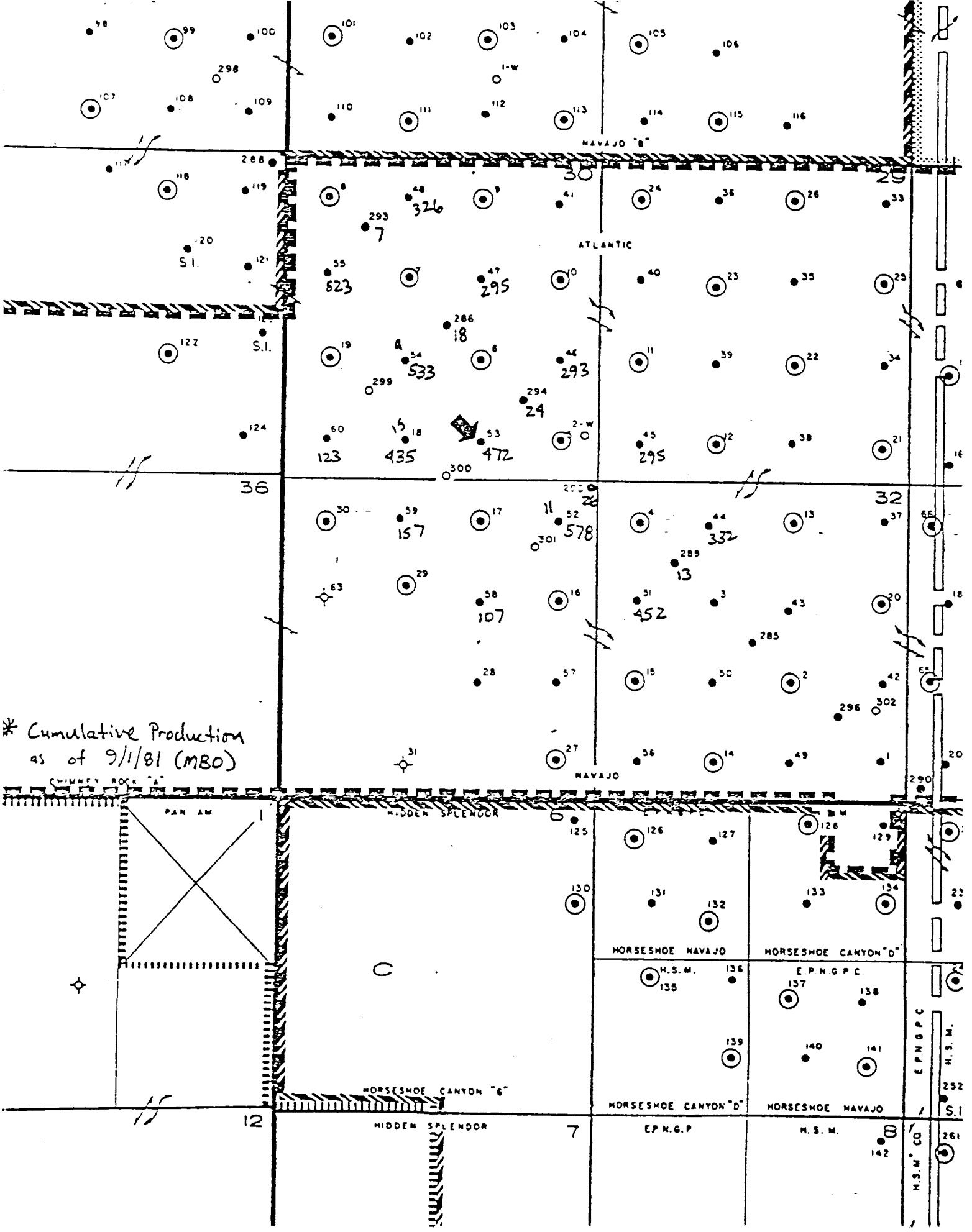
T.D.: 1376'

PBTD: 1339'

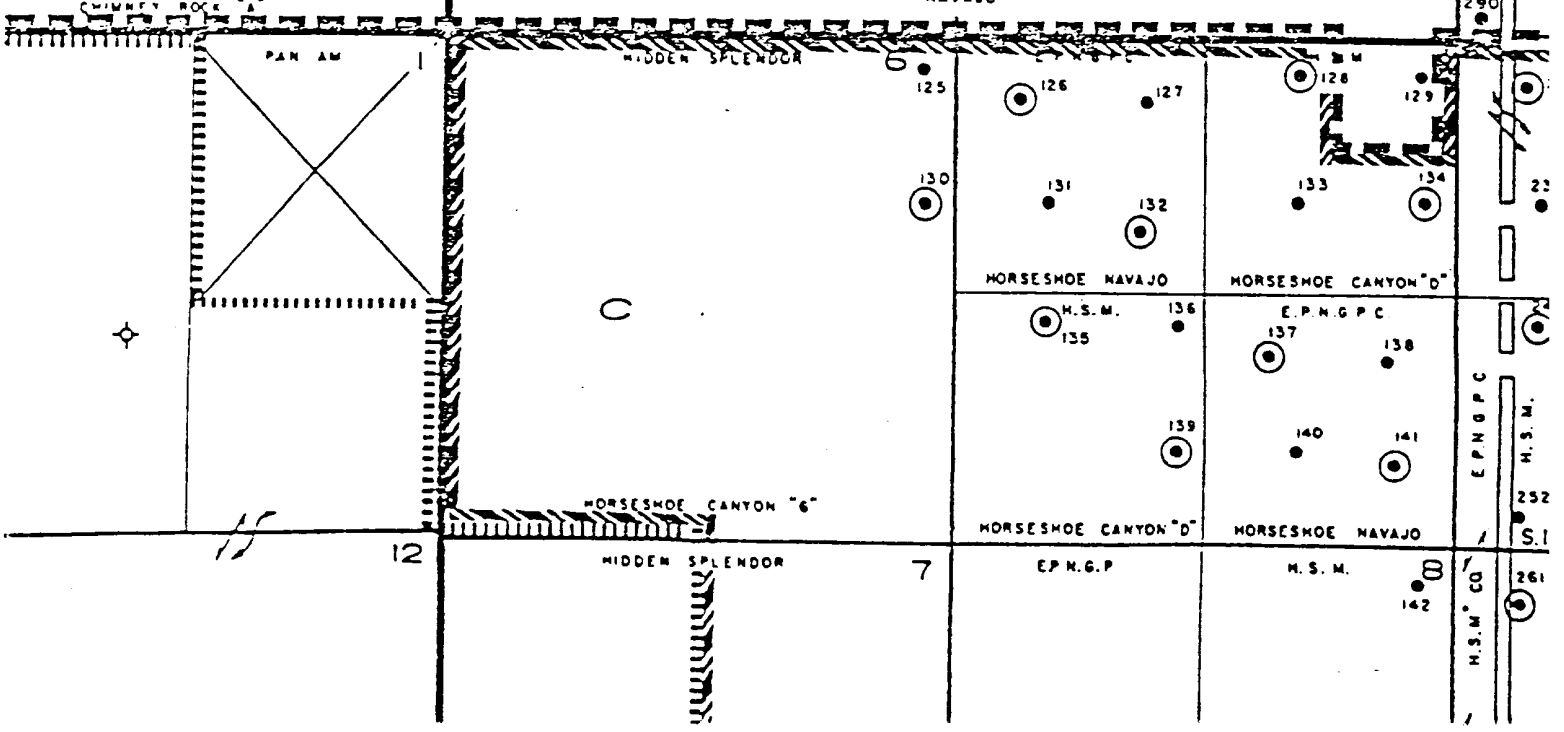
Note: There is a leak in the casing somewhere between 540' and 835'. There is also a tight spot at approximately 1140'. A 3-1/2" sand pump has passed through it.

Workover Procedure: \* Casing leak must be repaired before well is produced. Notify this office by Sundry Notice of intent or plans to repair casing.

1. MIRU. POH w/tbg, rods and pump. Note what kind of scale is present.
2. GIH w/perforating gun and perf opposite 4-1/2" csg w/2 jet SPF from 1284-1308' RKB and 1183-99' RKB. Use premium quality deep penetrating charges.
3. GIH w/work string and packer. Set packer @ 1100' RKB. Pump 5000 gal 15% HCl. Acid to contain iron sequestering agent, surfactant and corrosion inhibitor.
4. Wait one hour, then swab back acid.
5. With packer again @ 1100' RKB, pump 100 bbls water mixed w/110 gals S-271 ARCO scale inhibitor. Flush w/20 bbls water.
6. POH w/packer. Shut-in overnight.
7. RIH w/production tbg, rods and pump. Space pump and resume normal pumping operations. Put well on test.



\* Cumulative Production  
as of 9/1/81 (MBO)



Schlumberger ILL Log  
Measured from KB, 7' above GL

