W. 20-604-1951

5. LEASE

14-08-0601-8200

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME Horseshoe Gallup Unit
(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.)	8. FARM OR LEASE NAME Horseshoe Gallup Unit"p"
1. oil gas other Injection	9. WELL NO.
2. NAME OF OPERATOR ARCO Oil and Gas Co., a Div. of Atlantic Richfield Company	171 10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR 707 - 17th Street,	Horseshoe Gallup
P.O. Box 5540, Denver, Colo. 80217	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	Sec. 27-31N-16W
below.) AT SURFACE: Unit N,660'FSL & 1980'FWL, Sec. 27	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL:	San Juan New Mexico
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	None
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW OFF BERALAND WAS
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	5494 GR OIL AND GAS OPERATIONS
TEST WATER SHUT-OFF	
FRACTURE TREAT	SEP 23 1982
SHOOT OR ACIDIZE	(NOTE: Report results of multiple completion or zone
PULL OR ALTER CASING	change on Form 9–330.)
MULTIPLE COMPLETE	GRAND JUNCTION, COLORADO
ABANDON*	
(other) X - Set Cement Plug	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state including estimated date of starting any proposed work. If well is comeasured and true vertical depths for all markers and zones pertined	lirectionally drilled, give subsurface locations and
ARCO hereby asks permission to set a cerinterval (1380-1412') in the subject with the requirements as set forth in a 1981, and a subsequent letter of April of New Mexico, Energy and Minerals Departments of Copies attached.)	t well. This is in compliance memorandum dated September 30 26, 1982, both from the State
Attached is the procedure for setting to	he cement plug.
	SEGEINEU
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
SEU 9.0 1000	SEP 1 6 1982
Subsurface Safety Valve: Manu. and Type SEP 3 0 1982	- WHITE AND MANAGEMENT CE
18. I hereby certify that the foregoing is true and correct DIST. 3	DURANGO, CO
SIGNED Stephen Kode TITLE Dist. Prod	-
Original Signed - Scutt L. This space for Federal or State of Price State of Pric	DATE
CONDITIONS OF APPROVAL IF ANY: District Supervi	3V.

ATTACHED

HORSESHOE GALLUP UNIT INJECTION WELLS

PLUGGING PROCEDURE

- 1. MIRU.
- 2. Release packer and pull tubing and packer out of hole.
- 3. RIH with tubing open-ended to 40' above the top perforation and pump sufficient cement to set a 100' plug inside the casing (Using light-weight cement).
- 4. POH, RD, and move off.





STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING ARRY KEHOE

April 26, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE. NEW MEXICO 87501 (505) 827-2434

RECEIVED

APR 30 1982

ENGINEERING

OIL CON. COM.

DIST. 3

Arco Oil & Gas Company P.O. Box 5540 Denver, Colorado 80217

ATTENTION: J. G. Bradshaw

RE: Exception to Rule 705-A for Injection Wells in the Horseshoe Gallup Unit, Federal Lease No. 14-08-0001-8200, San Juan County,

New Mexico.

Dear Sir:

Pursuant to your letter of February 18, 1982, requesting exception to Rule 705-A for fifty-seven (57) wells as listed on Table I, the Oil Conservation Division hereby denies both of your requests. You are hereby requested to take prompt action as outlined in the September 30, 1981, Memorandum. (Copy enclosed).

The Oil Conservation Division will not grant an exception to Rule 705-A if a well will not be placed in service within 6 months of the request. For future reference, supportive data for exception to Rule 705-A should include:

- Proof of mechanical integrity, such as bradenhead tests, tracer logs, or other supportive tests or data.
- 2. All related OCD Division Order Numbers or Case Hearing Numbers.
- 3. A schematic of the present injection well including cement tops and quantities thereof.
- 4. Date each well was shut-in.

If you have any questions regarding this matter, please do not hesitate to contact me at (505) 827-2533.

Sincerely,

JÓE D. RAME

Division Director

TABLE I

Horeshoe Gallup Unit Federal Lease No. 14-08-001-8200 San Juan County, New Mexico.

List of Wells

1. No. 26	1

- 2. No. 29 B
- 3. No. 103 A
- 4. No. 105 A
- 5. No. 113 A
- 6. No. 126 C
- 7. No. 130 C
- 8. No. 132 C
- 9. No. 135 C
- 10. No. 137 C
- 11. No. 139 C
- 12. No. 141 C
- 13. No. 143 D
- 14. No. 145 D
- 15. No. 148 D
- 16. No. 150 D
- 17. No. 152 D
- 18. No. 154 D
- 19. No. 156 D
- 20. No. 160 D

- 21. No. 215 D
- 22. No. 162
- 23. No. 164 D
- -24. No. 169 D
- 25. No. 171 D
- 26. No. 173
- 27. No. 175 D
- -38. No. 180 -- 7
 - 29. No. 182 D
 - 30. No. 184 \mathcal{D}
 - 31. No. 186 🔘
- -32. No. 192
- 33. No. 194 D
- 34. No. 196
- 35. No. 201
- 36. No. 203
- 37. No. 205 Ω
- 38. No. 207 D
- 39. No. 213 📮
- 40. No. 217 [

- 41. No. 223 D
- 42. No. 225 D
- 43. No. 227 D
- 44. No. 229 D
- 45. No. 238 D
- 46. No. 240 D
- 47. No. 248 D
- 48. No. 250 D
- 49. No. 259 D
- 50. No. 261 C
- 51. No. 263 C
- 52. No. 269 C
- 53. No. 274 C
- 54. No. 275 C
- 55. No. 73 A
- . -

-56: No: 199

57. No. 211



DIL CONSERVATION DIVISION

POST OFFICE BOX 20 STATE LAND OFFICE BU SANTA FE, NEW MEXICO : (505) 827-2434

BRUCE KING SOVERNOR LARRY KEHOE SECRETARY

MEMORANDUM

TO:

ALL NEW MEXICO INJECTION WELL OPERATORS

FROM:

JOE D. RAMEY, DIRECTOR

SUBJECT:

TEMPORARY ABANDONMENT OF INJECTION WELLS

Division Rule 705A provides in part that "no injection well may be temporarily abandoned for more than six months unless the injection interval has been isolated by use of cement or a bridge plug." The Division Director may delay the cement or bridge plug requirement upon a request by the operator and a showing that such well is mechanically sound, that there is a continuing need for the well, and that the well constitutes no threat to underground sources of drinking water.

Division survey programs have found several hundred injection wells which have not been used for at least six months and which do not have the requisite plugs. Based upon these surveys the Division will be moving to enforce Rule 705A in the near future.

Operators should review the status of their injection wells and within the next six months take one of the following actions relative to injection wells which have been shut in for six months or longer:

- (1) Return the well to active operation.
- (2) Plug and abandon the well or place a <u>cement</u> or <u>bridge plug</u> above the injection interval.
- (3) File a workover or plugging plan and schedule with the appropriate Division district office.
- (4) File a request for exception to Rule 705A with the Division Director in Santa Fe.

September 30, 1981 fd/

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- is the same suffice shall be seen to the set of the se

UNITED STATES DEPARTMENT OF THE NJANGS 1983 GEOLOGICAL SURVEY

SUNDRY MOTICES AND REPORTS ON WELL ign sem use link form for proposals to orbif or to deeden or blug back to a cimerent Historyk i use form 9–131–1 for such proposals

ather

2.0. Bom 5540, Denwer, Colo. 90017

2. NAME OF OPERATOR ARGO 011 and Fas Co., a

4. LOCATION OF MELL_REPORT LOCATION DLEARLY See space 17

15. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE.

=

47 SURFACE: 660' FSL & 1980' FWL, Sec. 27

Yerision of Atlantic Richfield Company

335

3. ADDRESS OF OPERATOR

casow. Unit N,

AT TOTAL DEPTH:

AT TOP PRODU INTERVAL:

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* (other)

RECEI	VED
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GRAND JUNCTION, CO

17th Street,

SUBSEQUENT REPORT OF:

5. LE-SE

		4_4 <u></u>
5.	=	NOIAN, ALLOTTEE OR TRIBE NAME
		The Mtn.

Budget Bureau No. 42-71404

7.	UNIT AGREEMENT NAME	
	Forseshoe Gallum	This is

3. FARM OR LEASE NAME Horseshoe Gallup

9. AELL NO

10. FIELD OR WILDOAT NAME Horseshoe Gallup

II. SEO. T. P. M. OR BUM AND SURVEY OR 1851

Sec. 27-31N-16W 12. COUNTY OR PARISH 13. STATE San Juan New Mexico 14. API NO.

None Assigned 15. ELEVATIONS (SHOW DF. KDB. AND WD) 5494 GR

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

OIL CON. DIV.

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.)* Z11-1-32

This notice supercedes our Sundry Notice dated August 31, 1982, on the subject well.

APCO now proposes to plug and abandon this well, as per the attached revised P & A Procedure.

This is in compliance with the requirements as set forth in a memorandum dated Settember 30, 1981, and a subsequent letter of April 26, 1982 , both from the State of New Mexico, Energy and Minerals Department, Oil Conservation Division(copies attached to our August 31, 1982 Sundry Notice).

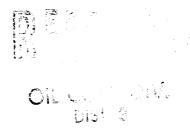
Subsurface Safety Valve: Manu. and Type	Set @ F
18. I hereby certify that the foregoing is true and correct SIGNED Stephen Tose 1990 TITLE Dist.Prod.Sur	December 30 Ot.OATE November 1, 1982
APPROVED BY	use)OATE
	RECEIVED
The plany a surface instructions on Reverse Side	M U JAN 1 7 1983

HORSESHOE GALLUP UNIT INJECTION WELLS PLUGGING AND ABANDONMENT PROCEDURE (REVISED)

- 1. MIRU.
- 2. Release packer and pull tubing and packer out of hole.
- 3. RIH with tbg open-ended to below the bottom perforation and pump sufficient cement to cover top perforation by 50' inside the casing.
- 4. POH w/tbg. GIH w/wireline and shoot enough holes in production string opposite 150' above top perforation to allow cement squeezing of zone. (This may be necessary since the original cement job may not have covered the Gallup formation by 50'). Squeeze sufficient cement to place a 100' plug outside the casing. Also, leave a 100' plug inside the casing. If unable to squeeze plug outside the casing, leave a 100' plug inside the casing.
- 5. POH w/tbg. GIH w/wireline and shoot enough holes in production casing opposite a point 50' below the surface casing shoe to allow squeezing cement.
- 6. RIH w/tbg open-ended and perform a braden-head squeeze of the perforations. Use sufficient cement for a 100' column behind the casing and a 100' plug inside the casing.
- 7. POH, cut casing one foot below ground level, place a 30' cement plug inside casing, weld on a blind flange, weld a dry hole marker on the blind flange, fill hole and move off.
- 8. Rehabilitate location and access road using stipulations supplied by the surface management agency.

NOTE: BOP's will not be needed in most cases because expected reservoir pressure of the Gallup in the area of abandonment is very low.

(Estimated at less than 250 - 300 psi bottom-hole.) If pressure does exist on any of the subject wells, bleed it off, install BOP's if needed, and commence with above procedure.



TRELE I

Horeshoe Gallup Unit Federal Lease No. 14-08-001-8200 San Juan County, New Mexico.

list of Wells

	1	26- -{	; _		
	:10 -	. 9	<u>`</u>		
3.	No.	103	Ř		
÷.	No.	105	4		
5.	No.	113	A		
- :-	:10:	126	-		
7.	Me.	130	C		
3.	%c.	132	C		
9.	No.	135	S		
10.	No.	137	C		
11.	No.	139	Ç		
12.	No.	141	C		
13.	No.	143	D		
14.	No.	145	D		
15.	No.	148	D		
16.	No.	150	D		
17.	No.	152	D		
18.	No.	154	D		
19.	No.	156	D		
-20 -		-:60			

		,	•					
21.	No. 213	2			<u>,</u>	Mc.	223	2
	-No. 162	-5-			42.	No.	225	- -
23.	No. 164	Ö.	,	(State)	43.	No.	227	5
-24.	-No. 169		•		44.	Nc.	229	D
25.	No. 171	D			45.	No.	238	D
26.	No. 173	D		(State)	46.	No.	240	D
27.	No. 175	D		Ź	47.	No.	248	D
-38	NO. 130				48.	Nc.	250	0
29.	No. 182	D			49.	No.	259	D
30.	No. 184	O		•	50.	No.	 261	C
	No. 186				51.	No.	263	C
-32	No. 192	-9 -			52.	No.	269	C
33.	Nc. 194	D,			53.	No.	274	C
34.	No. 196	D			54.	No.	275	C
-35	No. 201	-			55.	No.	73	A
36.	No. 203	Q.		-	56.	. %o.	-599-	-5
37.	No. 205	D			-57 .	-No:	211	-D
38.	No. 207	J.						
39.	No. 213	Q						
40.	No. 217	D						